Environmental Education and Population Education

Dr. Meena Kumari Goswami

Environmental Education and Population Education

For T.D.C. 4th Semester Major Course and
6th Semester General Course of Gauhati University

ENVIRONMENTAL EDUCATION
AND
POPULATION EDUCATION

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6th Semester General Course of Gauhati University

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PREFACE

Environmental education and population education both are the urgent needs of the time considering the global degradation of environmental condition that leads to threatening of not only the environmental plants and species but also the existence of human beings on earth. As the prime factor although not unique, the tremendous population growth also has contribute largely in degrading environmental situation. The present work is an attempt to bring awareness among students and teachers about environmental problems and population problems along with some suggestions for preventive measures. The contents of the book are designed following strictly the course content of the Gauhati University (GU) for its TDC syllabus on semester system.

We think that our present work will meet the requirement and expectation of the teachers and students.

As far as our work is concerned, it is nascent in the sense that no other books on the aspects *"Environmental Education and Population Education"* confining to the latest semester syllabus of GU has so far yet being published. The book touches all the contents in a manner which enable students not only to have a complete idea about Environmental Education and Population Education but also to help them to inculcate maximum achievement in their examination.

Innovative ideas are discussed in the book with the assumption that prospective teachers will be able to derive benefit from this book as a thrustworthy friend.

I, the author of this book is highly grateful to various authors and publishers whose books have considerably helped in preparing the manuscript. I wish to convey my heartiest gratitude to my husband Dr. Kailash Chandra Goswami for his honest and sincere guidance and constant inspiration in preparing the book. I, the author want to thank Mr. Devasish Bhattacharjee, Branch Manager of Asian Books Pvt. Ltd., Gauhati for his interest, ardency and active participation in completing the book in time inspite of his busy schedule to meet the requirement of the T.D.C. semester students (pass and major) of GU.

The author is highly hopeful that this book will meet the urgent need of the students as well as the teachers with maximum benefit. Any constructive suggestion for improving the book is highly acceptable.

Dr. Meena Kumari Goswami

SYLLABUS

Environmental Education and Population Education

Paper: M.4.02 (Credits-8) (Major Course)

(A) ENVIRONMENTAL EDUCATION

Objectives:

1. To enable the students to understand the concept, scope and importance of environmental education.
2. To enable the students to understand the programmes of environmental education at different levels of education.
3. To make the students aware of environmental stressors and knowledge on disaster management education.

Unit 1: Environmental Education

- Concept and definition of environment
- Importance of Environmental Education
- Relationship between man and environment-Ecological and Psychological perspective
- Environmental degradation and education for sustainable development

Unit 2: Environmental education at different levels of education

- Programme of environmental education for primary, secondary and higher levels

Unit 3: Environmental awareness and attitude change

- Awareness and attitude change through formal education
- Role of Formal and non-formal education
- Role of NGO

Unit 4: Environmental stressers and Disaster Management Education

- Environmental stressers–Natural and man-made
- Disaster Management Education for coping with the environmental situations

- Environmental Education–its problems and prospects with special reference to Assam

(B) POPULATION EDUCATION

Objectives:

1. To enable the students to understand the effect of population growth on poverty, health and hygiene.
2. To enable the students to understand the importance of population education in school levels.

Unit 5: Concept of Population Education

- Population education: concept, nature and scope and objectives
- Need and importance of population education

Unit 6: Concept of Population Education

- Causes of population growth in India
- Consequence of population growth
- Policies and programme of government of India regarding population control

Unit 7: Population and Quality of Life

- Population in relation to socio-economic development, health status, heath services, nutrition
- Effect of population growth on natural resources and environment

Unit 8: Population Education and Schools

- Population Education and Schools-Scope of population education in schools
- Teacher role in creating awareness of population problem
- Method and approaches: Inquiry approach, Observation, Self study, Discussion, Assignment
- Use of mass media (Newspapers, Radio, T.V.) and Audio-Visual Aids

SYLLABUS

Environmental and Population Education

Paper: 6.02 (Credits-8) (General Course)

(A) ENVIRONMENTAL EDUCATION

Objectives:

1. To enable the students to understand the concept scope and importance of environmental education.
2. To enable the students to understand the programmes of environmental education at different levels of education.
3. To make the students aware of environmental stressors and disaster management education.

Unit 1: Environmental Education

- Meaning and definition of Environment.
- Environmental Education – Concept, objective and scope.
- Importance of Environmental Education.
- Relationship between man and environment ecological perspective.
- Environmental degradation – Pollution – Types – Preventive Steps.

Unit 2: Environmental Education at different Levels of Education

- Programme of environmental education for ..... primary, secondary and higher levels.

Unit 3: Environmental awareness and attitude change

- Awareness and attitude change through formal education
- Role of formal and non-formal education
- Role of NGO

Unit 4: Environmental Stressors and Disaster Management Education

- Environmental stressors–Natural and man-made
- Disaster Management Education for coping wit the environmental situations

(B) POPULATION EDUCATION

Objectives:

1. To enable the students to understand the effect of population growth on poverty, health and hygiene.
2. To enable the students to understand the importance of population education in school levels.

Unit 5: Concept of Population Education

- Population education: Concept, objectives and scope
- Need and importance of population education

Unit 6: Population Growth and Population Dynamics in India

- Distribution of population–Age, Sex, Rural-Urban
- Causes of population growth
- Consequences of population growth

Unit 7: Population and Quality of life

- Population in relation to socio-economic development, health status, health services, nutrition.
- Effect of population growth on natural resources and environment.
- Population and literacy campaign in India.

Unit 8: Population Education and School

- Scope of population education in schools.
- Teacher role in creating awareness of population problems.
- Use of Mass media (Newspapers, Radio, T.V) and Audio-Visual Aids.

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1 Environmental Education

1.1 WHAT IS ENVIRONMENT

The word environment is a French derivation of the word 'Environner' means 'to encircle' or 'to surround'. As such environment is the constituent of the interaction of both biotic and abiotic components present in the nature. The biotic components comprise of all organic forms of animals and plants kingdoms with their exceptionally great mental or creative ability. The abiotic components of environment are those which supply energy required by the organism for the maintenance of the body and for the nourishment of life of organism. As such abiotic components of the environment are constituted of all the psycho-chemical elements and materials present in nature. Environment literally means surrounding of species to which it remains totally adapted and with which it interacts continuously for its existence. Environment is the sum total of all conditions and influences that affect the survival and development of life of all organisms on the universe. Different living organisms lowest or highest have their own environment.

Definitions of Environment

Environment is the sum total of the whole circumstances that assert their influences on the individual from the moment of their birth till death. In other word, everything that surround an individual may be said to be environment. Some of the definitions given by Psychologists are as follows:

According to Anastasi *"The environment is everything that affects the individual except his genes"*.

Borring defines environment as *"A person's environment consists of the sum total of the stimulation which he receives from his conception until his death"*.

For Douglass and Holland *"The term environment is used to describe, in the aggregate all the external forces, influences and conditions, which affect the life, nature, behaviour and growth development and maturity of living organism"*.

What is Environmental Education

The concept of environmental education is contemporarily new. United State Environmental Act, 1970, analyses environmental education as a process of recognizing

values and clarifying concept to understand and appreciate the inter-relationship that continues among man and his culture, his bio-physical surroundings created by both man and nature to develop skill and attitude among man to use, to preserve and to protect their surrounding by maintaining the eco-system without affect (UNESCO, 1970).

Environmental education is a process for providing knowledge to the learner to develop desirable attitude, awareness, understanding and skill towards natural and man made surroundings necessary for total human development and living facilities. Environmental education comprises of various environmental issues that demand knowledge and skill to deal with effectively. It requires first hand practical experience on the part of the learner. As such the strategies for imparting environmental education ought to be mostly practical in nature. Environmental education should start finding out various causes of environmental problem and it should endowed learner with knowledge of preventive measures against these problems.

Environmental education is an important segment within the educational system in the develop and developing countries. It is a political pedagogical action programme for all countries. Social groups, government, scientific community and educational institutions develop and pursue these programmes. These programmes include all educational activities with an attempt to overcome the environmental crisis. These programmes need to have the following characteristics.

(*a*) Establishing a relationship between environmental crisis and education, imposing more importance on new crisis-conscious and crisis-oriented type of education.

(*b*) Involving institutes and government in providing environmental education to achieve manifold goals.

(*c*) Providing specific educational measures to environmental problems with didactic concepts.

(*d*) Planning out programmes under different geographical context for a limited period of time.

(*e*) Specifying the group to be involved in the programme.

(*f*) Fixing condition for access in the group and participation in various activities.

(*g*) Determining norms necessary for students and teachers of adult education.

Nature of Environmental Education

Environmental education is by nature composition of various concepts rather than on concept, topics and specific measures. It is a programme to be undertaken by formal educational system, non-formal mode of education and by independent institutions to make decision for undertaking some direct activities to reach the desired objective related to environmental issues. Environmental education is not a time bound education. Environmental educations in sure to continue as long as the environmental problems continue to exist. It is a programme to root-out the deep-seated habit of destroying environmental ecology and to develop environmentally responsible behaviour.

Environmental education imports training for daily-life activities along with sustainable utilization of nature resources.

Objective of Environmental Education

The objective of environmental education is to equip people with the knowledge, skills and motivation they need to resolve diversified environmental issues. Objectives of environmental education may be briefly noted as follows:

The objectives of environmental education are:

(*a*) To develop environmental awareness among people and make them understand the ecological system of physical and social environment.

(*b*) To make people understand the inter relationship and interdependence of man and environment.

(*c*) To develop attitude among people to acquire knowledge, skill and abilities to participate in solving real life environmental problems with utmost responsibility.

(*d*) To change the views of children and people regarding value and to bring about changes in their behaviour.

(*e*) To develop the attitude of observable behaviour with diversities of values according to the social circumstances.

(*f*) To teach people think critically to develop self-confidence so that they can act on their own.

(*g*) Develop personal and social decision making capacity to solve environmental issues for achieving sustainable pattern of development.

The International Conference of UNESCO (1977) held at Tbilisi formulated a number of objectives of environmental education to be provided by both formal and non-formal mode of education. These are as follows:

(*i*) To develop an attitude of being aware of environmental problem with a sense of responsible citizen.

(*ii*) To impart knowledge on various environmental problems along with experiences associated with these problems.

(*iii*) To help to understand the interdependence of various environmental components, i.e., the ecosystem of environment.

(*iv*) To produce skilled persons so that environmental problem can be identified and solved properly.

(*v*) To develop responsible attitude for taking active part in protecting environment and functioning for sustainable development of environmental problem.

(*vi*) To provide knowledge on environmental protection and skill necessary for solution of environmental problem.

(*vii*) To develop the power of analysing the environmental components, their use along with the social, cultural, economical and technological development and changes and their affect.

Environmental Education aims at achieving all these objectives at all levels of education through both formal and non-formal system of education.

Aims of Environmental Education

Environmental Education Aims

(*i*) To bring out manifold behavioural changes in the day-to-day life of human beings.

(*ii*) To develop a socially responsible behaviour of the individual towards every aspects of life related to nature.

(*iii*) To develop attitude among the people so as to merse gap existing between preservation of natural resources and their uses.

(*iv*) To make people aware of industrial pollution and to train them to take active part in confronting the problem created by modern industrial system and to have an unpolluted environmental situation.

(*v*) At preparing person to deal with basic scarcity of resources by changing the way in which we use every resources.

(*vi*) To isolate conventional social habit which may create ecological harm to the environmental resources.

(*vii*) To provide programmes that facilitates formation of active behaviour to achieve desire goal instead of passive adoptation of autonomous change.

Need of Environmental Education

Environmental eduction is not a new term. It was rooted with the creation of nature and man where this interrelation may be termed as human culture and belief. Form time immemorable people used to pray trees, rivers, stones on hills etc. which symbolies the passive action of imparting environmental education to its native people.

Rigveda explains that in the environment there exists three Gods—the celestial, the arial and terrestrial i.e., land, air and water.

In ancient time ther exist peace and happiness every where because the relation between life and environment (i.e., nature) were so close that one could not think of surviving without the other. Man and organism never be though of as something separate from nature.

Human relation with nature is so inter-twined that it is difficult to see them separately, but the modern technological and scientific development and unplanned explosion of human population both in urban and rural areas and unplanned expansion of industrial complexes disturb the natural and harmonious relationship between man and environment.

Environmental challenges faced by industrial and developing countries are burning problems all over the world. For reconciling todays environmental imperative with the need for economic growth, environmental education is a must necessity.

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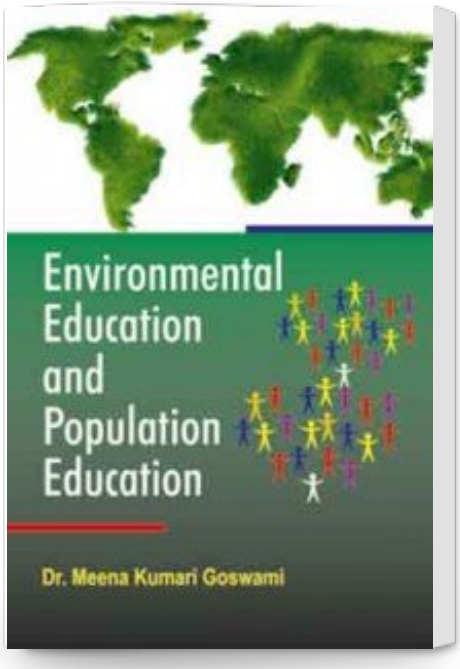

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