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**INTRODUCTION**

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## CHAPTER - I

# INTRODUCTION

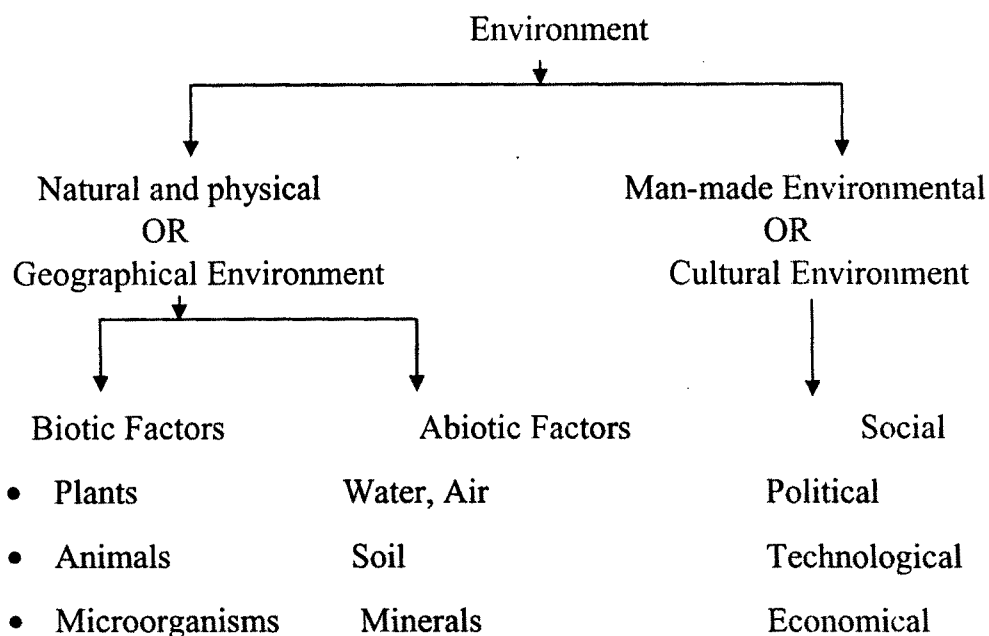
### **Introduction**

The word 'Environment' is originated from French word 'Environ' which means 'to surround'. The environment is that set of surroundings which influences the life and activities of object, human or animals. The environment may be regarded as a reservoir of natural resources, some renewable but many non-renewable.

Environment is made up of many components including purely physical features like climate, soil type as well as other living organisms and their effects. Environment may be defined as the, 'sum total of biotic & abiotic factors influencing the response of organism.'<sup>1</sup>

The environment means the aggregate of all the external conditions and influences affecting the life and development of an organisms. The environment is a complex entity. The important components of environment which are commonly identified are air, water and land, soil mineral, plants, animals and climate. One of the other dimensions of environment which is generally not considered is the social system in which we live.

Fig. No. 1 Types of Environment and it's factors



(Source : 'Environmental studies : A modern view,' by Mane Ashish, 2005) 2

### Environment Education

After the industrial revolution in 18<sup>th</sup> century the problem of environment increased so rapidly that the danger to the existence of whole universe along with man could be easily visualized. In order to stop environmental degradation and to create a community with proper knowledge, understanding, awareness, attitudes and values required for environmental conservation, need of environment education was felt.

Global concerns for environment and eco-friendly developmental programmes led to the need for Environmental Education.

According to the International Union for the Conservation of Nature and Nature Resources (IUCN) Commission of Education – "Environment Education is the process of recognizing values and clarifying concepts in order to develop skills and attitudes necessary to

understand and appreciate the inter-relatedness among man his culture and his biophysical surrounding. Environmental education also entails practice in decisions making and self formulation of a code of behaviour about issues concerning environmental quality”.<sup>3</sup>

Thus, the basic aim of environment education is to succeed in making individuals and communities understand the complex nature of natural and built environments and the interaction between their biological, physical, social, economical and cultural aspects and acquire the knowledge, values, attitudes and practical skills to participate in a responsible and effective way in anticipating and solving social problems and in the management of the quality of the environment.

Palmer and Neal (1996) the renowned researchers on Environment Education in England and Scotland have suggested that planning for the inclusion of EE in curriculum needs to take account of the three interlinked components like

- a) Education about the environment.
- b) Education for the environment
- c) Education in or through the environment.

Teaching is the only profession entrusted with the task of nurturing human skills and capacities that will be enable society to survive. The key to any change in the formal educational system is the teacher who has to internalize a change in his/her role from one of ‘giver of knowledge’ to one of facilitator in the learning process. If teachers are to be effective facilitators in bringing environmental education into teaching and learning, their capacities in understanding and internalizing the characteristics of environmental education and skills in transacting these, need to be built and strengthened.

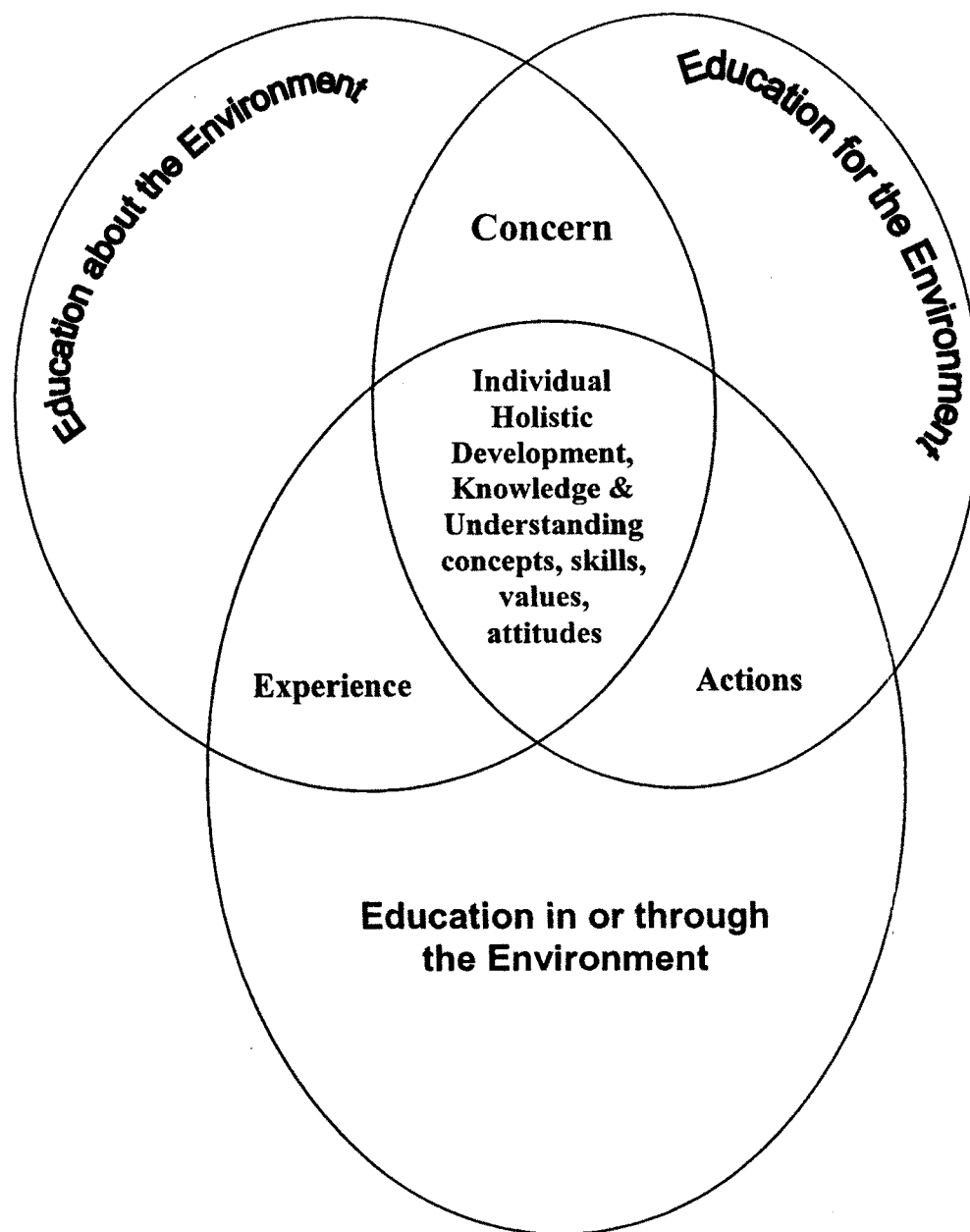


Fig. No. 2 The components of Environment Education Curriculum

(Source : The Hand book of Environment Education, ( 1994) by Palmer, J. and Neal, P. ) 4

## **Need and Importance of Environment Education**

Environment consists of many biotic and abiotic factors which are interdependent. Mankind is one of the most important factor in it who is totally dependent on environment to satisfy his needs. Due to excessive and unplanned use of natural resources there is imbalance of environment. So there is an urgent need of conservation of environment.

Nature provides humanity with its basic requirements like food, clothes, shelter, soil and water. To accomplish these requirements there is need of environment protection. Due to heavy industrialization many problems like global warming, ozone layer depletion, pollution, toxic waste disposal, ocean and river contamination, heat and garbage, junk yards and radioactive contaminations have been evolved. To overcome these problems conservation and protection of environment is essential.

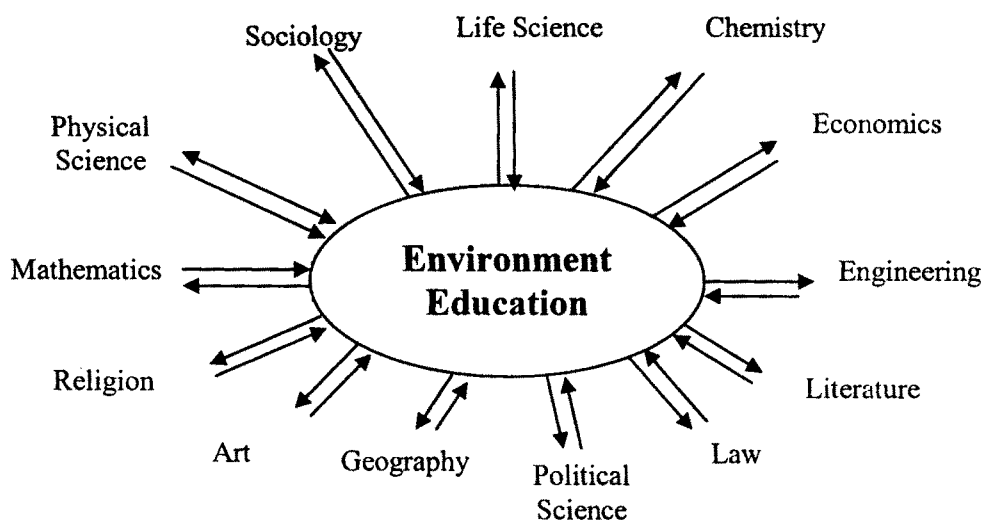
Increasing deforestation causes many problems like desertification, soil erosion and extinction of many animals and plants, imbalance in ecosystem, greenhouse effect and deterioration of biodiversity. Increased population is also an exacerbating factor either directly or indirectly in environmental degradation world wide. Population explosion results into increase in unemployment and level of consumption. We are exploiting natural resources blindly to fulfill this increased level of consumption, which has disturbed our environment and development process.

Increasing population results in urbanization. Urbanization is considered as a part of development process but, if it is unplanned it creates shortages of housing, , basic health services, water, , energy etc. The unplanned urbanization has disturbed the overall environment and quality of life of people. Due to growing urbanization and rapid industrialization greenfield areas are shrinking in India. To overcome these problems conservation of environment is important.

A healthy environment is not only a need, it is also a right. So the conservation and protection of environment for bright and healthy future is essential and for this environment education is essential.

Environment conservation depends upon deep understanding of the values of forest, soil, water, wild life and related resources to individuals and to their nation. Better understanding of environment can only be achieved through environment education. That's why environment education is so important and essential as a measure for conservation and pollution free environment for sustenance of life and healthy living.

### **Multidisciplinary And Interdisciplinary Approach of Environment Education**



Environment education is an interdisciplinary as well as a multidisciplinary subject. It has many dimensions and disciplines. Many concepts, principles methodologies from different disciplines like physical sciences, life sciences, Earth Science and social sciences make contribution in this subject, reason why the subject became more advanced.



Many concepts and principles from Physics, Chemistry, Electronics, Botany, Zoology, Ecology, Biochemistry, Genetics etc. are used to solve the problems of environment and therefore studied in Environment Education.

Along with these Psychology, Political Science, Economics, Geography, Oceanography, Soil Science, Meteorology also make their contribution to Environmental Studies.

Now Environment Education has become a compulsory subject at all levels of Education. It has been introduced in various Professional courses such as Law, Engineering, Medical, Teacher Education Courses etc. It is important to study how Environment Education has been introduced in various Professional Education courses.

### **1.1. Statement of the Problem**

A Critical Study of Environment Education Introduced In Professional Education Courses of Shivaji University.

### **1.2. Definitions of the Terms**

The definitions of some terms used in the statement of problem are as under ,

- **Environment Education**

Conceptual Definition

“Environment education means recognition and clarification of values, attitudes and concepts concerned with man’s relationships to his culture and biophysical environment”

– C.V. Good (Dictionary of Education, 1897)

### Operational Definition

Environment education is a part of the course at various professional education courses dealing with dissemination of knowledge about environment and developing necessary values, attitudes and skills to solve environmental problems.

- **Professional Education Courses**

### Operational Definition

The courses run by a university to develop skills and abilities required in Medical, Law, Engineering and Teaching professions.

- **Shivaji University**

### Operational Definition

Shivaji University was established in 1962 in Kolhapur, city of Maharashtra. It is an Educational Institution under which various higher education courses are conducted.

- **Critical Study**

### Conceptual Definition

Thoughtful activity of learning or gaining knowledge either from books or by examining things in the world.

- Oxford Dictionary

### Operational Definition

Critical study means an analysis of the syllabi of Professional Education Courses of Shivaji University to find out the position of Environment Education and an investigation into the teaching methods adopted and resources available for Environment Education in Professional Education colleges affiliated to Shivaji University.

### **1.3. Objectives of the Study**

To objectives of the study are as follows,

- 1) To analyse the syllabi of various Professional Education courses of Shivaji University with reference to Environment Education.
- 2) To identify the teaching strategies used for Environment Education by teachers in various Professional Education colleges.
- 3) To identify the resources available for Environment Education at various Professional Education colleges.
- 4) To study the exchange of resources for Environment Education among various Professional Education colleges.
- 5) To study the difficulties of teachers while teaching Environment Education at various Professional Education colleges.
- 6) To make recommendations to improve quality of Environment Education at various Professional Education colleges.

### **1.4. Assumptions of the Study**

The study is based on following assumption

The Environment Education has been introduced in various professional education courses of Shivaji University, Kolhapur.

### **1.5. Significance of the Study**

The study is useful in following manner-

- 1) The study has been helpful to know the nature of Environment Education at various professional education courses. It has thrown light on different teaching strategies used at various Professional Education courses so that those strategies will be disseminated at all Professional Education colleges.

- 2) The study has been useful to identify the experts available at various Professional Education colleges. So that their expertise will be used by other Professional Education colleges.
- 3) The study has identified the non-human resource available at various Professional Education colleges. It has made possible the exchange of non-human resources among various Professional Education institutes.
- 4) The study has been helpful to know the opinions of teachers about implementation of environment education at various Profession Education colleges. Those opinions will help to improve the quality of Environment Education at various Professional Education courses.
- 5) The study has been significant to identify the difficulties in implementing Environment Education at various Professional Education colleges. Those difficulties can be solved by joint efforts made by different Professional Educational colleges.

#### **1.6. Scope of the Study**

**Scope :** The present study included various professional education courses of Shivaji University, Kolhapur.

#### **1.7. Delimitations of the Study**

- 1) The present study included following professional education courses only : B.E. (Bachelor of Engineering), B.Ed. (Bachelor of Education), L.L.B. (Bachelor of Laws), M.B.B.S. (Bachelor of Medicine and Bachelor of Surgery).
- 2) The colleges started before June 2003 were considered for the study.

- 3) The present study included 16 Professional Educational colleges from Satara, Sangli and Kolhapur district of Maharashtra which are affiliated to Shivaji University.
- 4) Only co-educational colleges were selected for the study.
- 5) Only one year B.Ed. course was selected for the study.
- 6) Only M.B.B.S. Branch of Medical course was selected.
- 7) Only Civil, Mechanical, Electrical, and Electronics, and Telecommunication (basic branches) were selected for the study.

#### **1.8. Research Methodology**

- a) Method –
  - 1) Survey method – The researcher has made an attempt to collect analyze and interpret the information related to the introduction of Environment Education in Professional Education Courses of Shivaji University.
  - 2) Document Analysis – Document Analysis of syllabi of B.Ed., B.E, L.L.B. and M.B.B.S. Courses was also done.
- b) Sample -

**Table No.1**  
**Sampling for selection of colleges**

Sr.	Districts	Colleges of Education (B.Ed.)		Colleges of Engineering (B.E.)		Colleges of Law (LL.B)		Colleges of Medicine (M.B.B.S.)	
		G	NG	G	NG	G	NG	G	NG
	Grantable (G) Non-Grantable(NG)								
1	Kolhapur	1	2	0	1	1	0	1	0
2	Satara	0	2	1	0	0	1		1
3	Sangli	1	1	0	1	1	0	1	0
4	Total	2 out of 4	5 out of 10	1 out of 2	2 out of 4	2 out of 3	1 out of 3	2 out of 2	1 out of 3
	Total 16 colleges out of 32	7 Colleges out of 14		3 colleges out of 6		3 colleges out of 6		3 colleges out of 6	
	Sample in percentage	50%		50%		50%		50%	

Table No.2

**Sampling of Teachers/Lab Assistant/Librarian/Students**

Faculty Member	College of Education (B.Ed.) (7 Colleges)	College of Engineering (B.E.) (3 colleges)	College of Law (LL.B.) 3 colleges	College of Medical (M.B.B.S.) 3 colleges	Total
Principal/HOD's (All)	7	3	3	3	16
Teachers (All Teaching EE or EE related subjects/components)	7	4	3	14	28
Lab Assistants (All)	-	3	-	3	06
Librarian's (All)	7	3	3	3	16
Students (5 students/College)	35	15	15	15	80

- c) Tools – 1) Questionnaire for principals/Head of the Departments, Teachers, Lab assistants and Librarians.
- d) Analysis – 1] Qualitative analysis of the data gathered by Document Analysis was done
- 2] For the analysis of quantitative data percentage was calculated.

### **1.9. Environment Education in various Professional Education Courses :**

Every profession is either directly or indirectly related to Environment. Therefore professional understanding of environment is the determinant of how his work will affect the environment. For example only if a mechanical engineer is aware of the pollution and its adverse affects, he will think on producing machines which release less pollutant.

Same can be said about the other professionals. Thus to create a healthy environment it is very much essential that all professional education courses should introduce Environment Education in a proper way.

### **Environment Education in Teacher Education Course :**

(D.Ed., B.Ed., M.Ed. Courses)

In the development and revolution of society and nation role of teacher is important as a social engineer. Teaching is the only profession entrusted with the task of nurturing human skills and the capacities.

It is essential to develop such teacher who can develop knowledge, awareness among students about environment, its problems and their impact human life. He should also be able to transact knowledge and environmental values in students. Therefore the topics such as Environment and Environment Education, Environmental problems and their impact on human being, Environmental law and movements and also the strategies of Environment Education far as Teacher Education Programmes are concerned.

### **Environment Education In Engineering Course (B.E.)**

Engineering is one of the important professions playing important role in National development technical, economic, sociological and environmental.

Engineering is related with science and technology as well as it is devoted to improve the quality of environment, its conservation and sustainable management. It is related to the topics of study such as chemical engineering, water resources Engineering, Engineering Geology, Water Power Engineering, Hazardous waste management, Industrial waste treatment, Air Pollution and control, River management and training etc.



To create an Engineer with a deeper understanding and a greater sense of commitment quality engineering education programmes are needed.

**Environment Education in Law course (LL.B.)** Law is a course which enables to create a just and humane society. Its main purpose is to establish proper regulatory mechanism in the society. Lawyer is that person who helps people to get justice and to prevent any injustice to them. Environment is not a property of anybody. Nation states and the people are beneficiaries and therefore bound to protect the Environment in which they live.

Everywhere in the world how there are Laws and rules regarding the protection of Environment. These laws and the respective cases are studied in the Law course (LL.B.)

#### **Environment Education in Medical Science Course (M.B.B.S)**

A doctor is a person who is committed to the welfare of the human being mainly his physical and physiological welfare. The changing environment is creating new challenges before the medical science. The diseases due to air, water, land and sound pollution are on increase. Accordingly medical education course has to be modified so that the doctors can help their patients in coping with the changing environment and also enabling them to conserve the environment to avoid further health loss.

### **1.10. Chapterization**

#### **Chapter 1 : Introduction**

In this chapter researcher has explained the background of problem, need and importance of the study, statement of problem, definitions of terms, objectives of research, assumptions of research,

scope and delimitations of research. She has briefly introduced the topic of her research.

### **Chapter 2 : Review of Related Literature**

In this chapter review of related literature has been presented . The researches done by other researches the tools they used and conclusions they drawn have been mentioned.

### **Chapter 3 : Plan and Procedure of the Study**

In this chapter, researchers has described the plan and procedure of the study. The research method and tools used and sampling design adopted etc. have been explained in it.

### **Chapter 4 : Analysis Of the Data and Interpretation**

In this chapter researcher has analyzed the collected data and interpreted it.

### **Chapter 5 : Summary, Findings and Recommendations**

In this chapter, researcher has given the findings and recommendations of the study.

Thus in this chapter the researcher has introduced her research in brief. In the next chapter she has presented the review of related literature.

### References

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