CHAPTER ---IV

METHODOLOGY OF THE STUDY

4.0: INTRODUTION

Research is an unending search for knowledge and truth; it is an essential and powerful tool for any kind of development. For undertaking research, the researcher has to adopt proper methodology because a good research depends on a sound and effective methodology. It provides the researcher proper direction to plan and solve research problem under study. The selection of research method depends on the nature of the research problem and its objective. Research methodology is an integral part of any research. It is a way to solve the research problem systematically and scientifically. It involves all the steps that are adopted by the researcher while studying his or her research problem along with the logic behind them. It is concerned with the various processes and procedures that are adopted in solving research problem. It helps in successful completion of the research work.

The research design is the conceptual frame work in which the research is conducted. It helps the investigator to carry on his research operation to solve a research problem with minimum wastage of time, money and effort. A research design can be compared to a blue print that an architect prepares before starting of construction. Research aims at the discovery of the relationships that exists among the phenomena of the universe. While educational research, a specific category of research is planned and orderly activity or activities to discover such relationship in the phenomena concerned with the theory and practice of education. It may further be described as the application of the principles and procedures of scientific inquiry to enhance our understanding related to the education of the young and the old and also to develop a sound and rational base for the practice of education. While there are different methods and techniques employed to investigate such relationship among the phenomena related to education, the purpose or purposes underlying a research study guide the choice of the specific research methods that are used. Any individual research study may address multiple questions, not all of which share the same purpose. Consequently, more than one research method may be incorporated into a particular research effort. Because methods of investigation are not pure (free of bias), several types of data and method

of gathering data are often used to triangulate on the answer to a specific question. A major weakness of the educational research in India is it's over dependence on the use of questionnaires and test. The reasons are not difficult to trace. The principal reason is the facility, they would provide for quantification and further processing, possibly through computers. Very few studies are found to adopt other methods such as observations, case study, content analysis and participant observation. Besides, most of the studies are descriptive surveys. In view of the said enigmatic situation, the proposed investigation entitled **"Primary education in Assam with special reference to Bongaigaon District: A Case Study**." has been investigated by means of a multiple approach of research methodology. Although the study intends to investigate into the educational status of Bongaigaon District but to reveal the same along with its causes, consequences and remedies one has to address the relevant issues/ questions that influence the participation of the people under consideration in education. Having said that the investigator employed a proper method of investigation involving survey research method. Among the various methods and techniques of research, survey research is the most common and widely used. It is concerned with those techniques and procedures which are used to ascertain and established the present status of primary education situations. Such type of research is designated under a broad nomenclature called Descriptive research. It is devoted to gathering of information about prevailing conditions or situations for the purpose of description and interpretation. The primary concern of this type of research is present but surveys for retrieving past information may also be carried out if the objective of the study is to investigate into a comparison between the past and the present or to assess the growth of a particular phenomena.

4.01 METHODS OF STUDY

The present study employed descriptive cum survey method. This method includes survey and enquiry of different kinds. It is designed to obtain pertinent and precise information concerning the current status of phenomena. The researcher has taken the study 'Primary education in Assa m with special reference to Bongaigaon District; A Case Study". It is the current status of the phenomena of primary education. It is not only fact finding but also formulates important principles of knowledge and solve significant problems concerning issues. Descriptive studies involve description,

recording, analysis and interpretation of the existing conditions. What is going on in primary education in Bongaigaon district, these are the concerning issues of the present study. The descriptive research method is the most popular and widely used research method in education. It is the means through which opinions, attitudes and suggestions for improvement of educational practices and instructions and other data can be obtained. They have immense value in solving problems about children, school organization, supervision and administration, curriculum, teaching methods and evaluation. Survey may collect data from different unit of population or from a representative sample. The information regarding the primary education can be gathered and may be concerning a large number of related factors or may be confined to few selected items. This chapter deals with the design of the study, population, tools that are used for collection of data. So far objectives are concerned the present study includes under the descriptive research. This method describes and interprets what exists at present.

4.02 EXPLORATION OF THE DOCUMENTS

The present study "Primary education in Assam with special reference to Bongaigaon District: A Case Study" employed the descriptive survey including exploration of documents. In this documentary analysis the sources of data are records, reports printed forms, letters, handbook, census, catalogues, syllabi etc. Documentary analysis is conducted to interpret present events from available records which provide data to investigator in relation to the research problem. It follows the approach of identifying relevant records for investigation, judging authenticity of documents, doing content analysis of evidence, organizing contents/ information, reviewing the content, making interpretations etc. Various research questions are answered through analysis of data available in the form of printed text viz, books, official records, research report, review articles, information, annual report, periodicals, news items etc. There can be innumerable sources of obtaining documentary evidences and conducting relevant studies. A large amount of information on most aspects of our national life comes from the statistical data reports, white paper and Government reports. These bulletins and reports often give the required information which can be utilized by the researcher instead of organizing laborious survey to find out the same. This way time and money can be saved. Similarly personal documents like diary,

letters provide details of which are not achieved by other standardized methods of social surveys. They can give insight into personal characteristics. In order to drive the study in its proper direction and to reach the objectives, the investigator explored a number of documents to collect data.

The documents that were explored for the present study are Census Report of India 2001, Census Report of India 2011, DISE Information of SSA- Bongaigaon 2010 – 11 and MIS Statistical Handbook of Assam---2010 to 2014, School wise Educational Database- DEEO –Bongaigaon, Library of Assam University, Library of Gauhati University, Library of SCERT, Guwahati, Library of Bongaigaon B. Ed college, Library of NEHU, Library of Dibrugarh University, Office of the Sarva Shiksha Abhiyan Guwahati, Kahilipa, http .mhrd.gov. in, http.ssaassam.gov.in,

In order to proceed with research project the following steps has been adopted.

a) Formulating the objectives to the study.
b) Selecting the sample.
c) Tools of research.
d) Collecting the data.
e) Processing and analyzing the data.

4.03 POPULATION

The population of the present study comprises of all the provincialised lower primary schools **(**class I-V) of Bongaigaon district**.** According to statistical hand book of Assam there are 844 lower primary schools in Bongaigaon district with the four educational block viz- Srijongram**,** Manikpur**,** Boitamari and Bongaigaon**. F**rom the Educational Statistics of SSA, Bongaigaon 2013-2014, Boitamari Educational Block has the 160 schools, Bongaigaon Educational Block has 135 school, under Manikpur Block has 114 and Srijongram Educational Block has the highest number of primary school 287. The area or jurisdiction of Srijongram Educational Block is very vast. Another thing is that the Government of Assam has newly provincialised 28 LP schools under Boitamari Educational Block, 37 schools under Bongaigaon Block, 30 LP School under Manikpur Educational Block and 53 LP school under Srijongram Educational Block. Total number of LP school is 844 in Bongaigaon district. For the present study “Primary Education in Assam with special reference to Bongaigaon

District; A Case Study", population will include all the teachers, students and headmasters of LP schools from the four educational blocks as well as BRC and CRC coordinators and resource persons of Bongaigaon District.

4.04 SAMPLE OF THE STUDY

A sample is a small proportion of a population selected for observation and analysis. It is a collection consisting of a part or subset of the objects or individuals of population which is selected for the purpose of representing the population. By observing the characteristics of the sample, one can make certain inferences about the characteristics of the population from which it is drawn. Stratified random sampling was used in the present study. In Bongaigaon district, the total number of Lower primary school was 844. Four educational block are there in the district, i e Bongaigaon, Boitamari, Srijangram and Manikpur. In Bongaigaon block there were 172 LP school, in Boitamari block 182 LP school, 340 in Srijangram block and 144 in Manikpur block. Sample schools taken from the blocks were Bongaigaon-17 school, Boitamari-18 schools, 34 schools from Srijangram and 15 schools from Manikpur. Schools were randomly selected. 239 teachers were working in 84 primary schools. The sample of 239 teachers included 84 Headmaster/Headmistress or teacher in-charge and the rest assistant teachers of provincialised primary schools of Bongaigaon district. On survey data may be gathered from entire population. Population means all the entire item consideration in any field of enquiry. In such a case it is known as census survey. But it is time consuming and expensive. In most cases a group from the population is selected carefully to be represented for the total population. This group is known as sample.

As per objectives of the present study, an equal proportion of 10% sample (total-84) Primary school representing from four educational block have been selected by using stratified random sampling technique. Then the selected schools were categorized as Assamese medium, Bengali medium and Hindi medium. The investigator selected ten students (5 boys and 5 girls) from each of the sampled primary schools of IV and V standard as the sample of the study (total=840 students). Again the investigator also selected five BRC from each block and five CRC from each block of Bongaigaon district. (total=20 BRC & 20 CRC). The BRC is renamed now as Block Resource

Person (BRP). The investigator selected 10 experts from the district who contributed a lot to the field of education.

4.05 TOOLS USED IN THE STUDY

Tools are the significant component of any piece of research work. For the completion of the study, the researcher needs desired data and these data are possible to be collected from the field by making use of various tools. Therefore authenticity of data depends upon the reliability and validity of tools. Hence the researcher needs to be careful about the selection of tools for his research work.

Tools are the devices that are used for collection of the desired information or data. In any research work a researcher requires to use any data gathering tools according to the objective of his study or work. There are different types of data gathering tools and each tool is appropriate for the collection of certain type of information or data. The researcher has to either select from existing available tools or has to construct his own. In the present study, ‘ Primary Education in Assam with special reference to Bongaigaon District: A case study’ in order to collect the primary data from the schools, a questionnaire and a checklist for the headmaster/ headmistress were used as tools which were developed by the investigator himself. Through this information of the school regarding physical facilities, number of teachers and student, availability of teaching aids and materials, time table or work load, health and others facilities are collected from the headmasters/ headmistress of the schools. With the help of questionnaire such kind of information are collected from the teachers. Here headmaster/headmistress of each school is also counted as teachers as they are also part and parcel of teaching.

For this research the investigator selected and used the following data gathering devices

a) Questionnaire for the Headmaster/Headmistress.
b) Questionnaire for the teachers.
c) Questionnaire for students.
d) Interview.
e) Observation.
f) Checklist for the primary school Headmaster/Headmistress.
g) Problem checklist for primary school teachers.

QUESTIONNAIRE: - Questionnaire is a device consisting of a series of questions dealing with some psychological, social, educational, etc. topics sent or given to an individual or group of individuals, with the object of obtaining data with regard to some problems under investigation. Good and Hatt (1952) stated that in general the word "questionnaire 'refers to a device for securing answers to a series of question by using a form which the respondent fills in himself. Barr (1953) define questionnaire as a systematic compilation of questions that are administered to a sample of population from which information is desired. It is a popular means of collecting all kinds of data for the research purpose. It is widely used in educational research to obtain information about certain conditions and practices, and to inquire into opinions and attitudes of an individual or a group. A questionnaire is either administered personally to a group of individuals or it is mailed to them to save a great deal of time and money in travel. In the former situation, the person administering the tools has an opportunity to establish rapport with the respondents, to explain the purpose of the study to the respondents, and to explain the meaning of questions to the respondents that may not be clear to them. In the latter situation, the mailed questionnaire is probably both the most used most abused data gathering research tools. It is mostly used when the individuals from whom we desire information cannot always be contacted personally without the expenditure of great deal of time and money in travel. The range of administration of a mailed questionnaire may be national or international. A mailed questionnaire is mostly criticized, because of a favorable reaction it generates among the respondents to answer questions from strangers on subjects they are least interested in. Best (1977) calls it "as the lazy man's way of gaining information. He is of the opinion that the unfavorable reaction among the respondents is intensified when the questionnaire is long, the subject trivial in importance the question items vaguely worded, and the form poorly organized. As a result of this, a small proportion of mailed questionnaires are returned, and therefore, the data obtained are of low validity. It can be administered to group of individuals at a time. The availability of a number of respondents in one place makes the study economic both in time and value. According to J.W. Best the questionnaires are probably the most used and most abused of the data gathering devices. Questions like "Are there sufficient furniture in your school ? (Yes or No).

a) Questionnaire for the Headmaster/Headmistress. (60 questions)
b) Questionnaire for the teachers. (30 question)
c) Questionnaire for students.(10 questions)

INTERVIEW: - Interview is a very important means of obtaining information. It is a process of communication in which the subject, interviewee gives the required information verbally in face to face situation. If the interviewers are skillful, this means it can prove to be the best of all means of collecting data, Because people are usually more willing to talk than write. It is a helpful method in giving understanding of the individual attitudes, interest, problems and belief. It is particularly appropriate when dealing with the young children. The interview is one of the most important and extensive used research tool. It is also a device for securing a set of questions to the respondents. The investigator decided to develope many interview like BRCC, CRCC, President of the School Managing Committee, parents/guardian, and students. So as to collect data relating to various problems and issues, a set of question for the interview were included of primary schools, regarding regularity of Head master/ Head mistress, teachers. The condition of school building, library facilities, co-curricular activities, classroom, equipments, playground of the school. In some items guardians were asked to mention some problem of primary education like teachers punctuality, administration and supervision of the primary education, its curriculum and co-operation with the teachers and the implementation of mid-day meal scheme in primary school. In the present study interview is employed among some teachers and parents of the char area schools management staff and mainly the student of IV and V standard school (interview schedule for students with 10 question)

OBSERVATION: - It is very old and scientific means of data collection. In it the researcher goes to the field of research and observes the events personally. It claims to be realistic because it describes things as they actually are. The data obtained by observation are original and are correct in accordance with the aims of the researcher. But it can be used only within a limit because it is very expensive. There are two types of observation namely participant observation and non- participant observation (Woods 1986 & Burns 1999). Participant observation requires the researcher to take part in daily activities of the individual being observed. The field notes are taken on the spot or as soon as possible. The researcher may also use tape or video recorder as an additional instrument in observation. The central idea of participation is to enter

the experience of other within a group or institution and to experience the thought process of the group (Woods-1986). In the present study "Primary Education in Assam with special reference to Bongaigaon District – A Case Study". The researcher visited the primary schools of four educational block of Bongaigaon district and observed the actual scenario of primary schools. The primary schools which are situated in the char area, their building condition is very pitiable and this type of building can not attract the children. The educational environment is depend on infrastructure and other material conditions of teaching. In some school the teachers are providing lesson under the roof of tin. It is like open air or under a tree. The researcher observed the condition of the primary schools and compared it with the ancient Indian education which was provided under a tree. The infrastructure facility is nothing which are provincialised newly by the Govt. of Assam recently, but the attendance of the children is very good. In some primary schools of Bongaigaon district there is no kitchen to prepare the mid-day meal but the enrolment of that schools is very good. In the town area, the infrastructure of the primary schools is good, but the enrolment of the schools is very poor. The Pupil Teacher Ratio (PTR) of that school is not suitable according to RTE Act—2009. In some schools a large number of teachers are serving, having a few students only. With the establishment of private schools in town area, the guardian or the parents sends their children to the private schools. Non participant observation requires the researcher to watch and record the event on the spot. Furthermore Burns (1993) states that non participant observation exists when the interaction is viewed from recorders. The advantage of this type of observation is that it is not difficult for the observers to be objective because their interaction with the subjects is limited through use of video or tape recorder.

CHECKLIST: - A checklist is a device through which we assess the knowledge of the respondents regarding the presence or absence of certain defined characteristics in an object, a phenomenon or a process. It is also used to evaluate the performance, which can be divided into a series of clearly defined actions. We prepare a list of items pertaining to the problem being studied and provide a space for the user to indicate the presence or absence of the characteristics or action mentioned in the item by circulating Yes or No or by writing the appropriate word or number. Checklists are very useful in survey research. For example in census survey, we can collect a lot of

information with the help of checklists. For the study 'Primary Education in Assam with special reference to Bongaigaon district: A Case Study' two checklist has been used one for Headmaster and another for the teachers (problem checklist) to know about the availability school facilities, like infrastructure, classroom, library, playground, games, number of teachers, subject wise instructional procedures, problem etc. to collect relevant information. (Appendix-II & IV).

4.06 PROCEDURE OF CONSTRUCTION OF TOOLS

Pilot Study:- Pilot study is very important step to test the validity and reliability of the tools. No matter how carefully the tools are developed or designed, it is necessary to try them out with a few respondents before final investigation in actual situation. In the present study primary school teachers and headmaster of the sample schools of Bongaigaon district of Assam were to give their views and comments on various aspects of primary education. Therefore the tools used for data collection has to be made understandable to all of them. To ensure, whether the language of the tools are understandable or not, whether the responses fulfill the objectives of the investigation, a pilot study was carried out in 3 primary schools of Bongaigaon district. Subsequently, some changes were made on the basis of the experience gained in the pilot study. After modifying the tools the final draft was prepared. The questionnaire consisted of 60 items for Headmaster and questionnaire consisted of 30 items for teachers and a problem checklist.

4.07: DATA COLLECTION / ADMINISTRATION OF TOOLS

After having selected the samples and developed the tools, the next step to be taken was to collect the data from the sample schools. The researcher personally visited each of the selected schools and distributed questionnaires and checklist for the teachers of the sampled schools. After seven days distribution of the tools, the investigator again went to those schools to collect the materials and at the same time he took interview of the president of SMC of the respective school, 10 students of each school of IV & V standard, 20 parents/guardian of the students, BRC (20) CRC (20) of the district and collected data on various issues of primary schools of

Bongaigaon district. The data was collected for the year 2010 and 2014 of the sampled primary schools.

4.08: PROCEDURE OF ANALYSIS AND INTERPRETATION OF DATA

In the present study, data of primary education were collected by administering several tools developed by the researcher for the purpose. The collected data and information have been analysed both qualitatively and quantitatively and interpreted as per the objectives designed in the study and finally the results have been presented in the chapter-VI. The analysis of the school headmaster/headmistress questionnaire and the questionnaire and the problem checklist for the teachers has been done separately. As per objective of study, the analysis and interpretation of the data are divided into several parts. Different types of items were there in the school information schedule and questionnaire used for data collection. These were multiple choice types, Yes / No type, supply of figure and open ended type question. The responses to each multiple choices type and Yes / No type were analyzed in terms of frequencies of the respondents agreement or disagreement with a particular statements. These frequencies were further converted into percentage. The responses of each items of supply of figure type were recorded in a table for all respondents and further analyzed suitably. The open ended type items were analyzed qualitatively. After scoring each item, the summated score were obtained for each of the six areas of checklist. It was done to find out the relative position of the six areas in terms of the intensity of problems faced by the teachers.

4.09 CASE STUDY

Case study is an intensive study of a case which may be an individual, an institution, a system, a community, an organization, an event or even the entire culture. Yin (1991:23) has defined case study as “an empirical inquiry that investigates a contemporary phenomenon within its real life context, when the boundaries between phenomenon and context are not clearly evident and in which multiple sources of evidence are used. Kromrey (1986:320) holds that “Case study involves studying individual cases, often in their natural environment and for a long period time”. It is thus a kind of research design which usually involves the qualitative method of

selecting the source of data. It presents the holistic account that offers insights into the case under study.

Case study is not method of data collection rather it is a research strategy, or an empirical inquiry that investigates a contemporary phenomenon by using multiple sources of evidence. Case study is not just a narrative account of an events or a series of events but it involves analysis against an appropriate theoretical framework or in support of theoretical conclusions.

The present study "**Primary education in Assam with special reference to Bongaigaon district: A Case Study"** is an appropriate theoretical framework with events.