CHAPTER 3

METHODOLOGY

This chapter details the methodology followed for the study titled “Literacy Empowerment of Rural Women : A Field Experiment”. The Statement of the problem, area of study, design of the study, operational definition of the terms, sampling design, assumptions, hypotheses, tools used for data collection, data collection procedure, analysis of data and the statistical techniques used have been described in this section.

3.1.Statement of the Problem

The study was an attempt to develop a methodology for the literacy empowerment of illiterate rural women in the age group of 35 to 55 years to read and/or write Tamil, the local dialect through basic literacy training followed by post literacy with the help of trained Literacy Facilitators. The Literacy Facilitators were the volunteers picked up from the same village and trained to use the basic literacy manual, “Ezhythu Tamil Eilu Nalil” (Write Tamil in Seven Days) for the beginners to learn to read and write Tamil in seven days, published by the Department of Adult and Continuing Education (Now known as Department of Life Long Learning and Extension) of Gandhigram Rural Institute. The literacy exercise was followed by a post literacy experiment using two primers developed by the investigator, one on Nutrition and Health and the other on Environmental education.

In India, the National Literacy Mission concentrates on literacy enhancement of those in the age group of 15-35 years (National Report for CONFINTREA VI, 2008). The literacy and continuing education of all those below 15 years of age is taken care of by the formal and non formal schemes of school education while for the illiterate women in the age group of 35 years plus, no such schemes could be traced. This was the reason why the investigator selected those above 35 years of age as the target group of the study.
Census reports of India indicate a wide rural-urban difference and gender gap in the literacy level of the population. The most disadvantaged among the population are the rural women specifically in the late adulthood stage and the aged. This in turn, has slackened the pace of empowerment of women in the rural areas. To expedite the empowerment process, literacy skills are imperative to all rural women. To impart literacy skills to all illiterate women in a village, a cost-effective Andragogical programme with integration of local man power - youth/school children as trainers, was felt realistic and practical. On realising this need, the researcher made an attempt to develop a replicable micro level model for literacy empowerment of illiterate women in the educationally back ward villages of Tamil Nadu.

Women, in the age category of 35 to 55 years are purposively chosen as the target group as they are relatively free from child bearing and rearing responsibilities and are in the active work force. Women in the older age groups are reported to be less receptive to innovations and hence for this experimental work, the upper age limit for the learners was fixed at 55 years. A slow and steady transition of women from illiteracy to literacy had been envisaged with continuing education of the neo literates as otherwise, many of them, even after acquiring basic literacy skill would go back to illiteracy and become incapacitated to use literacy as a functional tool for their development.

The primers on “Environmental Education” and “Nutrition and Health” were designed and developed as resource materials for post literacy. It was assumed that with the added knowledge imparted on Nutrition and Health and Environmental Education, the primers would help the neo-literates to improve their knowledge on these vital issues of life which may, in turn lead to positive changes in their practices at personal and family levels. The change in their awareness level of the target group on post literacy has been chosen as the criterion for impact assessment of the intervention.
3.2. Design of the Study

A quasi experimental design was adopted for the present study. All such experimental situations in which experimenter does not have full control over the assignment of experimental units randomly to the treatment conditions or the treatment cannot be manipulated are collectively called quasi-experimental designs (Broota, 1992). The study is multi-phased and it aims at educational empowerment of rural women in the age group of 35-55 years through basic literacy at Level One followed by post literacy experiment at Level Two. The same pattern was followed for all the five villages chosen. The design of the study is depicted in Figure 3.1.

![Design of the Study](image-url)
The Level One had planning and preparatory phase, development of teaching and learning materials and training of Literacy Facilitators, Teaching and learning phase and monitoring and evaluation phase. The educational experiment at Level Two concentrated on functional capacity building of the learners in reading and understanding the application of Nutrition and Health and Environmental Protection with basic science input. Summative evaluation of the learner after acquiring necessary literacy and functional skills was done by using participatory exercises at three levels - Learners, Literacy Facilitators and Literacy Education Supervisors. Evaluation scales were used for assessing the learners’ skills, views on post literacy materials and aspects of the educational programme.

3.3. Theoretical Framework

The present study has the Human Capital Theory in the theoretical base. The Human Capital Theory focuses on skills acquisition through education as a means of empowering women which will lead to self-development and socio-economic status. Human Capital Theory focuses on capacity building premised on the notion that “There is presumed economic return on investment in education; that is skill or capacity based at the micro and macro levels” for the individual learner, such an investment seems to provide returns in the form of individual skills acquisition, benefits of literacy and its application for economic success and achievement (Blaug, 1970; 1976; Karabel & Halseu, 1977; as cited in Akintayo & Oghenekohwo, 2004; Adelore and Olomukoro, 2015).

The human capital theory is relevant to this study, because it lays emphasis on the investment of people through educational activities for skills acquisition, which will ultimately lead to capacity building and subsequent empowerment through skill utilisation. Without investment in human capital, skills will not be acquired and there cannot be self-development and improved socio-economic status (Olomukoro, 2012). There is therefore a need to deliberately empower women with skills and knowledge through literacy education programmes. Arguably, it is through formal knowledge or literacy skills that women are able to take control of their lives and participate effectively in the developmental process.
Model for Literacy Programmes as Determinant of Women Empowerment

- Literacy
  - Basic Literacy
  - Advanced Literacy
  - Post Literacy

Barriers to Women Empowerment:
- Illiteracy
- Ignorance
- Diseases
- Hunger
- Poverty
- Dependency
- Malnutrition
- Cultural inhibitions
- Limited access to education

Outcome/Product:
- Cognitive Skills
- Improved health/nutrition
- Higher income
- Higher productivity
- Employment opportunities

Source: Adelore and Olomukoro (2015).

Figure 3.2
3.4. Area of the study

Athoor block of Dindigul district was purposely chosen for the study. The district consists of Three Revenue Divisions viz., Dindigul, Palani and Kodaikanal and eight Taluks. These Taluks are further divided into 39 Firkas and 358 revenue villages. As regard to local bodies, there are three Municipalities viz., Dindigul, Palani, Kodaikanal and 24 Town Panchayats. The rural areas are divided into 14 Panchayat Unions (Blocks) comprising 306 Village Panchayats. According to 2011 Census, its population was 2,161,367 of which male and female were 1,081,934 and 1,079,433 respectively. The sex ratio of Dindigul was 998 as per 2011 census. Literacy rate was 76.85 per cent: 84.91 per cent for males and 68.82 per cent for females (Census of India, 2011). The study locale is shown in Figure 3.3.

Figure 3.3
Athoor is one of the 14 blocks of Dindigul district of Tamil Nadu. It lies in between Dindigul and Bathalagundu about three Kilometers’ west of Sempatti. Athoor is 14.2 km away from the District head quarters. It is one of the legislative assemblies of Tamil Nadu. It lies on the lap of Sirumalai hills in the East and Kodai hills on the west. Kamarajar Sagar Dam is situated in the west part of the village. It lies in the rain shadow region with an average annual rain fall of 900 mm. Endowed with rich types of fertile soil, Athoor block is suitable for a galaxy of crops from food crops to horticulture, floriculture and commercial crops including vanilla. This block does not have any major industries. However, a small segment of the population is employed in weaving, steel fabrication, fiber processing, spinning and textile production.

In Athoor block, there are 22 Village Panchayats. A Village Panchayat is the smallest administrative unit in a rural area, governed by elected members. Among them, seven panchayats, namely, Ambathurai, Alamarathupatti, Thoppampatti, Pillaiyarnatham, Pithalaipatti, Kalikampatti and Vakkampatti were randomly chosen for the study. Profile of the seven village panchayats chosen for preparing the population frame for the experimental study is given in detail in the Chapter 4 Results and Discussion.

The reasons for selecting the area for the study were ease of approach and familiarity with the people for repeat visits during the study for planning, execution and evaluation of the intervention programme. Moreover, rapport maintenance with the school authorities, panchayat presidents and members and local women leaders was easy to ensure cooperation for conducting regular classes and to monitor the programme.

3.5. Operational Definitions of the terms

Literacy

Literacy has traditionally been described as the ability of a person to read and write.
The United Nations Educational, Scientific and Cultural Organization (UNESCO, 2005) defines literacy as the “ability to identify, understand, create and communicate, as well as compute, using printed and written materials in various contexts” (cited in UNESCO Institute for Lifelong Learning, 2013).

**Literacy** in the present study refers to the ability of a person to read and write the alphabets in the native language and form words and sentences.

**Illiterate**

**Illiterates** are the Persons who are not able to read and write their mother tongue, and not able to put their own signature.

According to the Census Report (2011) **illiterate** is a person who cannot either read or write written texts in their native language.

**Literacy Empowerment**

**Literacy empowerment** in the present context refers to enhancement of the ability of an illiterate person to read and/or write simple words and sentences in Tamil, the native dialect and form simple sentences and can read and understand simple literature intended for them.

**Rural Women**

**Rural women** represent the female population living in the rural areas. According to article 24 of the law on Agriculture and Rural Development (no.134/2007) **rural areas** are defined as the “geographic area that is defined by the following criteria: small number of population or low density of population and; specific socio-economic characteristics (Risteska, 2012).

**Field Experiment**

A **field experiment** applies the scientific method to experimentally examine an intervention in the real worldie,, naturally occurring environment rather than in the laboratory (http://en.wikipedia.org/wiki/Field_experiment).
**Post Literacy Programme**

Post literacy is the continuing education programme of the basic literacy to sustain the literacy abilities gained during basic literacy programme.

**Literacy Facilitators**

“**Literacy Facilitators** are the class instructors or facilitators: it is they who actually teach and interact with the intended beneficiaries” (Oxenham 2003).

**Literacy Education Supervisors**

**Literacy Education Supervisors** are those with leadership qualities performing supervisory role in the planning, execution, monitoring and evaluation of the literacy programme.

**Primer**

A Primer is a book or series of books for teaching reading and writing to beginners or semi-literate learners (http://www.01.sil.org/literacy/materials/index.htm). In the present study, a primer developed by the Department of Lifelong Learning of Gandhigram Rural Institute was used for imparting basic literacy skills.

**3.6. Sampling Design**

A quasi-experimental design was followed for the study. It is a multi-phased study using a combination of probability and non-probability sampling techniques for the selection of samples at different phases of the study. Using random sampling method, seven Village Panchayats of Athoor Panchayat Union were selected for baseline survey. Out of these seven Village Panchayats, three with the highest number of illiterate women in the age group of 35 to 55 years were purposively picked up for the educational intervention. Of the 22 villages under these three Village Panchayats, five villages were selected by purposive sampling for conducting the literacy experiment. The criteria considered for the selection of the villages for the experimental study were: the number of illiterate women (35 to 55 years), their willingness to learn, availability of Literacy Facilitators and supervisors within the village, people’s co-operation and absence
of extraneous variables influencing learners’ participation and the teaching learning process. In these five villages, there were totally 213 illiterate women in the age group of 35 to 55. All of them were motivated to join the literacy training programme. However, 33 women refused to join the programme. So, a total of 180 women were enrolled for the literacy training. The sampling design chosen for the study is depicted in Figure 3.4.
3.7. Assumptions

1. The time taken for learning differs by the age of the learners.
2. The average time (number of hours) taken by the illiterates to complete the classes differs for those belonging to backward and scheduled castes.
3. Personal and family factors influence the time taken by the adults for learning.
4. A primer using morphological sequencing would help learners to acquire reading and writing skills quickly.

3.8. Hypotheses

1. There is a relationship between the age of the learner and her literacy accomplishment.
2. There is a significant improvement in the knowledge level of the learners on their education on Nutrition & Health and Environmental Education.

3.9. Data Collection Procedure

LEVEL - I

Phase I: Planning and Preparatory Phase

Survey: A rapid household survey was conducted in 40 villages of seven village panchayats in Athoor Panchayat Union to enumerate the number of women illiterates in the age group of 35 to 55 years. During the survey, an effort was made to identify the potential Literacy Facilitators (LF). i.e. persons competent to train women in the neighbourhood to become literate. Most of them were students studying in the 7th to 12th standard or volunteers in the age group of 12 to 18 years who exhibited readiness to teach at least two illiterates in their locality for one hour a day. Based on the information collected through the survey, a status report was prepared at panchayat level. The interview guide used for the same is given in Appendix-I.

Using an interview schedule, data were collected from the illiterate women in the age range of 35 to 55 years, for preparing a detailed profile of the
illiterate women in the five experimental villages. The schedule is given in Appendix-II. **Participatory Learning and Action** exercises and **Focus Group Discussions** were conducted in each of the villages to identify the human resources (Literacy Facilitators and Literacy Education Supervisors) to be tapped to train illiterate women to read and write as well as a smaller team to monitor the teaching-learning process at village level.

Five **Focus Group Discussions** were conducted in the five villages of selected three village panchayats where the teaching-learning programmes were proposed. In a group, 30-40 members participated. The researcher facilitated the discussion. The participants were the Panchayat President, Panchayat member, School Headmaster/Mistress, SHG leaders, Literacy Education Supervisors and Literacy Facilitators. The discussions were held prior to the implementation of the literacy programme to create awareness among the village leaders and administrative heads of the institutions connected with the literacy programme and further to ascertain their consent and cooperation in conducting the programme in the selected village(s). Focus Group discussion was conducted to know the aspects to be covered for imparting functional literacy to non-literate. At the end of each discussion, the literacy needs of women could be shortlisted. The topics for post literacy were identified at these meetings as Nutrition and Health, Energy and Environment.

In order to supervise the Literacy Facilitators, ten Literacy Education Supervisors were identified from the five experimental villages. They were the local persons having leadership qualities and a spirit of volunteerism. Their qualification was prescribed as pass in the higher secondary examination. Each Literacy Facilitator selected two illiterates each from their locality. Accordingly 180 women illiterates were selected for the learning process. Interview schedule used for collecting their profile is given in Appendix-III & IV. The village-wise distribution of these women along with the Literacy Facilitators and the Literacy Education Supervisors involved in the literacy intervention programme is shown in Table 3.01.
Table 3.01
Distribution of the Persons Involved in the Literacy Intervention Programme

<table>
<thead>
<tr>
<th>Name of the Villages</th>
<th>Non-literate women (35-55 years)</th>
<th>Literacy Facilitators</th>
<th>Literacy Education Supervisors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kalikkampatti</td>
<td>60</td>
<td>30</td>
<td>4</td>
</tr>
<tr>
<td>Ambathurai</td>
<td>50</td>
<td>25</td>
<td>3</td>
</tr>
<tr>
<td>Thoppampatti</td>
<td>34</td>
<td>17</td>
<td>1</td>
</tr>
<tr>
<td>Kollapatti</td>
<td>22</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>MGR Colony</td>
<td>14</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>180</strong></td>
<td><strong>90</strong></td>
<td><strong>10</strong></td>
</tr>
</tbody>
</table>

Village Level Co-ordination Committee was constituted for each of the selected villages. The committee consisted of the Panchayat President, Panchayat Member, School Headmaster/Mistress, SHG leaders, Literacy Education Supervisor and a Literacy Facilitator. This committee monitored the activities in each village.

**Phase: II Development of Teaching and Learning Materials and Training**

**Primer**

The primer “Ezhythu Tamil Eilu Nalil” (Write Tamil in Seven Days) (Level one) prepared and published by the Department of Adult Continuing education and Extension (Now known as Department of Life Long Learning and Extension) of Gandhigram Rural Institute was selected for teaching Tamil. This primer, “Ezhythu Tamil Eilu Nalil” was prepared by Prof. T. Karunakaran, Former Vice Chancellor of Gandhigram Rural University in 1984 following the new method of morphological sequences. He had pretested the primer among women who were the members of Mather Sangam (women groups) of Dharmapuri District. Thereafter, he had tested the primer in the service villages of Gandhigram Rural Institute and found it useful to teach the beginners to write Tamil alphabets and words in an easy way. The Primer is given in Appendix-V.
The letters in Tamil which are very easy to write like “L, U” are introduced in the first lesson. These letters are very easy to write for the learners who have an idea and skill to draw lines.

In the second and third lesson the symbol “r” is introduced with the help of “n” symbol, the following letters could be taught at this stage.

In the fourth lesson, the symbols “p, P, n, N” are introduced and the letters are taught. The following table shows how the symbols help them to learn letters.

<table>
<thead>
<tr>
<th>p</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>n</td>
<td>N</td>
</tr>
<tr>
<td>k</td>
<td>kp</td>
</tr>
<tr>
<td>nk</td>
<td>Nk</td>
</tr>
<tr>
<td>f</td>
<td>fp</td>
</tr>
<tr>
<td>nf</td>
<td>Nf</td>
</tr>
<tr>
<td>r</td>
<td>rp</td>
</tr>
<tr>
<td>nr</td>
<td>Nr</td>
</tr>
<tr>
<td>n</td>
<td>v</td>
</tr>
</tbody>
</table>

In the fifth lesson the symbol “n” is introduced and the following letters can be taught.

<table>
<thead>
<tr>
<th>Q</th>
</tr>
</thead>
<tbody>
<tr>
<td>t</td>
</tr>
<tr>
<td>y</td>
</tr>
<tr>
<td>d</td>
</tr>
<tr>
<td>s</td>
</tr>
</tbody>
</table>

Then in the Lesson six, same symbol “n” is introduced. In the Lesson seven, the symbols “g, Q, r, G, p, Q” are repeated and with help of those
symbols some words are taught. The following table shows the procedure to teach the letters.

<table>
<thead>
<tr>
<th>Symbols</th>
<th>Letters</th>
<th>Words</th>
</tr>
</thead>
<tbody>
<tr>
<td>க கம கன கண கந</td>
<td>கமன கணன கநன</td>
<td></td>
</tr>
<tr>
<td>ஞ ஞம ஞன ஞண ஞந</td>
<td>ஞமன ஞணன ஞநன</td>
<td></td>
</tr>
<tr>
<td>ல லம லன லண லந</td>
<td>லமன லணன லநன</td>
<td></td>
</tr>
<tr>
<td>ர ரம ரன ரண ரந</td>
<td>ரமன ரணன ரநன</td>
<td></td>
</tr>
</tbody>
</table>

In a nutshell, some symbols are introduced first and with the help of the symbols, letters are followed by words.

Symbols ———> letters ———> words

The words which appeared in the primer were the words commonly used by the learners. This primer was the basic literacy aid for teaching Tamil alphabets and words.

**Pre-testing of the Tamil primer**

The researcher equipped herself to use the primer for learning/teaching Tamil. Thereafter, a pre test was done in Chettiypatti, a neighbouring village for teaching Tamil to fifteen illiterate women. The span of attention of the learners was low and so women could not be seriously engaged for more than an hour a day. In one month, only one lesson could be completed properly. So for completion of eight lessons, roughly six to eight months were needed. For evaluation and repeated reading and writing exercises, an allowance of three months with one month additionally for the slow learners was made to help them pick up the learning pace. Altogether, an optimal period of 10 months was planned for the first level literacy exercise.

During Pretesting, the investigator realised the need for assistive teaching aids like a manual, exercise book, alphabet cards with a card holder:

**Manual:** Based on the primer “Ezhythu Tamil Eilu Nalil”, a manual was prepared for teaching each of the eight lessons. This manual served as a guide and helped both the Literacy Facilitators and learners to understand the easy way of
writing Tamil alphabets. The manual contained horizontal, vertical and curved lines and some symbols which form the shape of Tamil alphabets. This manual starts with full stop, comma and then the vertical and horizontal lines. It was used as an additional resource for rapid learning of the learners. The manual is given in Appendix-VI.

**Exercise book:** For the learners to practice alphabets at home, a magic exercise book with a sketch pen was distributed. This enabled them to do homework/repeat exercise of writing the alphabets. The magic exercise book is available in the market. The letters could be erased with a wet cloth.

**Alphabet cards** were prepared based on the primer “Ezhythu Tamil Eilu Nalil”. Alphabet card helped the learners to form words and sentences. The size of an alphabet card was 6x6 cms. Altogether, 142 characters were prepared by use of four colour printing on 80x80 gsm sticker sheet.

A **card holder** was prepared for holding the alphabet cards. The size of the card holder was 4x46 cm (width and length). This holder was made up of wood and seven letters could be displayed at a time. This helped the learners to arrange the alphabets for easy and fast coining of words in Tamil.

**Primers for Post Literacy Education**

Two primers were developed for Post literacy education of the neo-literate. The topics of current interest were identified during the Focus Group Discussions of the monitoring team. Of the suggested topics, Nutrition and Health and Environmental Education were selected and it’s drafting and review by experts was completed in the second half of the first year. Necessary copies of the same were kept ready for post literacy proposed in the second year of the experiment.
Motivating the Women to Learn

Figure 3.5

The primer on Nutrition and Health had 29 lessons in 34 pages. It gave information on the foods we consume. Each lesson had colourful pictures, and care was taken to use simple words and sentences. Detailed information on protein, vitamins and mineral content of food found a place. It explained the diseases
caused by the deficiency of nutrients and tabulated the richness of each food in these 29 lessons. By giving the picture of foods, it made the reader understand the food substance mentioned and to remember it. It was prepared in simple language which could be understood by everyone. It could also be used by village level workers to impart nutrition education to the community. The primer is given in Appendix-VII

The Primer on **Environmental Education** with its power packed 36 pages, provided a varied range of information on environment and bio regions. Though its primary focus was to educate rural women aged between 35-55 years, it provided knowledge to all those who ever turned its leaf. The primer with its colourful package helped to understand easily its content and to fix in memory through its striking pictorial representation. Starting from nine planets, minerals, flowers and insects, it spoke on environmental conservation and preservation of natural resources. It provided catchy quotes, beautiful anecdotes in the life of Wangari Mathai to emphasis the role of individuals in safeguarding nature. The fully greenish background of the primer tells the purpose of the primer when one wades through every page and reminds us to be a part of clean earth. It also provided information on some of the bio regions, rivers, mountains and sanctuaries besides giving the bio symbols of Tamil Nadu. The primer educates and sensitizes people of all ages to know their role and invites all to lend their hand to protect mother nature. The primer is given in Annexure -VIII

For teaching the two primers including the test and evaluation exercises, a time limit of six months was planned. More of self-learning exercises were expected of the learners at this stage to help them understand the content of the primers and to improve their reading skills than at the earlier stages of the literacy experiment.

A tool kit consisting of a primer, work book, alphabet cards (142 nos.), slate, chalk and note book, magic book with sketch, and pencil was distributed to each of the learners as their participation progressed.

**Literacy Facilitators’ Training:** The selected volunteers were given training on the use of the primer and the methods that could be used for teaching adults. They were trained with the technical assistance of the personnel available in
the Department of Life Long Learning and Extension of Gandhigram Rural Institute. One day training was organised in each of the village panchayats. During the training programme, the tool kit was distributed. The tool kit consisted of a note book, attendance register, primer, manual for teaching primer and a pen.

**Phase III : Teaching and Learning Phase**

The teaching of the learners started on a fixed day. Teaching was done at the residence of any one of the selected learners. Literacy Facilitators taught the learners for an hour a day for 6 days in a week. The timings was fixed at the convenience of the Literacy Facilitators and the learners. A total of 216 hours of teaching (one hour per day for 36 weeks) was scheduled and conducted. 16 hours was allotted for testing their performance through tests.

Every month, Literacy Facilitators assessed the level of learning of the learners by administering tests (Oral and Written). Test scores were entered in the register. Based on the performance in the test, the slow learners were identified. They were given special coaching by the Literacy Facilitator by sparing additional time and attention for learning.

**Phase IV : Monitoring and Evaluation**

The progress made by the learners was assessed through periodic observation visits, and verification of the progress reports maintained by the Literacy Education Supervisors. Once a week, the meeting of the Literacy Education Supervisors was convened by the researcher in a central place adequate to accommodate the learners and Literacy Facilitatorsto identify the strengths and weaknesses of the programme and the modification required for optimizing the teaching learning process. Weekly tests were given to assess their progress in learning writing and reading.
Meeting with Literacy Supervisors

Teaching-Learning Process

Monitoring the Basic Literacy Skill
Evaluation of Basic Literacy Skill

Celebration of International Literacy Day

Figure 3.6
LEVEL-II

A post literacy material was prepared for Family Life Education (Environmental Education, Nutrition and Health) and used as supplementary reading materials for the neo-literates for their continued education and literacy empowerment. The procedure followed for the preparation of continuing education material on Environmental Education and Nutrition and Health is described below:

**Phase I: Preparation of a Primer for Post Literacy**

Focus Group Discussion with non-literates was conducted to know the aspects to be covered for imparting continuing education to neo-literates. After discussing with women on Nutrition, health, drinking water and sanitation, energy and environment, hygienic practices, on-going programmes for their development, important aspects of girls’ education, immunization and maternal and child care, three aspects namely, nutrition, health, energy and environment were shortlisted. To conduct literacy sessions at Level Two, continuing education materials were prepared on Nutrition and Health, Energy and environment.

Teaching aids and learning materials were prepared on selected aspects. Earlier research done in this area has revealed that most of the print materials available in the Government departments were inadequate either because the typed letters were too small in size, overcrowded or too many technical terms had been used in the text. So, based on the needs of the learners, learning materials were prepared. On trial basis, it was given to a group of women from a selected village for learning and evaluation. Based on the suggestions given by the learners, it was modified and standardized. Multiple copies of the standardized primer were used for imparting continuing education on family life education in the study area.

**Phase – II Evaluation**

Formative and Summative evaluation of the learner after acquiring necessary literacy skills and post literacy was done using participatory exercises at three levels - Learners, Literacy Facilitators and Literacy Education supervisors. Interview Schedule was prepared for assessing the learners’ literacy skills, views on primer and the aspects of programme.
3.10. Tools of Data Collection

An Interview schedule was used to collect the data from the women illiterates between the age group of 35-55 years. The demographic background of the participants, information regarding the age, caste, religion, marital status, type of family, ownership of dwelling, family income, participant’s status before and after the field experiment and views about it, tool kit, primer, time, effectiveness of the experiment and suggestions to improve it.

A questionnaire was used to collect data from the Literacy Facilitators, information regarding age, caste, religion, marital status, type of family, ownership of dwelling, family income, eager to teach the learner and relationship, about tool kit, primer, time, training, awareness and importance of literacy programme, self improvement of the Literacy Facilitator after the participation in literacy programme, evaluation of teaching, effectiveness of the literacy programme, suggestions to improve the literacy programme and so on were sought.

An Interview Schedule was used for testing the learners’ knowledge before and after the Post literacy education on health and nutrition and environment.

3.11. Data Analysis

The data were coded, tabulated and analyzed by using CS-pro and SPSS version 20. Percentage, mean, Standard deviation, Coefficient of Variation, paired t-test and MANOVA tests. Results have been presented with tables using appropriate graphical representations and interpretations in the Chapter 4.

3.12. Limitations of the study

1. Majority of the women participants were engaged in 100 days’ employment, so they could not attend the classes regularly.

2. During the vacation and examination, Literacy Facilitators could not give much attention to teaching.