Chapter 3

METHODOLOGY

Method
Area of study
Sample
Sources of Data
Description of Tools
Procedure for Data Collection
Statistical Methods
METHODOLOGY

This chapter is devoted to a detailed description of the method and procedure of the study. The details of the method, sample, tools, procedure for data collection and the qualitative and quantitative techniques for analyzing the data have been explained in this chapter under the following heads.

1. Method
2. Area of study
3. Sample
4. Sources of Data
5. Description of Tools
6. Data collection procedure
7. Statistical Techniques for analysis

3.1 Method

The decision about the method depends upon the nature of the problem selected and the kind of data necessary for its solution. Since the present study is a descriptive one in a comparative framework, Normative survey method is the technique adopted for the collection of data. The investigator stuck on to descriptive study because it aims at providing accurate descriptions of the in-service programmes for primary school teachers in the two states of Kerala and Tamil Nadu. A questionnaire was prepared for gathering the perceptions of teachers on the effectiveness of the in-service training programmes. Focus group discussions were conducted with the SSA functionaries who envisage and implement the in-service programmes at State and the District levels in Kerala and Tamil Nadu to collect relevant data to analyze and compare the in-
service programmes conducted under SSA in the two States using the focus group discussion format. The study covered Kerala and Tamil Nadu. Keeping in mind the size of the population and nature of clientele, purposive sampling technique were used for sample selection. The Investigator selected two districts Trivandrum in Kerala and Kanyakumari in Tamil Nadu. The two districts were selected because the literacy rates of the two districts are almost equal and both the districts have three educational districts. Five blocks were selected randomly from each of the districts covering all the educational districts for collecting the primary data.

3.2 Area of study

Trivadrum is the southern district of Kerala. It comprises an area of 2192 sq.km. The population of the district according to 2001 census was 33.39 lakh with a male population of 16.71 lakh and female population of 16.68 lakh. The density of population is 1479 per km. Kanyakumari district in Tamil Nadu comprises an area of 1684 sq.km. According to 2001 census the population of Kanyakumari district in Tamil Nadu was 10.94 lakh with a male population of 5.43 lakh female population of 55.11 lakh. The density of population is 995 per km. There are 12 blocks, 4 municipalities, 1 corporation and 78 village panchayaths in Trivandrum district. In Kanyakumarai district there are 9 blocks, 4 municipalities and 155 village panchayaths. The literacy rates of the two districts are almost equal and both the districts have three educational districts. Trivandrum District in Kerala has the literacy rate 89.36 percent with Male 92.68 percent and Female 86.26 percent. Out of 30 Districts in Tamil Nadu, Kanyakumari District has the highest literacy rate in Tamil Nadu 87.60 percent with Male 90.40 percent and Female 87.60 percent. Figure 3.1 shows the geographical map of the study area.
Figure 3.1
Geographical map of Study Area

No. Of BRCs -12
BRCs Selected
1. Varkala
2. Nedumangadu
3. Kaniyapuram
4. Balarama puram
5. Neyyattinkara

No. Of BRCs -12
BRCs Selected
1. Melpuam
2. Munchirai
3. Thovalai
4. Thackallay
5. Thiruvattar
3.3 Sample

The present study compares the in-service programmes under SSA in the two states of South India. In order to get a wider picture of the training and orientation, individuals having expertise, experience and exposure in different aspects of in-service programmes were chosen for the study. So keeping in mind the size of the population and nature of clientele the Investigator used purposive sampling techniques for sample selection. Trivandrum district in Kerala and Kanyakumari district in Tamil Nadu were chosen.

Trivandrum District in Kerala consists of 3 Educational Districts and 12 Block Resource centres (BRCs). The three educational districts in the districts are Attingal, Neyyattinkara and Trvandrum. Attingal and Neyyattinkara Educational Districts have 5 Block Resource Centres each. Trivandrum Educational District is the smallest with only three BRCs. For the study five BRCs were selected randomly, two each from Attingal and Neyyattinkara Educational Districts and one from Trivandrum Educational District. Thus, Varkala and Nedumangad BRCs from Attingal, Balaramapuram and Neyyattinkara BRCs from Neyyatinkara and Kaniyapuram BRC from Trivandrum were selected.

A cross section of over 300 elementary teachers under five BRCs covering all the three educational districts in Trivandrum district in Kerala were contacted to elicit data on in-service programmes provided to them under SSA. Table 3.1 shows the number of schools covered and the distribution of sample of teachers selected from Trivandrum district in Kerala.
Table 3.1

Distribution of sample selected from Trivandrum District in Kerala

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Educational Districts</th>
<th>BRCs selected</th>
<th>No.of schools covered</th>
<th>No.of teachers covered</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>LP</td>
<td>UP</td>
</tr>
<tr>
<td>1</td>
<td>Attingal Varkala</td>
<td>9</td>
<td>8</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>Trivandrum Kaniyapuram</td>
<td>10</td>
<td>8</td>
<td>18</td>
</tr>
<tr>
<td>3</td>
<td>Neyyattinkara Balaramapuram</td>
<td>10</td>
<td>7</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Neyyattinkara</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>5 BRCs</td>
<td>46</td>
<td>35</td>
</tr>
</tbody>
</table>

There are 3 educational Districts and 9 Block Resource centres (BRCs) in Kanyakumari District of Tamil Nadu. All the three educational districts have 3 BRCs each. For the study, five BRCs, two each from Thuckalay and Kuzhithurai educational districts and one from Nagercoil educational district were chosen. Melpuram and Munchirai BRCs from Kuzhithurai, Thovalai BRC from Nagercoil and Thackalay and Thiruvattar BRCs from Thacklay were selected for the study.

A cross section of over 300 elementary teachers under five BRCs covering all the three educational districts in Kanyakumari district in Tamil Nadu were contacted to have their perceptions on the effectiveness of in-service programmes provided to them under SSA. Table 3.2 shows the number of schools covered and the distribution of sample in Kanyakumari district in Tamil Nadu.
Table 3.2

Distribution of sample from Kanyakumari District in Tamil Nadu

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Educational Districts</th>
<th>BRCs selected</th>
<th>No. of schools covered</th>
<th>No. of teachers covered</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>LP</td>
<td>UP</td>
</tr>
<tr>
<td>1</td>
<td>Kuzhithurai</td>
<td>Melpuram</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Munchirai</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>Nagarcoil</td>
<td>Thovalai</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>Thackalay</td>
<td>Thackalay</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Thiruvattar</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5 BRCs</strong></td>
<td></td>
<td>40</td>
<td>30</td>
</tr>
</tbody>
</table>

Table 3.3

Break up of Sample chosen from Kerala and Tamil Nadu.

<table>
<thead>
<tr>
<th>State</th>
<th>Districts</th>
<th>Total No. of EDS</th>
<th>Total No. of BRCs</th>
<th>No. of BRCs selected</th>
<th>No. of schools covered</th>
<th>No. of teachers Covered</th>
<th>Teacher Sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kerala</td>
<td>Trivandrum</td>
<td>3</td>
<td>12</td>
<td>5</td>
<td>46</td>
<td>35</td>
<td>167</td>
</tr>
<tr>
<td>Tamil Nadu</td>
<td>Kanyakumari</td>
<td>3</td>
<td>9</td>
<td>5</td>
<td>40</td>
<td>30</td>
<td>180</td>
</tr>
</tbody>
</table>

EDS- Educational Districts, LP- Lower Primary School, UP-Upper Primary.

The details of the teacher sample (age, sex and qualifications) selected from the two states are given in tables 3.4, 3.5 and 3.6 below.
Table 3.4

Classification of the Teachers according to age level

<table>
<thead>
<tr>
<th>Age</th>
<th>Kerala</th>
<th>Tamil Nadu</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of Respondents</td>
<td>%</td>
</tr>
<tr>
<td>&lt;35</td>
<td>32</td>
<td>10.67%</td>
</tr>
<tr>
<td>35-45</td>
<td>210</td>
<td>70%</td>
</tr>
<tr>
<td>&gt;45</td>
<td>58</td>
<td>19.33%</td>
</tr>
</tbody>
</table>

Table 3.4 indicates that out of 300 respondents from Kerala 70 percent of the respondents belonged to the age group of 35-45 years. In Tamil Nadu out of 300 respondents 66 percent of the respondents fell under the age group of 35-45 years. 19.33 percent of the respondents in Kerala and 20.67 percent of the respondents in Tamil Nadu were from the age group of above 45 years. 10.67 percent of the respondents in Kerala and 13.33 percent of them in Tamil Nadu were from the age group of below 35 years.

Table 3.5

Classification of Teachers based on gender

<table>
<thead>
<tr>
<th>Groups</th>
<th>Trivandrum</th>
<th>Kanyakumari</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>%</td>
</tr>
<tr>
<td>Male</td>
<td>41</td>
<td>13.67</td>
</tr>
<tr>
<td>Female</td>
<td>259</td>
<td>86.33</td>
</tr>
</tbody>
</table>
Table 3.6

Classification of Teachers according to Qualification

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Kerala</th>
<th></th>
<th>Tamil Nadu</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>a. General</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Plus 2</td>
<td>167</td>
<td>55.67</td>
<td>118</td>
<td>39.33</td>
</tr>
<tr>
<td>2. Graduate</td>
<td>101</td>
<td>33.67</td>
<td>140</td>
<td>46.67</td>
</tr>
<tr>
<td>3. Post graduate</td>
<td>32</td>
<td>10.66</td>
<td>42</td>
<td>14</td>
</tr>
<tr>
<td>b. Professional</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TTC</td>
<td>239</td>
<td>79.67</td>
<td>152</td>
<td>50.67</td>
</tr>
<tr>
<td>B Ed</td>
<td>56</td>
<td>18.66</td>
<td>120</td>
<td>40</td>
</tr>
<tr>
<td>M Ed</td>
<td>5</td>
<td>1.67</td>
<td>28</td>
<td>9.33</td>
</tr>
</tbody>
</table>

Table 3.6 shows that all respondents have professionally trained. In other words all respondents in the two states are trained teachers. It is to be mentioned that the minimum qualification in the two states for getting admission to Teacher Training Certificate (TTC) is pass in plus two. The minimum qualification for B Ed is a pass in degree course. There should be 50 percent marks for plus two and 50 percent marks for degree for getting admission to TTC and B Ed respectively. 33.67 percent of the respondents from Kerala and 46.67 percent of the respondents from Tamil Nadu are graduates. 10.66 percent of respondents in Kerala and 14 percent of them in Tamil Nadu are post graduates. 5 percent of the respondents in Kerala and 9.33 percent of them in Tamil Nadu have attained M Ed degree.

**Constitution of Focus Groups**

Focus group discussions were conducted with the SSA functionaries who envisage and implement the in-service programmes at State and the District levels in Kerala and Tamil Nadu to collect relevant data to analyze and
compare the in-service programmes conducted under SSA in the two States using the focus group discussion format. The tool focused on different aspects like the emerging constructivist paradigm in the state as envisaged in NCF-2005, training profile, nature of training, identification and analysis of training needs, curriculum of in-service programmes, mode of delivery, monitoring, research activities, follow up of in-service training programme etc. In each State three focus group discussions were conducted: one at state level with state level SSA functionaries and two at district level with district level functionaries. The focus group discussion was conducted with the officials of SSA selected from Kerala and Tamil Nadu as stated in table 3.7. The organisation SSA Kerala is depicted in Figure 3.2 and that of Tamil Nadu is shown in Figure 3.3.

Table 3.7
Officials for Focus Group Discussion

<table>
<thead>
<tr>
<th>No</th>
<th>Level</th>
<th>Kerala</th>
<th>Tamil Nadu</th>
</tr>
</thead>
</table>
| 1  | SPO   | 1 Additional Director  
9 State Programme Officers  
1 Consultant in Pedagogy  
(11 academic staff out of 12) | 2 Joint Directors  
2 Additional Directors  
5 Coordinators  
3 Deputy Coordinators  
2 Assistant Coordinators  
1 Consultant in Pedagogy  
(15 academic staff out of 31) |
| 2  | DPO   | District Project officer  
3 Programme Officers  
(4 academic staff out of 4) | District Project Coordinator  
Assistant Project Coordinator  
Training officer  
2 Academic Consultants  
7 coordinators  
(12 academic staff out of 12) |
| 3  | BRC   | 34 Trainers out of 117 | 12 BRTEs out of 40 |
Fig 3.2

Organisation of SSA Kerala (Academic and Training)

**State Project Directorate**

- State Project Director
  - Additional Project Director
    - State Programme Officers
    - Consultants
    - Assistant Programme Officers

**District Project Office**

- District Project Officer
  - District Programme Officers

**Block Resource Centre**

- Block Programme Officer
  - BRC Trainers
Fig 3.3

Organisation of SSA Tamil Nadu (Academic and Training)

**State Project Directorate**

- State Project Director
- Joint Directors
- Additional Directors
  - State Coordinators
  - Consultants
    - Deputy Coordinators
    - Assistant Coordinators

**District Project Office**

- District Project Coordinator
  - Assistant Project Coordinator
    - Training Officer
    - Coordinators
    - Academic Consultants

**Block Resource Centre**

- Block Programme Convenor
  - Block Resource centre
    - Teacher Educators
3.4 Sources of Data

The present study was done using both primary and secondary data. The primary data were collected through surveys and focus groups using questionnaires and formats. The Secondary data were collected from the documents developed in the two states approved by the State Governments which included Kerala Curriculum Framework-2007, State level and District level Annual work plan and Budget 2010-11 (SSA-Kerala and Tamil Nadu), Facilitating Training programmes - A handbook (General Education Department, Govt. of Kerala), Activity Based Learning (SSA, Tamil Nadu), Active Learning Methodology (SSA, Tamil Nadu), In-service teacher training (SSA, Tamil Nadu).

3.5 Description of Tools

For collecting the primary data, the following tools were devised by the Investigator and used.

- Questionnaire for Teachers
- Focus Group Discussion Format

Since in-service training plays a crucial role in deciding the professional development of teachers, the Investigator decided to focus on the various aspects of training given to teachers under SSA. The Investigator reviewed several documents, related literature and studies to develop the above tools to collect data for fulfilling the objectives of the present study.
3.5.1 Questionnaire for Teachers

The tool was prepared for gathering the perceptions of the elementary school teachers about the training programmes they have underwent under SSA to find out the effectiveness of these programmes in Kerala and Tamil Nadu. The Investigator went through all the available literature in the area of in-service teacher training for developing the questionnaire for teachers. Educationists, SSA officials and experienced teachers were contacted personally and held discussions with them inorder to get insight about the training programmes going on under SSA. The experience of the Investigator in working in SSA Kerala also helped to prepare the questionnaire for teachers. The Investigator adhered to both open form and closed form questions. Wherever the respondent’s free response in his own words is felt necessary, open form is used. After the draft was prepared, the experts in the fields were contacted. They were requested to express their remarks and provide their valuable suggestions. The questionnaire was translated to Malayalam and Tamil. A copy of the questionnaire and its Malayalam and Tamil versions are given in Appendix I to III.

After preparing the questionnaire, a pilot survey was conducted among 39 teachers in 4 schools in Trivandrum District in Kerala and 30 teachers in 4 schools in Kanyakumari District in Tamil Nadu. The feedback obtained called for some modifications in the items in the questionnaire. Thus the Investigator arrived at the final shape of the questionnaire which was used for gathering the perceptions of teachers in Kerala and Tamil Nadu on different aspects of the in-
service programmes they have participated under Sarva Shiksha Abhiyan. The questionnaire for the study consisted of 10 sections. The respondents were asked to go through the questionnaire and give their responses. All directions were given to answer the questions.

**Personal Data**

It is intended to collect the preliminary and general data of the concerned teacher and of the school in which he/she is working. Items like name, age, qualification, experience, school, BRC and in-service programme attended are included.

**Nature of Training**

This part contains 6 questions and are intended to collect the perceptions of teachers on the training received in terms of the number of days, nature of training undergone, training needs considered, methods used for identifying training needs, effectiveness of the process of need identification and suggestions to make the process of need identification effective.

**Content and Course Materials**

This part is meant for collecting comments of teachers on the quality of the training content and the suitability of the materials provided during training. There are 2 questions in this part. The teachers were requested to evaluate the quality of the training on content area. A five point evaluation scale was given options such as Very Good, Good, Satisfactory, Poor, and Very Poor. The teachers were requested to put tick marks against the statements acceptable to them. The respondents were requested to comment on the
suitability of the materials with provided to them during training. A three point scale was given with options such as Quite Suitable, Suitable, and Not Suitable. The teachers were requested to put tick marks against the statements acceptable to them.

**Method of transaction and modalities encountered by participants**

The questions in this part deal with the methodology of transaction of in-service training and the modalities encountered by the teachers during the training programme. This part contains two questions. The respondents were requested to identify the methodology of transaction and provide their perceptions regarding the effectiveness of methodology and usefulness of the modalities they had encountered.

**Organization and conduct of the in-service programme**

This part is meant for gathering the perceptions of teachers on the adequacy of the training facilities provided, programme design and evaluation of the programme by participants. There are four questions in this part divided into sub-questions.

**Co-Curricular and financial**

The questions in this part were meant for gathering opinion of teachers about the co-curricular and financial aspects related to different types of in-service programmes provided under SSA. There are 3 major questions divided into sub-questions. Both closed and open form questions are provided here.

**Monitoring**

There were three major subsections in this part divided into components.
Monitoring of in-service programmes

The questions in this subsection were meant for studying the perceptions on monitoring of the in-service programmes, effectiveness of monitoring and suggestions to improve the present system of monitoring. There are two questions in this subsection. Both closed and open forms of questions are provided here.

Follow-up activities of in-service programme

The questions in this subsection were intended to study the perceptions of teachers on follow-up activities, frequency of Onsite support, usefulness of Onsite support and suggestions to improve the procedures of Onsite support. There are four questions in this part. Both closed and open forms are provided here.

Research Studies

This subsection encompasses questions to study the types of researches carried out by teachers, teachers’ perceptions about research on professional growth, common difficulties experienced by teachers in conducting research, research grants, recognition for research works, the effectiveness of the measures undertaken to encourage research and utilization of research findings. There are 9 questions in this part. Both closed and open forms are provided here.

Remedial Activities

This part is meant for studying the effectiveness of the remedial activities undertaken by SSA after monitoring the in-service programme. This part consists of two questions.
Cluster training

This part is meant for studying the nature of the activities provided in cluster training and the effectiveness of cluster training. There are 2 questions in this part.

Impact of in-service programmes in teaching learning process

This part is meant for studying the impact of in-service programmes in classroom teaching learning process. There are twelve self evaluation questions about teachers’ competency to plan classroom processes, transact the curriculum, address the issues of special focus groups (differently abled children, girls and SC/ST children) and interact with parents. A three point scale with options Yes, No, Not Sure was given.

3.5.2 Focus Group Discussion Format

This tool was meant for gathering relevant data from the SSA functionaries who envisage and implement the in-service programmes at the State and the district levels in Kerala and Tamil Nadu and to analyze and compare the in-service programmes conducted under SSA. The tool focused on the emerging constructivist paradigm in the state, nature of training, identification and analysis of training needs, development of training modules, curriculum of in-service programmes, organization and conduct of programmes, co-curricular and financial aspects, resource persons and their background, mode of delivery, modalities encountered by participants, monitoring of in-service programmes, research activities and remedial measures undertaken. A copy of the format is given in Appendix IV.
Focus group is a relatively more flexible tool than any enquiry form as it permits explanation, adjustments and variation according to the situation. Focus group reveals detailed information regarding the topic under investigation and deep insight in it. As the present study is descriptive, the Investigator selected focus group as a relevant tool to collect data related to the different aspects of in-service training programmes from the functionaries of SSA dealing with in-service programmes. The Investigator developed the focus group discussion format after surveying relevant documents published by MHRD, NCERT, SSA Kerala and Tamil Nadu. Keeping the objectives of the study in mind the tool has been devised to elicit the maximum responses, ideas, opinions and suggestions from the respondents. The questions were put in sequence under 18 heads as briefed below:

**Emerging constructivist paradigm as envisaged in NCF-2005**

This part is meant for studying the emerging constructivist paradigm in the state. This part included 12 relevant ideas related to social constructivism, critical pedagogy, assessment of children, teacher training highlighted in NCF-2005 and were put before the respondents one by one. The respondents were asked to clear their stand on the concepts expressing their agreement or disagreement with reasons.

**Objectives of Training**

This part is meant for eliciting information related to the objectives of in-service training programme, theoretical foundations from which the objectives are derived, objectives difficult to achieve and new objectives to be considered.
Identification and analysis of Training needs

This part dealt with the methods used for identifying and analyzing training needs, agencies involved in the process of need identification, frequency of carrying out the process.

Curriculum of the in-service programme

This part deals with revision of school curriculum, theoretical foundations of school curriculum, curriculum of the in-service programme, nature, type and duration of the in-service programmes organized, contents of the training programme and materials used for training modules.

Development of Training Modules

This part dealt with the discussion of the process of developing training module, agencies that develop training modules and the involvement of teachers in developing the training modules.

Organisation and Conduct of the in-service programme

Following aspects of the in-service programme were discussed in this part. Duration and frequency of the programmes, organization and conduct of the programme, training facilities provided co-curricular and financial aspects and role of educational officers.

Resource persons and their background

The details of resource persons related to the selection process, qualification and experience, training given to resource persons and difficulties in getting suitable resource persons were included in this part.
Methods of delivery and modalities

This part is meant for discussing the methods of transaction and the modalities encountered by the participants.

Monitoring of in-service programmes

This part dealt with levels of monitoring, mechanism and process of monitoring in-service programmes, agencies of monitoring in-service programmes, frequency of monitoring and follows up of monitoring.

Follow-up of in-service programmes

This part dealt with agencies involved in process of evaluating the effect of in-service programmes in schools, strategies to evaluate the effects of the training programme in classroom and schools as a whole and frequency of on-site support.

Research activities

This part dealt with research activities and professional growth of teachers, types of research activities undertaken at school levels by teachers, mode of dissemination of research findings, types of recognition given to teachers, training on research, difficulties experienced by teachers in conducting research activities and research activities at State level.

Remedial measures undertaken for improving the quality of in-service training programmes

This part dealt with the measures undertaken at different levels to improve the quality of in-service programmes.
**Utilization of programmes in vitalizing other areas in education**

This part dealt with the discussion on whether the organization of in-service education programmes for elementary school teachers in the state has helped in any way in vitalizing other services in education such as supervisory services, pre-service teacher education programme, school – community relations etc.

**Incentives given to teachers**

This part is meant for discussing the types of incentives given for attending in-service programmes, recommendations for other type of incentives and other type of empowerment programmes like distance mode imparted.

**Difficulties and drawbacks in organizing in-service education**

This part focused on discussion of the major difficulties faced in organising the in-service programmes and the major drawbacks experienced by the organisors at various levels.

**Collaboration with other agencies**

This part dealt with the discussion on the institutions in locality which formally or informally organize in-service education programmes for elementary teachers and collaboration with them in their programmes.

**3.6 Procedure for Data Collection**

**3.6.1 Data collection from Teachers**

The Investigator visited the BRCs selected for the study distributed in the three educational districts in Trivandrum district. This was mainly meant to have rapport with the Block Programme Officers and trainers. The Investigator then prepared the time schedule to visit the Cluster Training Centres (CRCs)
during the cluster training programmes. The selected BRCs in the 3 educational districts in Kanyakumari district were also visited afterwards and prepared the time schedule to visit the CRCs during the cluster training programmes of the districts. A time schedule was prepared for 4 months with the help of the SSA Officials of Trivandrum and Kanyakumari districts for data collection. The questionnaire was then administered to the respondents visiting the cluster training center during the training programmes.

As per the time schedule, the Investigator visited the selected BRCs in the two districts during the cluster training programmes one after the other. With the consent of the co-ordinator, the investigator met the teachers in the BRCs and detailed the purpose of visit. A brief introduction was given to respondents after establishing rapport. Necessary instructions were given to help them to fill up the questionnaire correctly. The teachers were requested to fill in the questionnaires. In all, 365 questionnaires were collected from Kanyakumari District and 385 from Trivandrum District. From these 300 questionnaires from each district were randomly selected for analyses which were complete in every respect.

3.6.2 Focus Group Discussion

After finalizing the format, a programme with time schedule for the focus group was planned. As per the programme schedule the Investigator first conducted focus group discussion with the state level officials of SSA Tamil Nadu. The participants in the focus group instruction included the joint directors, additional directors, coordinators and consultants who vision, plan
and implement the in-service programmes in Tamil Nadu under Sarva Shiksha Abhiyan.

After getting the consent from the State Office of SSA Tamil Nadu, the Investigator visited the District Project Office, Kanyakumari and met the District Project Coordinator in Kanyakumari District. A time schedule was fixed with his consent and conducted the focus group discussion at district level with the district project coordinator, assistant project coordinator and training officer, consultants and coordinators and conducted the focus group with Block supervisors and BRTEs.

In the same way the focus groups were conducted at the state level in Kerala with a group consisting of the additional director, programme officers and consultant in pedagogy. Then with the consent of the State Project Director, visited the district project office in Trivandrum District and conducted the focus group discussion with the group consisting of the District Project Officer and District Programme Officers who are dealing with in-service programmes for elementary school teachers.

3.7 Statistical methods for analysis

The responses on questionnaire were tabulated district wise and consolidated to compare the in-service programmes under SSA. The responses of the focus group discussions conducted in the two states were consolidated item wise for qualitative analysis. The secondary data were analysed and interpreted. Percentage and frequency distribution were worked out. Critical ratio was used to analyze and interpret the results of the responses.
systematically. Critical Ratio was determined on the basis of comparison of the percentage of teachers in Kerala and Tamil Nadu who made the responses. In order to maintain the logical sequence of and for lucid presentation of results and findings, the whole analysis has been triangulated and divided into six sections with sub sections. The entire analysis has been carried out with in a comparative frame work.