CHAPTER-III
RESEARCH DESIGN AND METHODS

3.0. Introduction

‘Research is an endeavour to discover, develop verify knowledge. It is an intellectual process that has developed over hundreds of years, ever changing in purpose and form, always searching for truth’ - J. Francis Rummel.6

Research is a systematic and scientific work for obtaining new knowledge in a particular problem or topic. It is an art of scientific investigation which helps to find out the real fact behind the problem on a particular topic. It always involves some scientific methods to imparting data on a particular topic.

The Advanced learner’s Dictionary of Current English lays down the meaning of Research as ‘a careful investigation or inquiry especially through search for new facts in any branch of knowledge’7.

In the field of Education, research is an important aspect. To find out the educational problems and to draw a proper conclusion a research is always helpful. Educational Research implies the application of research method in the field of education. It is a systematic attempt to gain a better understanding of the whole educational process generally with a view to improving its efficiency. Educational Research help in identifying and verifying the problems which are related to

educational situation and try to find out their better solutions by using various scientific methods.

Methodology is considered as a soul of Research work. To formulate objectives, hypothesis, data collection, data analysis and drawing conclusions of a research problem methodology occupy a very important position. Without methodology research work is impossible. In simple, the term Methodology means system of methods used in a particular research field. It helps the researcher to acquire various knowledge about different things, events situations etc. that are available in the total surrounding.\(^8\)

Methodology gives a clear picture how the research work has been developed. Methodology includes all these aspects such as why a research study has been undertaken, how the research problem has been defined, in what way and why the hypothesis has been formulated, what data have been collected and what particular method has been adopted to collect data and why particular technique of analyzing data has been used. So, for the acquisition of perfect knowledge and information in a particular research field selection of methodology has special importance. But it differs according to the nature and characteristics of the problem of investigation.\(^9\)

### 3.1. Descriptive Method

Descriptive method is considered as a useful method of educational research. It is a method which base on description of the event, situation, phenomena etc. in

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present position i.e. descriptive method always tries to explain the present position of a event, situation and phenomena. The main purpose of this method is description of the state of affairs as it exists at present situation. In descriptive method the researcher has no control over the variables that were used in the research work. On the other hand in this method the researcher can only report what has happened or what is happening of the variables in the present situation.

In the present study the researcher has been used descriptive method due to its nature and characteristics.
3.2. Design of the Study

Research Design is considered as an important part of research process. It plays a pivotal role in any form of research process. Simply the term ‘Design’ implies decoration process. In other words it is also called as a plan or drawing produced to show the appearance and workings of something before it is made. Research design on the other hand means the conceptual structure within which research is conducted; it constitutes the blue print or decorative pattern for the collection, measurement and analysis of data in a particular research process. It indicates a clear picture of various aspects of a research problem and also gives a clear picture about how the research work has been completed in a specific period of time. A researcher in his research design includes the most appropriate methods or techniques that are to be applied to solve a particular research problem. It is also mentionable that the research varies from situation to situation\textsuperscript{10}.

The present study has been undertaken on the basis of Descriptive research due to its nature and characteristics. For the collection of relevant information in this study a questionnaire for each group, i.e. the students and teachers has been developed. An interview Schedule has also been developed for the selected Gaon Bura (Head of the village) of the Rabha community for the collection of relevant information related to the study. For the purpose of the study, random and stratified sampling under non-probability sampling techniques was adopted by the researcher. To know the Socio-Economic Status of the parents of the Rabha Community a Socio-

Economic Status Scale form by Dr. Beena Shah has been used in this study. Both the qualitative and quantitative data as per objectives constituted the prime effort of the researcher in this present study. Besides these survey methods were also used for collecting various information related to this study. In this study the questionnaires and interview schedules were administered for the respondents and information collected and after all by using statistical measures, analysis, percentage and data collected were interpreted and presented in tables and graphic form. The sample sizes for the study was selected from primary schools of Rabha dominated areas of Goalpara district with a great care.11

3.3. Tools used for the study

In the research work research tools occupy a very important place. Research tools imply an instrument, which is employed for gathering data and information for new facts by exploring relevant fields. On the basis of nature and characteristics and according to the requirement of the research work the researcher employed several tools in his study. For the present study the researcher has collected data both from the primary and secondary sources. To collect the data from primary sources, the researcher has used the following tools -

1) A self-developed questionnaire, for the students to find out the problems of the primary education among the children of Rabha community in Goalpara district of Assam.

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2) A self-developed questionnaire separately both for the students and teachers to study the problems relating to administration and supervision in the primary schools.

3) A self-developed questionnaire separately both for the students and teachers to investigate whether the existing infrastructural facilities of the schools are available to the students.

4) A self-developed questionnaire separately both for the students and teachers to study the economic support given by the parents to their children for undergoing primary education.

5) A socio-economic status scale form by Dr. Beena Shah for the parents to know the socio-economic status of the parents.

3.4. Secondary sources

To collect data from secondary sources files, registers, and records of the schools were checked to find out various academic performances of the children, their dropout rates and problems related to the primary education among the children of Rabha community of Goalpara district. Besides these the researcher has also been used various books, journals, published doctoral thesis, official records, reports, records of Government departments/ agencies and visited a number of university as well as other libraries. They were—

1) K.K Handique Library G.U.

2) State Central Library, Guwahati, Assam.

3) Omeo Kumar Das institute of Social Change and Development.

4) Sarbasiksha Library, Guwahati, Assam.
3.5. A Brief Description about the District Goalpara

Goalpara is a prominent district of lower Assam. The natural beauty of the district is always remarkable. Culturally the district is very rich. This district was originally created by the British in 1876. The district was a princely state ruled by the Rajbongsi Kings and the then ruler of the undivided kingdom. Various thinkers had said that, the name of the district Goalpara has originally derived from the term “Gwaltippika” which means “Guwali Village” or the village of the milk man. The district of Goalpara is situated on the south bank of River Brahmaputra. It covers an area of 1,824 square kilometers and is bounded by West and East Garo Hills districts of Meghalaya on the South Kamrup district on the East, Dhubri district on the West and River Brahmaputra all along the North. The geographical location of the district is between 25°53’ N to 26°30’ N latitude and 90°07’E to 91°05’E longitude.

Goalpara was finally incorporated in the new province when Assam was created in to a separate administration in 1874 during post– independence period. At present the jurisdiction of the district has undergone several changes. In 1983 two of the Sub-divisions namely, Kokrajhar and Dhubri districts were taken away from the original Goalpara district. Thereafter in 1989 the area was again reduced when she lost her North Salmara Subdivision to the newly formed district of Bongaigaon. The district thus consists of only one sub-division namely, Goalpara (Sadar) sub-division
divided in to five revenue circles Lakhipur, Balijana, Matia, Rangjuli and Dudhnoi and eight development blocks namely, Joleswar, Lakhipur, Kharmuja, Balijana, Krishnai, Matia, Dudhnoi and Kushdhowa. At present there are three towns viz Goalpara (Municipal Board), Lakhipur (Town committee) and Kharijapikan (census town) in the district. The total number of villages in the district is 837 of which 761 are inhabited. There are also 81 Gaon Panchayats in the district.

According to the 2011 census report the total population of Goalpara district is 1,008,183 including males 513,292 and females 494,891 population which is roughly equal to the nation of Cyprus on the US state of Montana and gives it a ranking of 444th in India (out of a total of 640). The district has a population density of 553 inhabitants per square kilometer (1,430/sq.mt.). Its population growth rate over the decade 2001-2011 was 22°74%. The sex ratio of the district is 962 females for every 1000 males. The literacy rate is 68°67% including males 72.7 percent and females 64.5 percent according to the same census report. The percentage of scheduled tribes of total population in this district is 20 percent (approximately) and literacy rates of scheduled tribes are 69 percent which is just above the district literacy rate. (according to 2011 census report).

3.6. Present Educational Scenario of Goalpara District

The educational scenario of the Goalpara district is still not very good. The educational attainment of the total literate population in the district as per Census 2001 shows that 1.96 percent is just literate without any attainment level, where pre-primary is as high as 37.91 percent and primary is only 24.08 percent. In respect of middle school, it is 17.43 percent and high school/ higher secondary/ diploma is 15.68
percent. The corresponding figure for graduation and above is only 2.85 percent according to the same census report. The present literacy rate of the district is 68.67 percent including males 72.7 percent and females 64.5 percent according to the 2011 census report. The percentage of scheduled tribes to total population in this district is 20 percent (approximately) and literacy rates of scheduled tribes are only 69 percent (according to 2011 census report). The total number of enrolment of the scheduled tribes children to total enrolment in the elementary education is only 17 percent (DISE 2011-12 report Goalpara). It shows that the enrolment rates of the children in elementary education level and the educational attainment rates of all level are not satisfactory.

According to DISE 2011-12 reports Goalpara, at present the district has 2338 elementary schools. The status of Mid Day Meal (MDM) in the particular district is that out of the total number of schools 76.05 percent schools are provided and prepared MDM in the school premises and 63.82 percent schools are provided it without kitchen shed (Report DISE 2011-12). The district has four educational blocks viz, Matia, Lakhipur, Dudhnoi and Balijana.

3.7. Population of the study

The researcher has chosen the Goalpara district for his study as the Rabha people of the particular district are found backward in different aspects in general and in the aspect of child’s primary education in particular.

It is earlier mentioned that the study is mainly concern for the purpose of to identify the problems of primary education among the children of the Rabha Community in Goalpara district. Therefore all the children of primary schools
belonging to the age group from six to fourteen years of the Rabha Community those who are studying in the class I to V, in different primary schools of the Goalpara district has selected as population for the study.

According to the UDISE, 2012-13, SSA (Goalpara), report at present the district has 1298 primary schools and 3239 teachers in primary education level. Besides these according to the District Elementary Education Report Card (DEERC), 2010-11 the district has 107,206 primary school going children.

**Table No.3.0: Block wise number of Primary schools**

<table>
<thead>
<tr>
<th>Name of the Block</th>
<th>Number of L.P School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matia</td>
<td>315</td>
</tr>
<tr>
<td>Lakhipur</td>
<td>339</td>
</tr>
<tr>
<td>Dudhnoi</td>
<td>301</td>
</tr>
<tr>
<td>Balijana</td>
<td>343</td>
</tr>
<tr>
<td><strong>Total = 1298</strong></td>
<td></td>
</tr>
</tbody>
</table>

(Source: UDISE, 2012-13, SSA, Goalpara)
3.8. Sample of the study

A sample is considered as a miniature part of the whole or universe, i.e. the group representative of the population possessing all the characteristics and selected for the study is called a ‘sample’. Through the sample the researcher collected information of the actual facts and an attempt is made to draw correct inferences about the aggregate of the population.

The sample for the present study was selected in to two stages. Firstly 45 schools were selected from the Goalpara district by adopting purposive sampling technique. The sample is chosen on the basis of concentration of Rabha populations as Rabha population is not spread all over the Goalpara district. The list is given in annexure (1). This is the sample of the study. The sample is consisting of four educational blocks of the said district namely, Matia, Dudhnoi, Lakhipur and Balijana.

Secondly, in order to select a sample of 400 students from the already selected schools, the population of students were stratified into groups on the basis of their sex and location i.e boys and girls and rural and urban. After that students were disproportionately selected from the sampled schools by using the method of stratified random sampling technique.

For this study 100 teachers were disproportionately selected as sample from the sampled schools by using the method of stratified random sampling technique.
400 parents were also disproportionately selected as a sample from the already selected student’s sample by using the method of stratified random sampling technique.

Besides, selected head master, Gaonbura, from the Rabha community was selected as a sample in this study. For them interview was taken to collect various information related to this study.

![Sample of the study](image)

**Fig.No.3.0:** Pie diagram shows the Percentage of the Sample of the study.

### 3.9. Purpose and Construction Procedure of the Questionnaire No. I

The construction of primary tool for this study was followed on the basis of a systematic procedure. In a descriptive research method, a questionnaire is an ideal tool for collecting primary data. A questionnaire is a series of questions presented to
the respondents for their answer. In a research work it is prepared in such a way so as to obtain opinions, insights and suggestions from the individuals who are involved in it. The designing of questionnaire for a research work is mainly determined on the basis of the objectives formulated in the study.

For the purpose of the study of the problems of primary education among the children of Rabha community in Goalpara district, the researcher prepared the draft of the tool viz a questionnaire for the primary school students. After this the preparation of the tool was discussed with two experts who have relevant knowledge in the field of education and the guide. In this questionnaire i.e. questionnaire for the primary school students consisted of 14 questions viz.

1. Basic information’s of the students.
2. School regularity
3. Reasons for irregular attendance
4. Problem relating to admission time
5. Parents inspiration
6. Parents opinion regarding girl child education
7. Parents consciousness about child education
8. Students parents relationship
9. Parents relation with schools
10. Home environment
11. Care of the parents
12. Regarding punishment of the parents
13. Child labour
14. Regarding *Bandh* culture system

In case of every question both i.e the questionnaire for students and questionnaire for teachers, there have been included three alternative boxes such as “Yes”, “No” and “Tick mark” under the respective statement was put. After that the total number of ‘yes’ or ‘no’ response were counted and it has been indicated by the symbol of frequency (f) and also drawn graphical representation from the percentages (％) of scores.

**3.9.1. Validity and Reliability of the questionnaire**

Validity and reliability are considered the most important characteristics of any research work. To test validity and reliability of the present questionnaire the researcher made an attempt to conduct a pilot study on the basis of the opinions from the experts and guide. For this, the questionnaire was prepared and first administered to a group of 30 selected students. The questionnaires were collected, screened and those were found incomplete, were eliminated from the list of the questions. To test the reliability of the questionnaire the same was administered again to the same group after a gap of two months. After this those items were found complicated in the questionnaire were modified and it was prepared for the final administration of the study.

**3.10. Purpose and Construction Procedure of the Questionnaire No.II**

Second questionnaire was constructed separately both for the students and teachers for the purpose of investigation of the problems relating to administration and supervision in the primary schools. The researcher first prepared draft of the questionnaire separately both for the students and for the teachers. After this, the
preparation of the questionnaires i.e. questionnaire for the students and questionnaire for the teachers was discussed with two experts who have relevant knowledge in the field of education and the guide. The questionnaire for the students consisted of 25 questions and the questionnaire for the teachers consisted of 5 questions.

In case of every question both i.e the questionnaire for students and questionnaire for teachers, there have also been included three alternative boxes such as “Yes”, “No” and “Tick mark” under the respective statement was put. After that the total number of ‘yes’ or ‘no’ response were counted and it has been indicated by the symbol of frequency (f) and also drawn graphical representation from the percentages (%) of scores.

3.10.1. Validity and Reliability of the questionnaire

To test validity and reliability of the questionnaire both the questionnaire i.e. questionnaire for the students as well as questionnaire for the teachers, the researcher made an attempt to conduct a pilot study on the basis of the opinions from the experts and guide. For this, the questionnaires were prepared and first administered to a group of 30 selected students and 30 teachers. Both the questionnaires were collected, screened and those were found incomplete, were eliminated from the list of the questions. To test the reliability of the both questionnaires the same was administered again to the same group after a gap of two months. After this those items were found complicated in the questionnaire were modified and it was prepared for the final administration of the study.
3.11. Purpose and Construction Procedure of the Questionnaire No.III

Third questionnaire was constructed separately both for the students and teachers for the purpose of investigation whether the existing infrastructural facilities of the schools are available to the students or not. In this regard the researcher first prepared draft of the questionnaire separately both for the students and for the teachers and after this, the preparation of the questionnaires i.e. questionnaire for the students and questionnaire for the teachers was discussed with two experts who have relevant knowledge in the field of education and the guide. The questionnaire for the students consisted of 20 questions and the questionnaire for the teachers also consisted of 20 questions.

In case of every question both i.e the questionnaire for students and the teachers, there have also been included three alternative boxes such as “Yes”, “No” and “Tick mark” under the respective statement was put. After that the total number of ‘yes’ or ‘no’ response were counted and it has been indicated by the symbol of frequency (f) and also drawn graphical representation from the percentages (%) of scores.

3.11.1. Validity and Reliability of the questionnaire

For the purpose of testing validity and reliability of the questionnaire both the questionnaire i.e. questionnaire for the students as well as questionnaire for the teachers, the researcher made an attempt to conduct a pilot study on the basis of the opinions from the experts and guide. For this, the questionnaires were prepared and first administered to a group of 30 selected students and 30 teachers. Both the
questionnaires were collected, screened and those were found incomplete, were eliminated from the list of the questions. To test the reliability of the both questionnaires the same was administered again to the same group after a gap of two months. After this those items were found complicated in the questionnaire were modified and it was prepared for the final administration of the study.

3.12. Purpose and Construction Procedure of the Questionnaire No.IV

Fourth questionnaire was constructed separately both for the students and teachers, to study the economic support given by the parents to their children for undergoing primary education. For this purpose the researcher first prepared draft of the questionnaire separately both for the students and for the teachers and after this, the preparation of the questionnaires i.e. questionnaire for the students and questionnaire for the teachers was discussed with two experts who have relevant knowledge in the field of education and the guide. The questionnaire for the students consisted of 13 questions and the questionnaire for the teachers also consisted of 4 questions.

In case of every question both i.e. questionnaire for students and teachers there have also been included three alternative boxes such as “Yes”, “No” and “Tick mark” under the respective statement was put. After that the total number of ‘yes’ or ‘no’ response were counted and it has been indicated by the symbol of frequency (f) and also drawn graphical representation from the percentages (%) of scores.
3.12.1. Validity and Reliability of the questionnaire

For the purpose of testing validity and reliability of the questionnaire both the questionnaire i.e. questionnaire for the students as well as questionnaire for the teachers, the researcher made an attempt to conduct a pilot study on the basis of the opinions from the experts and guide. For this, the questionnaires were prepared and first administered to a group of 30 selected students and 30 teachers. Both the questionnaires were collected, screened and those were found incomplete, were eliminated from the list of the questions. To test the reliability of the both questionnaires the same was administered again to the same group after a gap of two months. After this those items were found complicated in the questionnaire were modified and it was prepared for the final administration of the study.
3.13. Socio- Economic Status Scale (SES); tool No-VI

To know the socio- economic status of the parents a Socio- Economic Status Scale form by Beena Shah has been used in this study. Being a composite variable Socio- Economic Status includes a total SES score based on father’s and mother’s occupation & income level, father’s and mother’s educational level. The level of occupation ranged from higher professions to unskilled labour and income level from below 2,000 to 25,000 and above.

The SES scale contains- occupation, income, education, property, type of house, amount of land, type of family, total number of family members, household materials, income tax, total number of animals, subscribship of newspaper and magazine, membership of different social and religious institutions etc.

Here the SES indicates the position that family occupies by means of occupation, income and educational level of the head of the family.

3.14. Data collection procedure

In the present study the researcher collected data both from primary and secondary sources. For the collection of data from the secondary sources the researcher used various books, journals, published doctoral thesis, reports and records collected by visiting various libraries, institutions etc.

On the other hand to collect data from the primary sources the following procedure were followed by the researcher

For the collection of the data from the primary school students, teachers and Head Masters, the researcher himself visited all the selected primary schools of
Goalpara district. After reaching the schools, the headmasters were being contacted and all efforts were made to establish a good rapport. The questionnaires were distributed to the selected students i.e. the class I and class V students of the school and requested to give his/her responses to the questionnaire prepared for the purpose and promised confidentiality. Before it, the researcher introduced himself and gave a brief idea about the research topic and it was tried to explain all the questions and clarified doubts if any.

To collect data from the teachers of the schools as well the Head Masters the same procedure was followed as in case of data collection of the school students.

Besides these, the researcher also visited and observed various Rabha villages under different blocks of Goalpara district for the collection of direct information related to the study. Some selected Gaonbura of the villages and some selected community member from the Rabha community of the particular district were also being contacted and discussed about the research topic to fulfill the objectives of the study. A methodological diagram has given below.

### Table No.3.1: Methodological Diagram

<table>
<thead>
<tr>
<th>Objectives of the study</th>
<th>Description of tools/technique</th>
<th>Sources of data</th>
<th>Nature of data</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) To investigate the problems of Primary Education among the children of Rabha Community of Assam with special reference to the district of Goalpara.</td>
<td>Self Developed Questionnaire</td>
<td>Primary data</td>
<td>Qualitative in nature</td>
</tr>
</tbody>
</table>
2) To study the problems relating to administration and supervision in the Primary Schools.  
| Self Developed Questionnaire | Primary data | Qualitative in nature |

3) To investigate whether the existing infrastructural facilities of the schools are available to the students.  
| Self Developed Questionnaire | Primary data | Qualitative in nature |

4) To study the economic support given by the parents to their children for undergoing primary education.  
| Self-developed questionnaire | Primary data | Qualitative in nature |

5) To study the rates of drop out of the children of Rabha Community in primary education.  
| School’s office record, attendance registrar | Secondary data | Quantitative in nature |

6) To study the socio-economic status of the people of Rabha community in Goalpara district of Assam.  
| Socio-Economic Status Scale | Primary data | Quantitative in nature |

3.15. Statistical treatment of the data

In present study collected data were analyzed and tabulated systematically. Each item was analyzed by giving diagrams, graphical representation and percentage. On the basis of percentages for each item, data was interpreted. The following statistical techniques were used in this study –

1) Simple frequency distribution

2) Percentage analysis

3) Graphical Representation.
References:


