

CHAPTER 3

DESIGN OF THE STUDY

3.0 Introduction

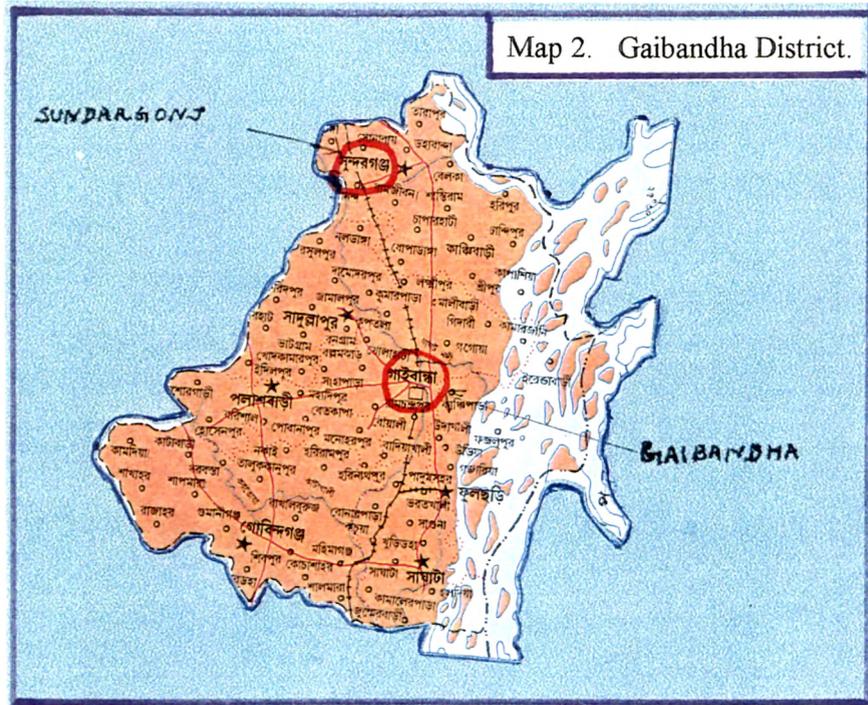
This chapter presents the design of the present study where in the characteristics of the study area, sample, nature of data, sources of data, tools and techniques used for data collection, and procedures adopted in analysing the data are discussed in detail.

In order to realise the stated objectives of the study, the investigator decided on adopting the survey method in general, and for substantiating the data collected through survey, profiles were also developed. In this chapter, the discussion is focused on the aspects of the design earlier mentioned keeping in view the insights regarding the methodology arrived at by the review of literature in the previous chapter.

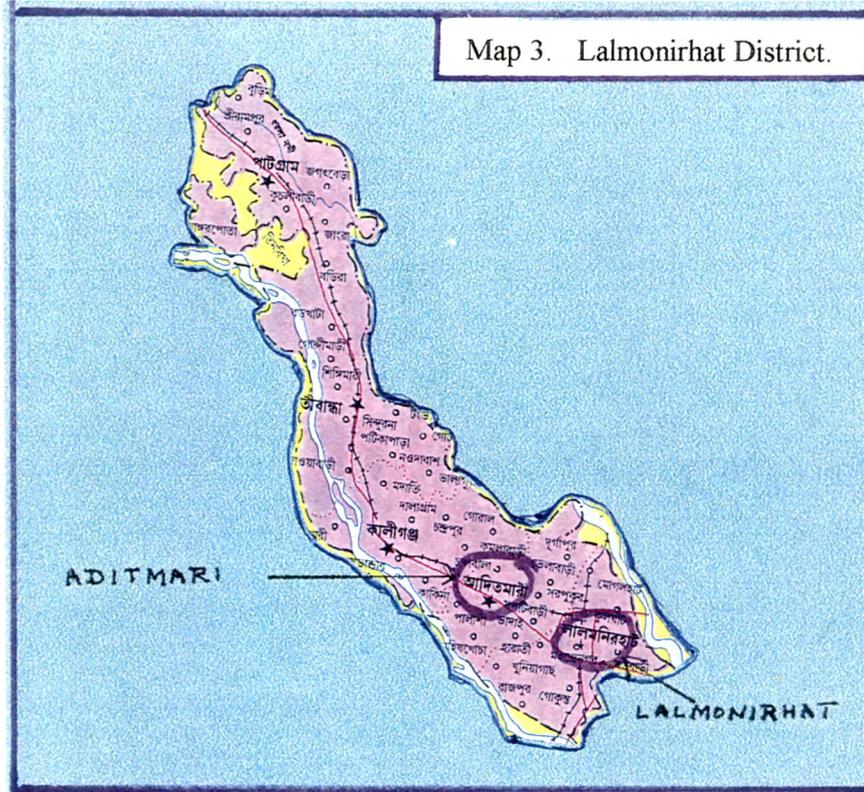
3.1. Characteristics of the Study Areas

RDP-9 was implemented under the aegis of BRDB in 20 thanas of four districts, Gaibandha, Lalmonirhat, Nilphamari and Rangpur in the northern part of Bangladesh, and they are part of Rajshahi division. The region is backward when compared to the central and southern part of the country in terms of industrialisation, power supply, communication, trade, employment opportunity, economic activities etc. To enable a proper understanding of the areas under study from their geographical location and distance from the capital Dhaka, maps have been presented here with.

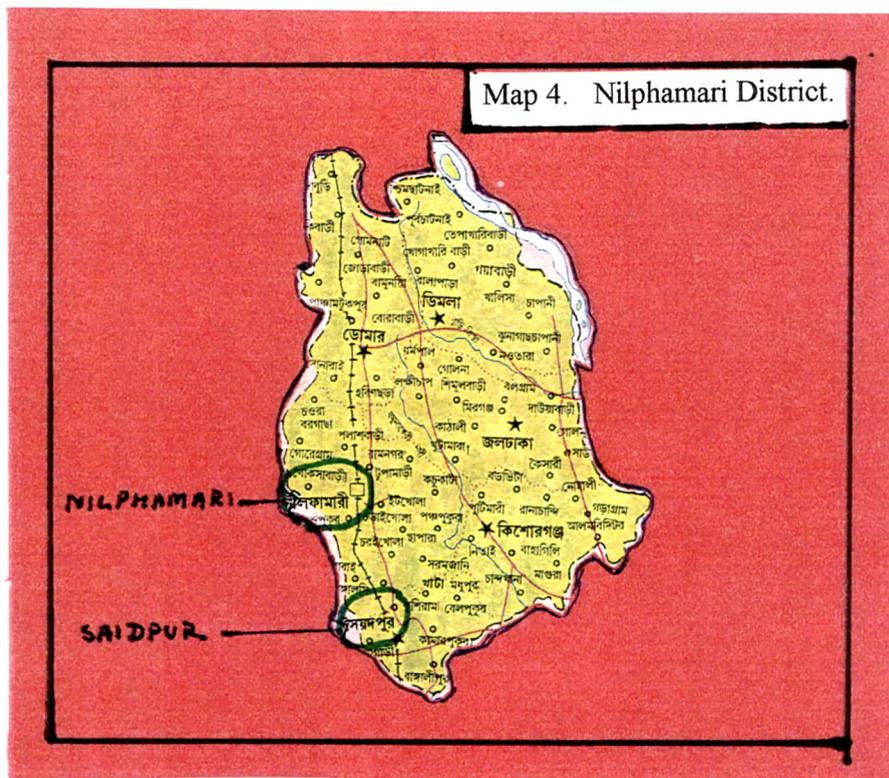
Most of the people live in the rural areas and agriculture is the main source of livelihood. Majority of the people in these areas are landless labourers whose supplementary occupation is either petty trade, or rearing of cattle and such like. Their agricultural methods are most traditional. Needless to say that they are



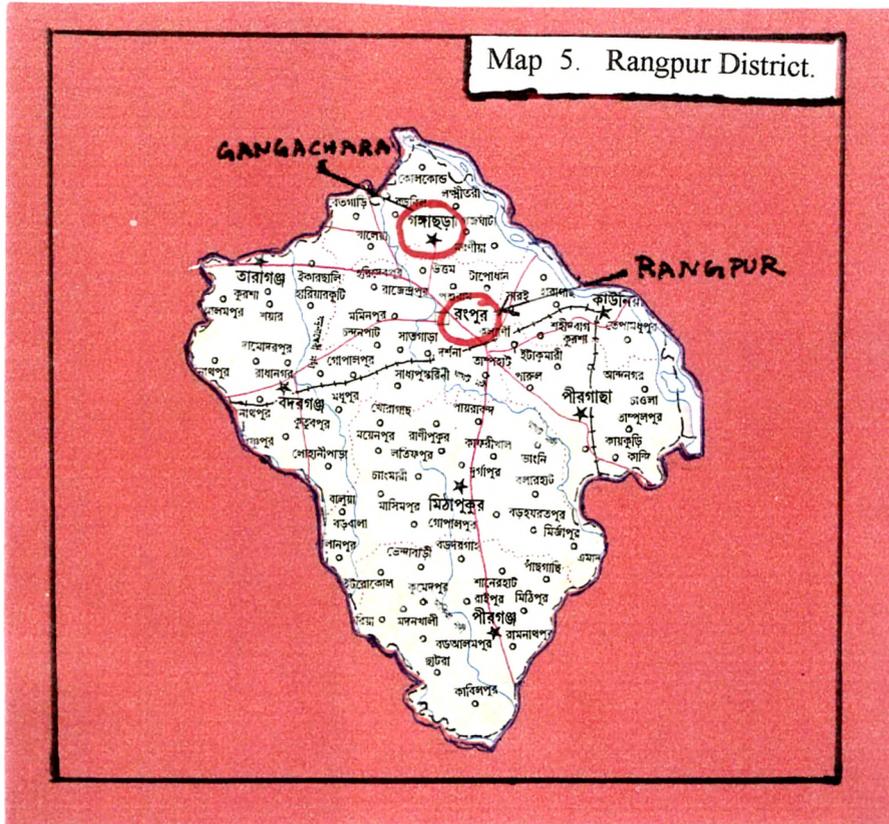
Name of District:	Gaibandha
Area in Sq.K.M:	2,157.
Population :	19,42,000
Distance from Dhaka by Road:	301 k.m
No. of Thanas:	7
Name of Thanas:	Gaibandha Sadar, Sadullapur, Gobindagonj, Shaghata, Fulchhari, Sundarbanj and Polashbari.
Total No. of FE centres:	83.



Name of District:	Lalmonirhat
Area in Sq.K.ms:	1,204
Population:	9,64,000
Distance from Dhaka	
by Road:	390 k.ms
No. of Thanas:	5
Name of Thanas:	Lalmonirhat sadar, Patgram, Aditmari , Kaliganj and Hatibandha.
Total No. of Thanas:	53.



Name of District:	Nilphamari
Area in sq.k.m :	1,553.
Population :	14,05,000
Distance from Dhaka	
by Road:	396 k.m
No. of Thanas :	6
Name of Thanas:	Nilphamari Sadar, Kishore ganj, Jaldhaka, Domar, Dimla, and Saidpur.
Total No. of FE centres:	79



Name of District:	Rangpur
Area in sq.k.m :	2,320.
Population :	2,12,000
Distance from Dhaka	
by Road:	335 k.m
No. of Thanas:	8.
Name of Thanas:	Rangpur Sadar, Ganagachara , Kaunia, Pirgacha, Badarganj, Mithapukur, Taraganj and Pirganj.
Total No. of FE centres:	83

economically backward. Due to poverty and illiteracy they are often exploited by money lenders, middle men, contractors and also the lower level functionaries. Their economic rights are governed by oral agreements, concern and mutual obligation.

The present study has been conducted in four thanas of these four districts with a view to gain knowledge regarding the significance of FE programmes in the development of such rural people.

3.2 Sample

RDP-9 implemented the FE programme only in the four districts of Bangladesh as mentioned earlier. For this FE programme, 298 centres were opened in the 20 thanas of these four districts with 4 monitors, 20 T.Cs, 40 D.T.Cs, 150 S.D.Os, 150 E.D.Os, 298 shevoks/shevikas as the functionaries of various levels. The learners' capacity in each of the centre was 20. The investigator selected 16 centres that were functioning and which were also found to be suitable for the use of participant observation technique for collection of data. From each of the selected thana, two male and two female centres were covered by the study. From each of the centre, all the learners were selected for interviews, assessment and observation. These learners could be categorised in the following groups:

- regular learners who have had atleast 80 per cent attendance;
- pre learners who have completed only 1 to 3 years of schooling, but have lapsed into illiteracy;
- those learners who were drop outs of the FE programme;
- learners of varied age groups; and
- ‘non-group’ members who were the kith and kin of RDP-9 group members and were selected as learners for the FE centre.

In all, 232 FE learners were interviewed (74.84 per cent males and 76.88 percent females). Out of them, 17 per cent non-group members (NGMs) were also interviewed and assessed. The detailed break up of learner sample are shown in Table 5.

Table 5: Area Wise Distribution of Sample

Name District.	No. of Thana	No. of Centres			No. of Learners			No. of Non-Group Members		
		M	F	T	M	F	T	M	F	T
Gaibandha	01	02	02	04	30	30	60	00	05	05
Lalmonirhat	01	02	02	04	29	31	60	08	00	08
Nilphamari	01	02	02	04	30	30	60	08	09	17
Rangapur	01	02	02	04	20	32	52	08	02	10
Total	04	08	08	16	109	123	232	24	16	40

Besides eight policy level personnel of RDP-9, shevok/shevikas, literacy experts were interviewed for collecting various information about the FE programme. The sample of the persons interviewed are shown in table 6.

Table 6: Persons Interviewed

S. No.	Persons Interviewed	Male	Female	Total
1	Literacy Personnel	28	27	55
2	Shevok/Shevika	20	21	41
3	Literacy Expert	05	-	05
4	Local people	54	10	64
	Total	95	45	140

From the Tables 5 and 6 it is clear that number of males and females in the sample are not equal.

3.3. Sources of Data

In order to achieve the objectives of the study, the quantitative and qualitative data were required. The quantitative data were collected from various sources, such as official documents, facilitators, beneficiaries, local people and the achievement tests administered on the learners. The qualitative data were collected through observations, interviews relating to the various processes and interaction of human and physical elements of RDP-9. The following were the sources of both the quantitative and qualitative data:

- Annual Reports of BRDB, Booklets of LGED and RDP-9.FE materials, review report, FE primers, training programme curriculum, hand outs and supervision registers, etc.
- Literacy personnel who worked in the districts/thana project office and at the field level.
- Learners or beneficiaries who were learning in the FE centre of RDP-9 in 4 districts of Gaibandha, Nilphamari, Lalmonirhat and Rangpur. An evaluation test prepared at the centres and another prepared by the investigator and information sheets pertaining to the learners' social awareness, socio economic status and location of centres.
- Shevoks/ shevikas who teach at the FE centres were the sources of information regarding their training, instructional materials, facilities, views about the learners, support from the literacy personnel and community, and these were obtained through a questionnaire.
- FE experts who were attached with the functional literacy programme of Bangladesh. They analysed the contents of the FIVDB primers -Functional Literacy Books 1,2,and 3. Their data also indicated the needs of the FE learners and about the learning methods that were used for the selected primers. These were obtained through an open ended questionnaire.
- Residents in the areas of the selected FE centres but who did not attend the programme also provided information and views about the programme in interviews that were conducted for the purpose.

3.4. Nature of Data.

Keeping in view the objectives of the study the necessary information were collected from the above cited sources. While the details regarding the implementation of poverty alleviation project, the infrastructure of the programme, details regarding the duration and nature of the training programmes, facilities available, and other details about the centres formed the quantitative data; the perceptions, opinions and suggestions about the programmes, and the performance and involvement of the personnel in the activities of running the FE centres, opinions of the learners and the other community members formed the qualitative data. Views of the literacy experts who had content analysed the primers were also qualitative in nature.

3.5. Tools and Techniques for Data Collection

The tools and techniques that were used by the investigator to collect the required data for the present study are presented hereunder.

1. Interview Schedules and Questionnaire
2. Functional Education Assessment Tool (FEAT)
3. Evaluation Test
4. Participant Observation
5. Unstructured Interviews.

3.5.(I).Interview Schedule and Questionnaire:

An open ended interview schedule was prepared to collect information about the perceptions of the FE learners/beneficiaries,(those who joined the FE programmes . This interview schedule covered five aspects of the programmes, i.e. basic information, personal information, familial, FE curriculum and materials, and teaching and learning process.

The questionnaire for the shevoks/shevikas included al the aspects of the conduct of the programme such as the year in which the programme was organized, nature of activities provided, availability of facilities, support from learners, literacy personnel and community, learners' interest , and follow up activities.

The literacy personnel's questionnaire consisted of items regarding the training for the task, frequency of visits to FE centres, mode of recording observations, nature of guidance provided to shevoks/shevikas, involvement in the activities of FE centre, problems related to organization and conduct of the programme and the remedial measures attempted.

An open ended questionnaire was prepared for collecting the opinions of the literacy experts. This consisted of items regarding FIVDB's primers of functional literacy, steps of teaching the primers, teaching methods, the content of the primers

etc. And there were also items to find out the relevance of the learning materials in the context of national development.

The interview schedule for the local persons ,who had not attended the courses at the FE centres, was developed to find out about their attitude towards the FE programme and the extent of their involvement in its conduct and organisation.

3.5.(ii).Functional Education Assessment Tools(FEAT)

The Functional Education Assessment Tools are designed on the basis of the FE primers which are developed by FIVDB. The FEAT was prepared for the purpose of assessing the learners' achievement in the skills of reading, writing, counting and awareness.

- a. **Assessment of Reading Skill:** There are four stages in the reading acquisition process . They are - preparing of reading; establishing initial reading attitude and skill; rapidly growing ability to read and acquiring more mature habits. Three sets of tests were designed for assessing the learners' reading competencies. The first test tries to assess the ability to read 10 words, the second to assess the ability read one paragraph of 7 simple sentences with two compound consonants words (words with conjunctive consonants **কপ** , **ক্ন**), and the third to test the ability to read with understanding a passage from the third primer and be able to answer five questions for comprehension.
- b. **Assessment of Writing Skill:** Writing is not a tool for reproducing memorised information, but also the ability to convey messages and express thoughts. For this , five sets of test were designed based on the maxim to easy to difficult. The first, see and write words. Here the learners see and write the names of four districts and one division of Bangladesh. Second, writing of their address. The learners write their own addresses so that their letter might reach them. Thirdly, filling up the gaps with suitable words. Learners fill in the gaps in ten sentences. Fourthly, composing five sentences on their own. They are shown selected

pictures from flip-chart about which they have to write five sentences. Fifthly, letter writing. They write a letter to their relatives.

- c. **Assessment of Numeracy Skill:** The concept of counting is used as an applied skill. Five tests were designed on the basis of easy to difficult concepts. The first test was to see that the learners are able to count numbers from one to fifty. The second test was to make them read five numbers with two digits. The third test was to fill up five gaps with appropriate numbers. Fourthly, there were three problems of addition to be solved, and these were from their own primers. The fifth test included three problems of subtraction, also chosen from their own primers.

3.5.(iii).Assessment of Learners' General Awareness. The term awareness refers to the knowledge of one's personal hygiene and health habits, social and national issues. This assessment has a great significance in the context of the functional education programme being a part of the larger rural development programme in the national context. Through such an assessment one is able to judge the extent of awareness of the learners in terms of knowledge, skills and practice which they can be related to the improvement of the quality of their lives, which happens to be one of the underlying goals of the RDP-9. The investigator personally collected the information about the general awareness of the learners regarding their personal, familial, social and national issues, through an open ended questionnaire.

3.5.(iv).Performance Assessment Test: The investigator prepared another performance assessment test battery containing five sets of tests to be administered five times within six months of the course. They assessed the level of attainment of learners in terms of their oral participation, reading skill (including reading of words, alphabets, and matras), writing, and numeracy skills. The rating was in three descriptive categories of good, satisfactory and poor.

3.5.(v).Participant Observation: Participant observation technique was essential in acquiring two sets of information. One, the researcher as participant of the process and progress of FE programmes in the rural areas was able to acquire more

authentic information about the programme due to closer and continuous interaction with the human and physical elements of the FE centre. It also enable the investigator to observe and collect a wider range of information by being and sharing the activities of the learners. Secondly, being a participant observer, it helped the investigator to a deeper insight into the networking of multiple variables operating in the centre's environment, and needs of the learners. This facilitated the investigator to prepare the case profiles .

Continuous participative observation was done by the investigator for 30 days in Rangpur, 7 days in Gaibandha and Nilphamari, and Lalmonirhat districts in various situations such as in the centres, locality and in group meetings. These observations were recorded in order to collected relevant evidences which helped the investigator to understand and interpret the manner in which the programme had made an impact of the learners' life. That is to say that, the investigator was able to report how the integrated interventions offered by RDP-9 in terms of loans, education and promotion of social awareness developed self reliance in the learners.

3.5.(vi).Unstructured Interview: This tool was essentially adopted for obtaining information for objectives one, two and three, which aim to measure the impact of overall FE programmes of RDP-9 and to find out 'what' effects they had on learners' daily life, which calls for an idiographic approach. The main aim was to probe into 'what', 'how' and 'why' aspects of the various educo-social environmental elements in order to get as much information as possible from the different sources of particular 'case' selected for the study. For the unstructured interview, respondents were the literacy personnel at different levels, shevoks/shevikas and learners. Its focus was to obtain a comprehensive idea about the progress of FE programme. The interview proceeded from cues obtained through observation and questionnaire. It did not follow any particular format, but varied from case to case and the individual interaction patterns varied significantly.

3.6. Procedure of Data Collection

In order to get permission for conducting the study, the investigator personally met the Project Director of RDP-9 and explained the need, importance and the purpose of the study. Conceding to the investigator's request, the P.D introduced the investigator to the various relevant officials. The investigator personally visited the different offices and the field areas in order to identify the relevant documents for the study.

The investigator observed the activities of the learners and teachers in the selected centres for 30 days in Rangpur, 7 days in the other three districts. In order to collect the general information of the centre, about the teaching learning process, and other details regarding the FE programmes in the centres, the investigator personally visited the relevant offices and collected all the required information from the documents and records. As a participant observer, the investigator administered the five sets of test prepared by her at different periods.

The investigator personally observed and interacted with the FE learners, shevoks/shevikas, literacy personnel and local people involved in the running of the centres in order to collect the data. In this task, she was assisted by the monitor. The verbal interactions were supplemented with the audio recordings and photographs taken by the investigator. These have helped her in the preparation of the profiles.

After completing the six months' observance of the FE course in the centres under study, the investigator conducted the tests of the learners. She used an open ended questionnaire and had informal discussions with the learners in order to collect data pertaining to their general awareness.

The investigator visited homes of 40 female and 20 male learners for about 10 to 15 days after 9 months of the closure of the FE centre and observed thoroughly their daily activities. The reason behind such visits was to gather their opinions about the FE programme and its effect on their life style. Another purpose was to obtain case profiles which would allow to probe deeper into the attitudes of

the respondents towards their livelihood activities. Of the 36 case profiles, 20 were from Rangpur, 11 from Saidpur and 5 were from Lalmonirhat. Prolonged interviews with each case for about 2 to 3 hours over seven consecutive visits yielded the necessary data for case profiles.

3.7. Procedure of Data Analysis

The study being a descriptive survey of a development programme, the data was analysed both quantitatively and qualitatively. The data on the questionnaire and FEAT has been subjected to percentage analysis.

Data collected through observation, interviews, quantified data in order to evaluate the learners' needs, performance, improving quality of life and over all activities of the FE programme of RDP-9, have been described and cross-checked by corroborating with the quantified data obtained through questionnaires. The information collected through the interview schedules, those recorded on the audio tapes, and the informal conversations which recorded in the investigator's diary have been content analysed and presented under the relevant objectives. Moreover, most of the analysis of data has been done during the data collection period itself, which enabled the verification of data obtained through qualitative techniques.

The criteria that formed the basis for the assessment of the learners' achievement on the five FEAT tests prepared by the investigator are presented here under in detail. The investigator had prepared a battery of three sets for the assessment of the learners' achievement in Reading, Writing and Numeracy. The performance of the learners on these sets of tests were both in the oral as well as the written forms. (On the other hand, their understanding and general awareness was assessed only orally through interactions during participative observation and visits to the homes of the learners by the investigator personally).

The FEAT test were administered on the learners in the 3 R's after the completion of the six month FE course of RDP-9. Time duration fixed for each of

the tests was: ten minutes for reading, 30 minutes for writing and 30 minutes for numeracy.

Reading Tests.

They were in all three tests for this skill. In the first test, the learners were assessed for their skill in Word Formation of simple ten words. The performance was rated on five points; good, fair, satisfactory, not satisfactory and poor.

Good: The ability to read seven to ten selected words from the Word Formation test.

Fair: The ability to read five to six selected words from the Word Formation test.

Satisfactory: Ability to read three to four words in the Word Formation test.

Not Satisfactory: Ability to read only one or two of the selected words in the test.

Poor: Inability to read even a single word from the test.

The Second Reading Skill test consisted of reading a paragraph of 7 sentences with one conjunction and two words formed of compound consonants. The performance was rated in five categories of good to poor as in the first test.

Good: The ability to read the paragraph with proper pace, and correct pronunciation.

Fair: The ability to read the selected paragraph slowly but with some errors of missing to pass pause at the conjunctions, but with proper pronunciation.

Satisfactory: The ability to read, but with the help of spelling out each alphabet, and with errors in pronunciation of the words with compound consonants.

Not Satisfactory: Reading very slowly spelling out each alphabet in the word, and with some errors in pronunciation, and not being able to pronounce words with compound consonants.

Poor: Inability to read any part of the paragraphs.

The Third Reading Skill test consisted of reading a paragraph with comprehension. The paragraph consisted of 7 sentences in two conjunction and two words with compound consonants. The learners' performance were rated in the following five categories:

Good: Ability to read with comprehension passage and answer four to five questions correctly.

Fair: Ability to read with comprehension the passage with pauses and answer one to three questions with some hesitation.

Satisfactory: Ability to read with the aid of spelling the alphabets without comprehension and answering four to five questions after listening to the paragraph re read by the investigator.

Not Satisfactory: Learners able to answer one to three questions after the passage was re read to them.

Poor: Total failure to read and comprehend.

Written Test.

Five sets of tests were designed for assessing the writing skills of the learners. The performance were rated as good, fair, satisfactory, not satisfactory and poor. The criteria for rating each test have been given down below.

The First Written test required the learners to only copy selected five words from their primers. They were rated as follows:

Good: Ability to copy the names of four districts and the name of the division correctly and with clearly formed letters.

Fair: Ability to copy the name of any three districts correctly and with clearly formed letters.

Satisfactory: Ability to copy the name of any two districts correctly and clearly.

Not satisfactory: Able to copy the name of only one district correctly, but clearly.

Poor: Not able to write anything.

The Second Written test required the learners to write their personal address. On this test, the were ratings were as follows:

Good: Ability to write their personal address correctly and clearly.

Fair: Ability to write their address but with some errors.

Satisfactory: Ability to their address incompletely but adequately enough to enable the letter to reach the destination.

Not Satisfactory: Ability to write only their names and name of their village as address.

Poor: Failure to write the address but able to write their names correctly.

The Third Written Test required the learners to fill up gaps with appropriate words to complete sentences. Performance ratings were as shown hereunder:

Good: Ability to fill up seven to ten gaps with appropriate words correctly.

Fair: Ability to fill up five to six gaps correctly.

Satisfactory: Ability to full up three to four gaps correctly.

Not Satisfactory: Ability to fill up only one or two gaps.

Poor: Inability to fill up even a single cap.

The Fourth Written Test consisted of written picture composition. The learners were shown a picture, and they were expected to describe in written form in five sentences. They were rated as follows:

Good: Ability to write four to five meaningful sentences correctly.

Fair: Ability to write three meaningful sentences.

Satisfactory: Ability to able to write only two meaningful sentences.

Not Satisfactory: Ability to write only one incomplete sentence.

Poor: Inability to write even one sentence.

The Fifth Written Test needed the learners to write a letter to any one of their relatives on any subject in four to five sentences. The learners had been exposed in the class previously with the format of the letter. They were rated as follows:

Good: Ability to write a letter of four to five meaningful and correct sentences.

Fair: Ability to write a letter of three meaningful sentences.

Satisfactory: Ability to write in two sentences but not able to express their ideas meaningfully.

Not Satisfactory: Ability to write only one incomplete sentence.

Poor: Inability to write even a single sentence.

Numeracy Tests

Another set of five tests were prepared to assess the learners' performance on Numeracy skills. These tests were also rated as good, fair, satisfactory, not satisfactory and poor.

The First Numeracy Test required the learners to orally count numbers 1 to 50. Rating of the performance was as follows:

Good: Ability to orally count 1 to 50 correctly.

Fair: Ability to orally count 1 to 40 correctly.

Satisfactory: Ability to count 1 to 30 correctly.

Not Satisfactory: Ability to count only 1 to 25 correctly.

Poor: Learners count 1 to 25 with lots of errors.

The Second Numeracy Test required the learners to orally identify 5 selected numbers. Assessment was as follows:

Good: Ability to identify 4 to 5 numbers correctly.

Fair: Ability to identify three numbers correctly.

Satisfactory: Ability to identify only two numbers correctly.

Not Satisfactory: Ability to identify only one number correctly

Poor: Inability to identify even one number correctly.

The Third Numeracy Test was an activity where learners had to complete a series of numbers by filling up blanks with correct numbers. This was a written test.

The learners were rated as stated under:

Good: Ability to fill up four to five blanks correctly.

Fair: Ability to fill up three blanks correctly.

Satisfactory: Ability to fill up only two blanks correctly.

Not Satisfactory: Ability fill up only one blank correctly.

Poor: Inability fill even one blank.

The Fourth Numeracy Test consisted of three problems of addition selected from the Primers studied by the learners. The ratings were as follows:

Good: Ability to compute two addition problems of two digits and one addition problem of one digit with three rows of numbers correctly and clearly.

Fair: Ability to compute two problems of two digit addition correctly and clearly.

Satisfactory: Ability to compute one addition problem of two digit and one addition problem of one digit correctly.

Not Satisfactory: Ability to compute only one addition problem out of the three problems.

Poor: Inability to compute even one problem.

The Fifth Numeracy Test consisted of three problems of subtraction selected from the Primers. Here the rating was as follows:

Good: Ability to compute all the three problems correctly and clearly.

Fair: Ability to compute one subtraction of three digits, and one subtraction of two digits correctly.

Satisfactory: Ability to compute one subtraction problem of two digits and one subtraction of one digit correctly.

Not satisfactory: Ability to compute only one subtraction problem out of the three problems.

Poor: Inability to do subtraction.

Data collected from the observation of the FE classes and the views of the literacy experts regarding the primers, curriculum etc. helped the investigator in the content analysis and description of the primers and the curricular activities.