CHAPTER-IV

THE PROBLEM AND PROCEDURE
Du r ing th e last few decades , there has been increasing consciousness and concern 
that the environment in which we live has been deteriorating very fast. The air we breath 
and the water we drink is getting polluted, rains are becoming erratic, forests are getting 
depleted, large numbers of plant and animal species are becoming extinct, the top soil is 
been eroded and even the ozone layer is getting damaging. There is also global warming. 
This environment degradation threatens the very existence of human being created by 
human activities such as urbanization, industries, factories, air crafts, automobiles, 
nuclear experimentation’s, agriculture, power plants etc.

Like any life form, man also has to depend on the natural resources for his 
survival. He has to transport material available in nature and transform them into desired 
forms and quality. To achieve this man has to work, human labour is the driving forces 
for exchanges between nature and society. These exchanges have to recur constantly. 
Man is, therefore, under pressure to accelerate the exchanges to sustain as well as to 
develop. However, he has not been doing enough to maintain a balance between the 
exchanges. Almost all activities of human society have, as a result these human activities 
influence the environment and thus degraded the quality of environment physically, 
chemically, biologically and even ethically.

4.0. INTRODUCTION:
A review of related literature shows the need to conduct research in this area 
and its basic principles of interdependence of environmental conditions of public life in 
general and schooling children at primary school level in particular in the State of 
Nagaland appears urgent need to study minutely.

During the last few decades, there has been increasing consciousness and concern 
that the environment in which we live has been deteriorating very fast. The air we breath 
and the water we drink is getting polluted, rains are becoming erratic, forests are getting 
depleted, large numbers of plant and animal species are becoming extinct, the top soil is 
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develop. However, he has not been doing enough to maintain a balance between the 
exchanges. Almost all activities of human society have, as a result these human activities 
influence the environment and thus degraded the quality of environment physically, 
chemically, biologically and even ethically.
In fact, we receive all the life supporting material from our environment but, in return, we do little for the environment. This overall exploits and improper utilization of natural resources, consequently, lead to a decline in the diversity and productivity of flora and fauna.

In this context, it is necessary to study and understand the various ways in which human activities have been affecting the natural bio-physical system. This will enable us to develop awareness, positive attitudes and help to learn to live harmonious balance with nature according to its own carrying capacity as an individually nature discipline particular and also help to develop policy guidelines, action plans and management techniques to achieve the desired goal of sustainable development along with conservation and preservation of environment at large.

Ultimately, Nagas realized the ultimate limits of natural resources. Its forest land is squeezing day-by-day due to deforestation, fuel wood, jhuming cultivation, falling of trees for trade, land potentials reducing, soil erosion and landslides, exhaust fertile land there by reducing productions, water scarcity problems, species of flora and fauna diminishing in the state, air and water pollution, high rate of population growth, coupled with people’s ignorant about the nature and its values. In its own perspective, a modest attempt has to be undertaken to start with the child’s life and school learning to make train man and women for environmentally humanistic approach. Consequences of man’s interventions should also be examined to learn lessons and chalk out an appropriate action plan for the future to sustain the generation to come. Environmental studies aims to provide a need based basic knowledge and understanding of environmental education to learners at all levels of formal and non-formal education beginning from primary school level. It deals with issues related especially to social, economic and ecological perspective of environment, designed to inform and support environment literacy efforts.

Hence, study course on status and problems of teaching environmental studies, pedagogy of teaching, methods. Training programme for subject teachers of environmental studies, infrastructure facilities and paucity of empirical knowledge regarding the effectiveness of environmental studies curriculum in Nagaland impelled the
investigator to conduct the present study to evaluate the ongoing imparting environmental studies in the State of Nagaland.

While conducting the present study special attention was paid to know how do Naga children with different educational background, socio-economic condition and other Environmental variation react to concepts introduced in Environmental studies curriculum. Except a few isolated attempts, comprehensive efforts have been made to highlight these questions. The extent to which variations due to prolong deprivation, educational level, sectorial condition and sex determine acquisition of Environmental studies may be examined. Are these variables relevant to a wide variety of attainment of Environmental studies at primary school level? Do these variables interact among themselves in producing a cumulative effect on attainment of Environmental studies? Are different levels of awareness attainment hierarchical in nature? These critical questions are very pertinent in the context of introducing Environmental studies as a compulsory subject in school curriculum.

Findings of the present study will provide guidelines to the curriculum framers in selecting specific concepts and content area in Environmental studies curriculum at different levels of primary education. Classroom teachers will be able to specify their interaction procedures for different educational levels, Environmental facilities and content areas of the curriculum. Keeping in view the above, the present study was conducted.

4.1: STATEMENT OF THE PROBLEM

Thus the problem undertaken is being stated as “A STUDY OF THE STATUS AND PROBLEMS OF TEACHING ENVIRONMENTAL STUDIES AT PRIMARY SCHOOL LEVEL IN NAGALAND”.

4.2: OBJECTIVES OF THE STUDY:

The following were the objectives of the present study:

i) To make an enquiry into the nature and scope of the existing Environmental Studies programme in Nagaland.
ii) To study the existing facilities available for teaching of Environmental studies programmes in Nagaland.

iii) To study the professional preparation of teachers of Environmental studies at primary level.

iv) To study the methods and techniques followed in the teaching of environmental studies.

v) To find out awareness level and attitude of students and teachers towards Environment and its relationship with human life.

vi) To find out impact of Environmental studies on daily living of primary school children.

vii) To suggest measures helpful in improvement of teaching of Environmental studies at primary school level.

viii) To develop a programme for Environmental studies for primary school level.

4.3: DEFINITION OF THE TERM USED.

4.3.1: STATUS:

Status refers to present ongoing effectiveness of learning and its future important.

4.3.2: PROBLEM:

Problem refers to difficulties in achieving the programmes and policies undertaken.

4.3.3: TEACHING OF ENVIRONMENTAL STUDIES:

Infact, children's learning occurs in the context of social and educational environment both inside and outside the School. Their functioning in such
groups. The knowledge and the skills that they acquire and the attitudes and values that they develop will greatly determine the way in which they will later approach adult responsibilities. Teaching in Primary years includes personal hygiene, child as a member of community (Social being), love and protection of nature, develop positive attitudes and awareness eco-system and balance managing the environment were highlight.

This deals with methodology of teaching skills, techniques, approaches and development in child's basic awareness towards enhancing effective learning the environmental aspects.

4.3.4: PRIMARY SCHOOL:

It includes Class-I to IV standards and age group of 6-9 years and in the case of rural pupils even 7 to 10 years of age because of their late schooling.

4.4: DELIMITATION:

The study is limited to evaluate 120 Primary Schools of both public and private covering rural and urban areas of all 8(eight) districts in Nagaland.

4.5: DESIGN OF THE STUDY:

The design of the study consists of population, sample of the study, tools, questionnaire, interview schedule, participatory observation and Data collection and measures for analysis.

4.5.1: POPULATION:

Population of the study covers all the students admitted in grades-I to IV in 1406 Primary Schools of Nagaland. It also includes all the Experts, Head Teacher/Teacher In-charge and Subject Teachers teaching Environmental studies at Primary level in Nagaland.
4.5.2: SAMPLE OF THE STUDY:

The sample of the study includes 120 Primary Schools, classified into 60 rural Primary Schools and 60 urban Primary School. It also further splits into 30 Public Primary Schools and 30 Private Primary Schools in amongst the 60 rural sample and 30 Public Primary School and 30 Private Primary Sections from amongst the 60 urban Schools. Sample were drawn randomly, 15 each Primary Schools from all 8(eight) districts in Nagaland. Teachers teaching Environmental studies at grade-III to IV at the selected Schools were included in the sample.

4.6: TOOLS USED:

In order to fulfil the objectives of the study, following tools were developed and used:-

i) QUESTIONNAIRE

ii) INTERVIEW SCHEDULE

iii) PARTICIPATORY OBSERVATION

4.6.1: QUESTIONNAIRE:

Three sets of questionnaires were developed by investigator. They were for experts (officials of School Education, NCTE, Kohima, SCERT, DIETS), Head Teacher/Teacher In-charge, subject Teacher of Environmental studies. Questionnaire were confined to the different aspects of Environmental studies at Primary School level such as:

> Curriculum.
> Text Books contents and units covered.
> Training of Teachers.
> Teaching methods.
> Evaluation techniques.
> Curricular and co-curricular activities.
> Teachers awareness level.
The main aspects of questionnaire were:

i) Personal data.

ii) Numerical information regarding Subject matter of environmental studies.

iii) Philosophical and objectives of Environmental studies.

iv) Coordination mechanism between the allied Departments.

v) Course contents of Environmental studies and its relevancies.

vi) Research work conducted or not.

vii) Expert Committee on environmental studies, its effectiveness and impact responses.

viii) Expert consultative meeting, its agenda and functions.

ix) Status of Environmental Awareness programme, protection, development, pollution control measures.

x) Experts vision to meet the growing demands of Environmental improvement.

xi) Suggestions for better functioning.

4.6.2: QUESTIONNAIRE FOR EXPERTS:

The main aspects of questionnaire were:

i) Personal data.

ii) Numerical information regarding Subject matter of environmental studies.

iii) Philosophical and objectives of Environmental studies.

iv) Coordination mechanism between the allied Departments.

v) Course contents of Environmental studies and its relevancies.

vi) Research work conducted or not.

vii) Expert Committee on environmental studies, its effectiveness and impact responses.

viii) Expert consultative meeting, its agenda and functions.

ix) Status of Environmental Awareness programme, protection, development, pollution control measures.

x) Experts vision to meet the growing demands of Environmental improvement.

xi) Suggestions for better functioning.

4.6.3: QUESTIONNAIRE FOR HEAD TEACHER/TEACHER INCHARGE

The main aspects of questionnaire were:

i) Personal data.
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i) Personal Data.

ii) Numerical information regarding the School.

iii) Functioning of:
(a) Policy makers/planners/decision makers of department.
(b) Subject Teacher of Environmental studies.
(c) Pupil's learning achievements.
(d) Pattern of respective Schools/Institutions.

iv) School programmes on Environment interest

v) Teachers training, syllabus on Environmental studies, Teaching methods, course contents.

vi) Experts and teachers responses.

vii) Pupil's learning achievement on Environmental studies.

viii) Parents, community and NGOs cooperation.

ix) School Administration.

x) Review of the progress.

xi) Self Evaluation.

xii) Suggestion for improvement.

4.6.4: QUESTIONNAIRE FOR SUBJECT TEACHER:

The main aspects of questionnaire were:-

i) Personal Data.

ii) Numerical information regarding the School.

iii) Functioning's of
(a) Experts.
(b) Head Teacher/Teacher In-charge.
(c) Pupils.

iv) Cooperation.

v) Teaching pedagogy.
4.6.5: INTERVIEW SCHEDULE:

Interview Schedule was developed to collect relevant information from the pupils to assess the effectiveness of the imparting Environmental studies at Primary School level in Nagaland.

The main components of interview schedule were:

i) Pupils awareness level.

ii) Pupils interest.

iii) Pupils opinion for overall programme of Environmental studies.

iv) Impact of Environmental studies on Pupils life.

v) Programme of Environmental studies in Nagaland and future changes.

vi) Policy decisions on its suitability.

vii) Teachers commitment preparation.

viii) Preparation for future.

ix) Functioning of Head Teacher/Teacher In-charge etc.

4.6.6: PARTICIPATORY OBSERVATION:

Observation sheet were developed by investigator to observed real Classroom teaching and to surveyed institutions in order to collect informations regarding:
Secondary sources. From primary source, data were collected through 3 (three) sets of questionnaires and by conducting interview by investigator through personal visits to the institutions.

Questionnaires were personally distributed to Experts, Head Teacher/Teacher In-charge and Subject Teacher of Environmental studies. Investigator himself interviewed Pupils, Teachers, Village leaders, experts to collect relevant information regarding the functioning of the programme on Environmental studies at Primary School level and learning effectiveness on the part of the pupils.

Data were also collected from Secondary source through survey of official records of Directorate of School Education, Kohima SCERT, Kohima, Nagaland Board of School Education, Kohima and related departments were conducted to collect basic information on policy, programmes, activities and curriculum of Environmental studies at Primary School and also collected information related to teachers training programmes, orientation and research works.

Basic information related to status, problems and programmes of Environmental studies were collected through questionnaire interview schedule and participatory observation.

4.6.7: COLLECTION OF DATA:

To fulfil the objectives of the study, data were collected from both Primary and Secondary sources. From Primary source, data were collected through 3 (three) sets of questionnaires and by conducting interview by investigator through personal visits to the institutions.

Questionnaires were personally distributed to Experts, Head Teacher/Teacher Incharge and Subject Teacher of Environmental studies. Investigator himself interviewed Pupils, Teachers, Village leaders, experts to collect relevant information regarding the functioning of the programme on Environmental studies at Primary School level and learning effectiveness on the part of the pupils.

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Basic information related to status, problems and programmes of Environmental studies were collected through questionnaire interview schedule and participatory observation.
4.6.8: **MEASURES FOR ANALYSIS:**

Data collected through questionnaire, interview schedule and participatory observation were reported accordingly. Data collected were presented in tabular form. Responses of the functionaries were converted into numbers and percentage(%) and analyzed accordingly.

**REFERENCES:**

3) Moriss Peter - Methods of Environmental Impact Assessment.
10) SCERT - Curriculum on Environmental studies Class-I-IV; Science Class-V-VI,(1989).