CHAPTER TWO

REVIEW OF RELATED LITERATURE

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CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.00 Paradigm

- Review of Related Literature
  - Surveys
    - Environment and mass Media
      - Environmental attitude among people
    - Environment and school Curriculum
      - Factors affecting environmental behaviour
  - Programmes
    - Not tested experimentally
    - Tested experimentally
      - School Education
      - Higher Education
      - Teacher Education
CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.01 Introduction

As pointed out earlier, the subject of environment attracted politicians, economists and educationists the world over in nineteen seventies when degradation of environment was accentuated. The concern for environment resulted in the international conference at Stockholm, Sweden in 1972. Since then much literature is produced on environment. As the present research is concerned with developing environmental awareness among teachers, the researcher went through the literature, related to environmental education. The available literature was classified into various groups for facilitating analysis.

The related literature was as follows-

1] Primary sources- These include theses and research articles dealing with environmental education. The researcher got only one thesis related to environmental education and two research articles.
2} Secondary sources- These include i) abstracts of theses and research articles in environmental education ii) reports of surveys related to environmental education iii) written programmes for environmental education.

In addition to the literature related to environmental education the researcher also went through the literature on environmental status of India and the world.

All the above literature was mainly in English. Some books and newsletters giving information about environmental status were available in Marathi.

*Organisation of the present chapter*

In the present chapter, first an account of surveys related to environmental education is presented. Then an account of programmes in environmental education is given. The account of the researches is followed by contributions of previous researches. Then the observations about previous researches would be pointed out. At the end, the characteristics of the present study are given, which would point out the necessity of the present study.
2.02 Surveys-classification

The researcher found in all 14 surveys in environmental education conducted in India and abroad. To facilitate the analysis the researcher has classified them into following types.

A) Environment and mass media

B) Factors affecting responsible environmental behaviour

C) Environmental attitude among people

D) Environmental education and school curriculum

Table 2.01 gives the number of surveys conducted in India and abroad in each of the above areas.

Table 2.01

NUMBER OF SURVEYS IN INDIA AND ABROAD

<table>
<thead>
<tr>
<th>Area</th>
<th>No of Surveys</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>India</td>
</tr>
<tr>
<td>Environment and mass media</td>
<td>-</td>
</tr>
<tr>
<td>Factors affecting responsible environmental behavior</td>
<td>-</td>
</tr>
<tr>
<td>Environmental attitude among people</td>
<td>2</td>
</tr>
<tr>
<td>Environmental education and school curriculum</td>
<td>3</td>
</tr>
</tbody>
</table>
It can be seen from Table 2.01 that more surveys are conducted in abroad than in India. In India the researchers have worked in areas of school curriculum and environmental attitude. The researchers abroad have worked mainly in the areas of factors affecting responsible environmental behaviour.

2.03 Surveys in each area

A) Environment and mass media

The first area i.e. environment and mass media, is related to mass media and their role in educating the people about environment. The two researches reported in this area were from U.S.A.

One is by Peter Sandman and coresearchers (1970). The study investigates success of mass media in California, America, in attaining the goals of environmental education. They were stated as knowledge, skill and motivation. Main findings of the study were:
1) The information given by mass media has following characteristics. i) Majority of broadcast content and a large majority of print media content is designed solely to entertain and most of it is environmentally irrelevant. ii) The educational content
of media entertainment is unplanned, unintended and unintegrated. 2) Mass media may satisfy the knowledge component of environmental education. 3) The effectiveness of mass media as educators is greatly diminished by their inattention to environmental skill training, their lack of educational goals of entertainment programme and their delivery of persuasive content into hands of environmental exploiters. 4) The media also deemphasized the information of basic ecological principles, environmental action, warning about environmental problems and assessment of environmental degradation.

The study also investigated barriers to effective environmental news coverage.

One more study in this area is reported by Lingwood (69-70). The title of the study was ‘Environmental Information Seeking through a Teach-in.’ Teach-in was an event which had served to focus public attention on environmental problems. The teach-in was held in March 70. It was a combination of invited addresses, more specific topic oriented sessions, demonstrations, informational exhibits. It was open to all students.
Three different studies were involved in the survey. One assesses the environmental teach-in held at the University of Michigan in March 1970, concentrating on characteristics of attendants, their expectations and outcomes, resultant behavioural change and patterns of environmental information seeking. The other two studies develop a context for the teach-in by examining changes in environmental knowledge, interest, concern and information processing.

The main objectives of the surveys were: i) To examine the effects of the teach-in on the behaviour of the attendants of the teach-in. ii) To examine the change in environmental knowledge, interest, concern and information possessing among the students who attended the teach-in. iii) To examine how much do the students know about the environment and how much concerned they are.

The method of the study was survey. The population of the study comprised of the students of University of Michigan Ann Arbor Campus, listed in students directory. Simple random samples were selected from the directory. The tools used were questionnaire and interviews. A two
tail t test was used for measuring the effects of the teach-in. Main findings of the study were as follows.

i) Teach-in was an important mechanism for learning about environmental problems, but respondents rely heavily on print mass media, outside the teach-in setting. ii) The teach-in was not helping change attitudes among nonstudent population but demonstrated the concerned attendants of the teach-in that others shared their concern and willingness to act. iii) Some definite changes were found in the student population who attended the teach-in. There was a great shift in attitudes and in the level of entry of environment into interpersonal communication at the expense of the topics such as Vietnam war.

Both the studies revealed that giving information through mass media may increase the knowledge of people about environment.

B) Factors affecting environmental behavior

a) An account of the surveys

This area covers six studies, conducted abroad, all in Southern Illinois University at Carbondale. People in
environmental education, serious about making changes in citizenship behaviour regarding the environment, are beginning to realise how important it is to modify human behaviour in socially productive ways. There is far too little known about what precedes or stimulates responsible citizenship behaviour. The following researches focus on these factors which are precursors of responsible environmental behaviour. The researches are summarised in Table 2.02, page 57.

b) Contributions

As can be seen from Table 2.02 the researchers had tried to investigate an important aspect in environmental education, i.e. variables affecting responsible environmental behaviour. The studies used samples from different population like citizens, environmental educators and members of environmental organisations. Thus they cover a wide range of people directly or indirectly related to environmental education, whose opinions and actions have an impact on the environment. The sample size was from 22 to 128. The main finding of studies is - There are certain key elements that must be attained if students are to
### Table 2.02

**RESEARCHES IN FACTORS AFFECTING ENVIRONMENTAL BEHAVIOUR**

<table>
<thead>
<tr>
<th>SN</th>
<th>Research</th>
<th>Objectives</th>
<th>Design</th>
<th>Sample</th>
<th>Main Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Significant life experiences Tanner, (1980)</td>
<td>To investigate variables which impinged upon active interest in citizenship conservation activities</td>
<td>Descriptive</td>
<td>45 professionals in selected citizen groups</td>
<td>Variables were-outdoors, habitat, parents, teachers, books, adults and habitat alteration</td>
</tr>
<tr>
<td>2</td>
<td>Developmental variables affecting environmental sensitivity Peterson, (1980)</td>
<td>To determine the precursors of environmental sensitivity</td>
<td>Descriptive</td>
<td>22 environmental educators</td>
<td>Variables were-outdoor activities, role models including teachers, familial sensitivity</td>
</tr>
<tr>
<td>3</td>
<td>Analysis of selected predicted variables of responsible environmental behaviour Sia, (1985)</td>
<td>To identify key predictors of environmental behaviour</td>
<td>Descriptive</td>
<td>105 Sierra Club members</td>
<td>Variables were-environmental sensitivity and their perceived skill in using environmental action strategies</td>
</tr>
<tr>
<td>4</td>
<td>A meta analysis on research on responsible environmental behaviour Hines, (1986)</td>
<td>To identify those variables which appear to be best predictor of behaviour</td>
<td>Meta analysis</td>
<td>128 research studies</td>
<td>Variables were-knowledge of issues, action strategies, attitudes, verbal commitments and sense of responsibility</td>
</tr>
<tr>
<td>5</td>
<td>Analysis of environmental behaviour predictor variables Sivek, (1988)</td>
<td>To repeat Sia's study</td>
<td>Descriptive</td>
<td>57 + 84 + 90 members of three environmental organisations</td>
<td>Variables were-environmental sensitivity, knowledge of environmental action strategies, attitudes, knowledge of issues</td>
</tr>
<tr>
<td>6</td>
<td>Analysis of correlates and predictors of environmental behaviour Marcinkowski, (1988)</td>
<td>To replicate Sia's research</td>
<td>Descriptive</td>
<td>121 + 53 members from two environmental organisations</td>
<td>A validation of Sia's findings</td>
</tr>
</tbody>
</table>
become responsible citizens. They are-

i) Problem identification skill

ii) A degree of environmental sensitivity

iii) Issue investigation and action skill

iv) Knowledge of and perceived skill in the use of citizenship action strategies.

The above researches clearly reveal that

i) Knowledge is not the only variable that can lead to favourable environmental behaviour. Environmental sensitivity is the precursor of the said behaviour.

ii) Role of teachers is very important in developing environmental sensitivity as can be seen from Tanner (1980) and Peterson's (1980) studies. The other variables responsible for environmental sensitivity i.e. out doors, habitat, books and role models can be planned by teachers. The above findings imply that teachers can play a significant role for developing environmental sensitivity among students.
C) **Environmental attitude among people**

a) An account of the surveys

One interesting survey in this area is reported abroad by Sister Constance Bank 'Police and environment'”. The other two surveys are from India. Table 2.03 on page 60 summarises the three surveys.

b) Contributions

Researches in this area threw light on environmental attitude among different groups of varying age. All the researchers used questionnaire as a tool except Gupta's study (1986) which used a Likert scale. Samples varied from 35 to 590. Findings show that junior college teachers show positive attitude towards environment.

Other study by Gupta, Grewal and Rajput (1981) examined environmental awareness of urban and rural children. They have stated parameters of environmental awareness as follows- sources of getting cotton, edible portion of tomato plants, animals for watching the house, effect of weather on growth of plants, the shape of the earth, etc.? They found that usually rural children are more aware of their environment than urban children and children studying in nonformal centres are more aware than school going children.
## Table 2.03

**RESEARCHES IN ENVIRONMENTAL ATTITUDE AMONG PEOPLE**

<table>
<thead>
<tr>
<th>SN</th>
<th>Research</th>
<th>Objectives</th>
<th>Method</th>
<th>Tool</th>
<th>Sample</th>
<th>Main findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Police and environment Bank, (Year not mentioned)</td>
<td>To ascertain level of awareness of police officers regarding environment</td>
<td>Survey</td>
<td>Q</td>
<td>590 officers, Stratified random sample</td>
<td>Significant number of officers felt that environmental problems are worthy of considered</td>
</tr>
</tbody>
</table>
| 2  | Environment -al awareness among children of rural and urban schools and non -formal education centres, Gupta, Grewal and Rajput, (1986) | i) To compare environmental awareness of school going children (F) and children studying in non formal centres (NFR) ii) To know the components of environment in which children in rural (R) and urban (U) areas were lacking | Survey | Q    | 115 students of standard IV from 25 rural, 35 urban schools, 60 non formal centres | i) FR were more aware than FU          
   |                                           |                                                                           |        |      |                                                   | ii) NFR were more aware than FU                                                                 |
   |                                           |                                                                           |        |      |                                                   | iii) NFR and FR were on par on EA.                                                               |
| 3  | Attitude towards environment education among teachers Gupta, (1986) | To find attitude of teachers towards environmental education and to compare attitude of teachers of various levels | Survey | Likert scale | 150 Inservice teachers in college, (CS) primary (PS), secondary (SS) and junior college level (JS) | Favourable attitude towards environmental education was found. It was more in JS than CS and PS. |

Q - Questionnaire
It is stated earlier that environmental awareness has two components, cognitive and affective (Chapter One, section 1.12). The researcher didn't find any evidence about study of these two components of environmental awareness in the above studies. As such it was necessary to consider cognitive and affective components of environmental awareness collectively. Similarly the above surveys reveal that the questionnaire can be used to investigate the concerns related to environment.

D) Environmental education and school curriculum

a) An account of the surveys

The fourth area of survey is environmental education and school curriculum. All the three studies are from India. Table 2.04 gives the details of the studies.
<table>
<thead>
<tr>
<th>SN</th>
<th>Research</th>
<th>Objectives</th>
<th>Method</th>
<th>Tool</th>
<th>Sample</th>
<th>Main findings</th>
</tr>
</thead>
</table>
| 1  | Using environmental potentialities in education                         | To analyze and compare textbooks of environmental studies | Survey, Analysis | Interviews and observation and group discussion | Textbooks of NCERT, Kerala, Tamilnadu       | i) Textbooks at national level have some worthy aspects such as process approach in Science  
 ii) National level and state level textbooks lack multidisciplinary approach to environment  |
|    | Manuel N. V., (1982)                                                   |                                          |                 |                             |                                             |                                                                                                                                             |
| 2  | Evaluative study on Environmental education (EE) programme in primary school | To examine nature and scope of EE programme with respect to objectives, curriculum, teaching learning strategies and media | Survey          | Opinionnaire, Questionnaire  | 32 primary school teachers, 75 primary school teacher educators                             | 1. General programme objectives have not been explicitly stated.  
 2. Content units were suitable to learners.  
 3. In std. V no balance in Physics, Chemistry and Biology                                                                                     |
|    | Eshah, (1985)                                                          |                                          |                 |                             |                                             |                                                                                                                                             |
| 3  | Environment and education (EE), A research in EE, Case study, India     | Analysis of curriculum of I to V std. in Maharashtra and analysis of national level Science curricula for VI to X std | Case study      | -                           | -                                           | All the curricula satisfy criteria of Tbilisi conference                                                                                   |
|    | Suzan Van Dijken, (1992)                                                |                                          |                 |                             |                                             |                                                                                                                                             |
b) Contributions

All the studies are mainly conducted on primary level of education. They analysed text books from different states in India. As all the studies used different criteria for analysis, they cannot be compared so far as findings are considered. The statistical technique used by the researchers was t test or chi square test.

The studies reveal that - i) There is scope to expand the activities related to environmental education ii) If curricula in Maharashtra satisfying Tbilisi Criteria (Appendix 37), then it is the responsibility of the teachers to execute them in such a way that the environmental goal can be achieved.

2.04 Programmes

In the area of environmental education different programmes are suggested and developed to achieve the goal of environmental education. These programmes can be classified as -

A) The programmes which are not tested experimentally.

B) The programmes tested experimentally.
A) Programmes (not tested experimentally)

Different researches from India and abroad have suggested programmes which can be used for different age groups and which can help to achieve the ultimate goal of environmental education as stated in Belgrade charter. They are titled as -

1. An instructional programme approach to environmental education (K12) based on action model

2. Environmental Education - A Process of Preservice Teacher Training - Curriculum Development

3. An Environmental Education Approach to the Training of Elementary Teachers

4. An Environmental Education Approach to the Training of Middle Level Teachers, A Prototype Programme

5. An alternative school approach to Environmental Education

All the programmes named above collectively helped answer the following questions.

i) How to develop a curriculum which can effectively lead to development of favourable environmental attitude and action skills?
ii) Which type of information and knowledge should a person possess to become environmentally active?

iii) Which type of activities can help develop environmental awareness, can create environmental favourable attitude and can inculcate problem-solving skills among children?

iv) How to pull together the resources necessary to educate people for environment?

v) What are different constraints in implementing the programme and ways to overcome them?

vi) How to evaluate these programmes?

It can be seen from the titles of the programmes, that the researchers suggested programmes for school level as well as for teacher training. A common feature of the programmes suggested for teacher training is that they are for integrated teacher training course i.e. for 3-4 years course, in which pedagogy and environment are integrated. Similarly programmes suggested for school level are of long duration ranging from 2 to 12 months.
B) Programmes (tested experimentally)

a) An account of the programmes

There are ten studies reported in this area out of which four are from India and six programmes are carried on in other countries. Out of these, two programmes are for students in higher education, one is for teachers and others are for school children. The details of these researches are given in Table 2.05 on page 67.

b) Contributions

The researchers in India and abroad have prepared and tried programmes mainly on 7th, 8th and 9th grade students, except Pai (1981) who had tried it on college students. As the source was secondary, the researcher could not get the details of the programme and the curriculum developed.

The researchers used mainly pretest-posttest control group design to find out effectiveness of the programmes. Different tools like attitude scales, inventories, achievement tests etc. were employed by them for data collection. The t test was applied by most of the researchers.
Table 2.05

PROGRAMMES TESTED EXPERIMENTALLY

<table>
<thead>
<tr>
<th>SN</th>
<th>Research</th>
<th>Objectives</th>
<th>Design</th>
<th>Sample</th>
<th>Tool</th>
<th>Main findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Construction of certain models for teaching school Botany using environmental and ethnic resources Exemmal J, (1980)</td>
<td>i) To construct teaching models for teaching Botany and testing their efficacy ii) To compare effectiveness of formal (fa)and environmental approach (ea)</td>
<td>parallel group design</td>
<td>300 teachers 100 experts and 8 schools</td>
<td>Rating scales, achievement test in Botany, attitude scale, Science interest inventory</td>
<td>1. The ea was significantly superior to formal approach 2. Rural students were found superior than urban students in their post teaching achievement when the groups were exposed to environmental teaching</td>
</tr>
<tr>
<td>2</td>
<td>Study in environmental approach of teaching at primary level Rajput, Saxena, Jadhao, (1980)</td>
<td>i) To study The existing awareness towards the scientific and social environment in children</td>
<td>pretest posttest control group design</td>
<td>102 students in class IV and 95 in class III</td>
<td>Environmental achievement test</td>
<td>At posttest stage experimental group were significantly better than control group</td>
</tr>
<tr>
<td>3</td>
<td>Tryout of the curriculum in environmental studies leading to lifelong education for college students Pai, (1981)</td>
<td>i) To help students acquire awareness and attitude about environment ii) To develop skills necessary for problem solving</td>
<td>pretest posttest control group design</td>
<td>72 students in experimental and 80 in control group</td>
<td>Environmental attitude inventory and environmental achievement test</td>
<td>Significant difference was found in knowledge and attitude of experimental and control group</td>
</tr>
</tbody>
</table>

continued
<table>
<thead>
<tr>
<th>SN</th>
<th>Research</th>
<th>Objectives</th>
<th>Design</th>
<th>Sample</th>
<th>Tool</th>
<th>Main findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Effects of process instruction on problem identification skill, Volk, (1981)</td>
<td>-</td>
<td>E</td>
<td>43 Students of class VIII</td>
<td>-</td>
<td>Experimental group was more capable of identifying issues than control group</td>
</tr>
<tr>
<td>5</td>
<td>Effect of three modes of instruction on environmental behavior*, Ramesy, (1981)</td>
<td>-</td>
<td>E</td>
<td>3 classrooms of VIII grade</td>
<td>-</td>
<td>INCA group outgained both other groups on following variables 1. Knowledge of environmental action 2. Environmental behavior</td>
</tr>
<tr>
<td>6</td>
<td>A modified replication of Ramsey's study Klingner, (1980)</td>
<td>-</td>
<td>E</td>
<td>2 classes of grade VIII</td>
<td>-</td>
<td>Individuals within the group receiving both instructional elements i.e. issue investigation training and citizenship action skill knew significantly more than other groups</td>
</tr>
<tr>
<td>7</td>
<td>replication of Ramsey's study Ramsey, (1980)</td>
<td>-</td>
<td>E</td>
<td>VII grade stu.</td>
<td>-</td>
<td>Following variables were significantly changed as a function of instruction. 1. Overt behaviour 2. Knowledge of environmental action 3. Perceived skill in use of action</td>
</tr>
</tbody>
</table>

* Three modes were - 1) Issue investigation and citizenship action instruction (IICA) 2) Issue awareness 3) Typical junior Science instruction

Q - Questionnaire
<table>
<thead>
<tr>
<th>SN</th>
<th>Research</th>
<th>Objectives</th>
<th>Design</th>
<th>Sample</th>
<th>Tool</th>
<th>Main findings</th>
</tr>
</thead>
</table>
| 8  | Replication of Ramsey’s study Holt, (1980) 23                             | -          | E      | Low ability stu. of grade VII | -    | Following variables were significantly changed as a function of instruction.  
|    |                                                                          |            |        |                              |      | 1. Overt behaviour  
|    |                                                                          |            |        |                              |      | 2. Knowledge of environmental action                                                            |
| 9  | Two week teaching unit evaluating environmental education programme Dean B. Bennet, (1972) 24 | -          | pretest posttest control group design | VI - VIII grade stu.  | Q    | Affective measurement in environmental education is difficult to deal with                      |
| 10 | An investigation into environmental awareness (EA) and its enhancement in the secondary school teachers Patel and others, (1992-93) 25 | i) To study the existing EA among secondary school teachers  
|    |                                                                          | ii) To implement prepared program me to enhance their EA | E      | 100 secondary school tea.     | EAQ  | 1. There is a significant effect of environment awareness programme on experimental group  
|    |                                                                          |            |        |                              |      | 2. There is no significant difference in EA of high and low experienced teachers                |

EAQ - Environmental awareness questionnaire  
stu. - Students  
tea. - Teachers  
E - Experimental
The main findings were- i) Environmental approach is superior than formal approach for teaching Botany ii) The training of students in issue investigation and citizenship action skill, changes their behaviour towards environment in favourable direction, iii) Cognitive outcomes of the programmes can be tested easily, but not affective.

One study is reported in the area of teacher education. It is conducted by Patel D. G. and others. the study investigates environmental awareness of secondary school teachers in Anand Taluka, Gujarat. The objectives of the study were- i) To study the existing environmental awareness among the secondary school teachers ii) To determine the various aspects environmental education interwoven in textbooks of Social studies and Science at secondary level iii) To implement a prepared programme to enhance the environmental awareness of the secondary school teachers.

The researchers studied the relationship between environmental awareness and teaching experience. The programme was tried out on teachers teaching to
IX grade. Pretest posttest control group design was used. The programme was found to be effective for increasing environmental awareness.

2.05 Observations

The review of related literature shows that after 1972, when the first international conference on environment was organised, much work is carried out in environmental education. The researchers worked in different areas of environmental education and at different levels of education. Table 2.06 gives number of researches at different levels of education.

Table 2.06

<table>
<thead>
<tr>
<th></th>
<th>School</th>
<th>College</th>
<th>Nonformal education</th>
<th>Adult education</th>
<th>Teacher education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surveys</td>
<td>3</td>
<td>-</td>
<td>1</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Programmes not tested experimentally</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Programmes (tested experimentally)</td>
<td>8</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
</tbody>
</table>
Table 2.06 shows that most of the researches concentrate on school children. However, the important factor in teaching learning process in school, viz. a teacher, has not received much importance.

The programmes for preservice teachers education which are not tested experimentally are three. All the three programmes are of long duration, of 3-4 years.

A preservice teacher training course of one year is usually loaded with microteaching, practice lessons, particles and course papers etc. There is no programme of short duration which can be implemented in teacher training course of one year. Hence a comprehensive programme of short duration, which takes into consideration development of both knowledge and affective dimension of environmental education, is needed.

One more feature of previous researches is that most of them are done abroad. Table 2.07 gives the number of researches done in India and abroad.
Table 2.07

<table>
<thead>
<tr>
<th></th>
<th>Number of researches</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>India</td>
</tr>
<tr>
<td>Surveys</td>
<td>5</td>
</tr>
<tr>
<td>Programmes</td>
<td>3</td>
</tr>
</tbody>
</table>

Obviously much less work is done in India in this area as compared to other countries.

It can be observed from previous researches that they took into consideration various aspects of education like curriculum and textbooks. But evaluation of effect of environmental programmes was neglected. Only one study is reported in the area of evaluation i.e. of Bannette (1972).

2.06 Characteristics of the present study

The review makes it clear that the programmes for preservice teacher training in environment were not tested. Therefore experimentation of a programme for teachers was a felt need. In order to fulfill the gaps in previous researches, the researcher has planned and executed this study. The study has following
characteristics—

1) In order to find out the existing level of awareness, the researcher developed a questionnaire and administered it during the survey.

2) The researcher made comparison of environmental awareness of teacher trainees of different faculties.

3) The researcher made comparison of environmental awareness of teacher trainees of rural and urban areas.

4) The researcher prepared a new programme of her own for prospective teachers.

5) The programme was tried out experimentally to test its effectiveness.

6) The programme was of 12 days, one to one and half hour per day. Such a programme of short duration was implemented in an year's busy schedule of B.Ed. course.

7) The design selected to test the effectiveness of the programme was pretest posttest control group design.

8) The programme was divided into lessons. Lessons were of 15-45 minutes duration depending on their activities and content.
5) The programme concentrated mainly on development of affective component of awareness by using different training techniques (Details in Chapter Five).

The review of related literature thus helped the researcher to understand dimensions of environmental education and the process of developing training programmes thereby giving directions to her own study.
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