

# Environment Conservation and Social Responsibility of Higher Education Institution

**B Sumana 1, I Nazreen 2, C P Prince 3**

1, 2. IInd MSW student, P G Dept of Social Work, Centre for P G studies and Research centre,  
St Philomena College, Puttur

3. Assistant Professor, P G Dept of Social Work, Centre for P G studies and Research centre,  
St Philomena College, Puttur

**Abstract:** *Environment is the source of life on earth and it not only directs but also determines the existence, growth and development of mankind and all its activities. The whole living organisms depend upon environment for their existence. The environment is degrading day by day either through natural process or through human activities. Human beings are the major cause of deterioration of the environment through pollution and unsustainable developmental activities. The objective of this study is to find out the attitude of the youth in reducing environmental degradation and to study their involvement in environment conservation. It is a descriptive study conducted among the Post Graduate students of St Philomena College, Darbe, Puttur. The study had generated environmental friendly awareness among them leading to a common activity of promoting pipe composting by the P G students in 3,000 houses in Puttur Taluk, as a homemade method of domestic waste management. It is a social responsibility initiative of the higher education institution. The Social Work Department in collaboration with students' welfare committee organised the activity in which students of all P G disciplines involved.*

**Key Words:** *Environment Conservation, Youth Involvement, Pipe Composting, Social Responsibility of Higher Education Institution*

## **Introduction**

Environment is the source of life on earth and it not only directs but also determines the existence, growth and development of mankind and all its activities. As society developed man's impact on environment grew in scope and strength. Mankind has long trusted in nature's potential and restorative powers, though there was no reason to believe that these powers were inexhaustible. Only recently, man has come to realize the necessity for conservation. Undoubtedly, this is the result of evolution in science and technology, which has dramatically increased man's ability to the natural

environment and its resources. Nature has been increasingly damaged, restorative capabilities have progressively weakened and human environment is deteriorating day by day to the point of affecting not only the quality of life but even the very existence of life.

The human environment is the earth we live in. It includes all the physical parts of the earth, such as air, soil, minerals, rocks and water as well as all its living organisms such as animal and plants. Environmental science provides an approach towards understanding the environment of our planet and the impact of human life on the environment.

What are the factors responsible for environmental degradation? What is the awareness created by students of higher education institutions on environmental degradation factors? What is their response in terms of active intervention, education, awareness and research possibilities? The study is a humble attempt to explore such possibilities and to highlight the social responsibility initiated by higher education institution.

### **Review of Literature**

The major factors responsible for environmental degradation as per the literature are briefed below.

They are: Today about 1.9 billion hectares of land worldwide (an area approximately the size of Canada and the USA) are affected by land degradation. Each year about 21 million hectares of land has become so degraded that crop production is uneconomical and about 6 million hectares of land are irreversibly lost for production. Land degradation is a universal problem. Even in remote areas the effects of land distortion are oblivious. In some areas the natural environment has been explode to hazardous waste.

The excessive use of Non-Bio-Degradable products like plastic and many more have degraded the land and water. The leakage of sewage to the water resources has polluted the water. The nuclear tests experimented in land and oceans by developed countries like America, North Korea, Afghanistan and many more countries have deteriorated the environment. In the developing world, land or environmental degradation is the symptom of under development. (Sexena. H. M. 2006)

### **Deforestation**

Deforestation is also the cause of environmental degradation. The nuclear tests of economic gains have been developed at the coast of Deforestation.

Deforestation is one of the outcomes of various developmental activities having the character of extensional development and it is true that deforestation is a havoc wrecked through less distractive activities of development. As the population increased more forest began to be cleared for various uses. Humans are cutting down trees for firewood, timber, medicinal purpose and many more, Deforestation and the logging industries have destroyed many tropical rain forests around the world.

In India, deforestation is going on at a very fast pace, this has destroyed many natural habitats of animals and plants native to the areas, as a result biodiversity is being distributed. The urbanization and expansion of agriculture activities have also contributed to the exploitation of forests. The impact of deforestation and the environment can be seen in the form of micro climatic damage which increases in temperature and decrease in heredity rainfall (Gorkha B Thapa).

### **Soil Erosion**

Bare rock surface are exposed in various types like physical, chemical and biological process which lead to physical and chemical disruption, physical process of weathering include action of water temperature glaciers and gravity which cause weathering of rocks through such process as wetting, drying, heating, cooling, freezing, gravitation etc.. The chemical process of weathering include hydration, hydrolysis, oxidation reduction etc...

The main types of soil erosion are as follows:

1. Normal and natural erosion
2. Fluvial erosion
3. Aeolian or wind erosion
4. Marine erosion
5. Accelerated soil erosion by human action. (Sexana H.M; 2006).

### **Landslides**

Landslide is another event, which may cause disruption in the general ecosystem. It is a natural hazard which means any down slope movement of mass of regolith or bedrock under influence of gravity when landslide occurs in the form of huge blocks. It is known as rock avalanche. In India, reports of rockslides often appear in the new hilly states like Jammu and Kashmir, Himachal Pradesh as well as North-East states. (Sexana H.M; 2006).

### **Mining and Environmental Degradation**

Mining is one of the most important economic activities in the world. With growing knowledge of mineral resources as well as due to technological and scientific developments, nowadays mining is performed on a very large scale. The extraction of minerals is done not only to fulfill regional or national needs but also for trade. With this result the large scale mining operations have become a threat to the environment and is responsible for environmental degradation. (Sexana H.M; 2006)

### **Pesticides and Environmental Degradation**

The problem of contamination through pesticides in our food, dairy products, vegetables, fruits or in our living environment as a whole has been visualized very well. Pesticides have been used in farming to:

- 1) Minimize the loss of food caused by pests and ensure a more bountiful harvest.
- 2) Decrease the extent of vector-borne diseases.

The pesticides, which have been widely applied throughout the world, are carried forth by wind, water and are distributed elsewhere. It was found that some pesticides slowly decomposed into compounds that were toxic to fish and wild life species in recent years. Today more than 70000 chemicals are in use. (Sexana H.M; 2006)

### **Salinization**

The second most important degradation process after soil erosion is soil salinization. Salt affected soils which occurred in different environmental, geographical, and topographical conditions and they existed in all five conditions. It is estimated that due to salinization the world loses at least 1.6 million hectares of fertile arable land every year (Hans van et al, (2003).

### **Nuclear Tests**

Some of the natural calamities like floods, earthquakes, soil erosion and many more have also degraded the environment. The natural calamities have destroyed the physical structures of soil and the human properties. It has also destroyed the habitance of various animals. As a result it has created imbalance in the eco system ([Https://eastern blogger.wordpress.com](https://eastern blogger.wordpress.com)).

## **Impact of Globalization**

Globalization of trades, the removal of barriers for the movement of commodities and information in response to economic growth have important implication for the future sustainability of present land use system. However globalization of information and Knowledge system may lighten and bring international attention to bear on rehabilitation and preventive measures at the local land. The world community has witnessed within the past decade a significant manifestation of concern for environmental health and reversal of all trends in land degradation through land mark convention on bio diversity, desertification and climate (Hans van et al. 2003).

## **Pollution**

Pollution is the result of human activities mainly those associated with industries and automobiles. The word pollution is derived from the Latin word 'polluter', which means 'to soil or defile'. Any alteration to air, water, soil or food that threatens the health, survival capability or activities of humans or other living organisms, is called pollution. Environmental pollution is the man made problem mainly of affluent countries, now a serious problem of developing countries as well. The common forms of pollution are 1. Air 2. Water, 3. Soil , 4. Noise, 5. Thermal, 6. Radioactive Pollution

### **Air Pollution**

Air, which is mixture of gases, moisture and some inert material, controls life on earth. It is the reservoir of oxygen needed by man and other animals and of carbon dioxide essential for plants. Any contamination in air may disturb the whole atmospheric system, which is an insulating blanket round the earth. Without air there would be no clouds, no winds, no rain, no snow, no fire. In other words there would be no life on earth. (Sexana H.M; 2006)

### **Sources of Air Pollution**

1. Combustion
  - 1.1 Transport emission
  - 1.2 Industrial process
  - 1.3 Use of solvents
  - 1.4 Radio activity. (Sexana H.M; 2006)

## **Water Pollution**

Water pollution simply means Contamination of water due to any external material or in others words introduction of something to natural water, which makes it unsuitable for human consumption. WHO has defined water pollution as “any foreign material either from natural or other sources that may contaminate the water supply and makes it harmful to life, cause of their toxicity leads to reduction of normal oxygen level of water, causes aesthetically unpalatable effects and spread of epidemic diseases” (Sexana H.M; 2006).

## **Sources of Water Pollution**

1. Natural resources
2. Human sources
  - 2.1 Domestic effluence and sewage
  - 2.2 Industrial effluence
  - 2.3 Agriculture effluents
  - 2.4 Radioactive waste
  - 2.5 Thermal pollution
  - 2.6 Oil pollution. (Sexana H.M; 2006)

## **Global Warming**

Global warming increases earth’s average surface temperature, due to the effect of green house gases, such as carbon dioxide emission from burning fossil fuels which would otherwise escape from the earth. More than 90% of additional energy stored in climate system since 1970 has gone into ocean warming, the reminder has melted ice and warmed the continents and atmosphere. Human influence on global warming is a big threat Earths climate is most influenced by the first 6 miles or so of the atmosphere which contains most of the matter making of the atmosphere. This is really very thin layer of earth. The primary green house gases in earth atmosphere are water vapour, carbon dioxide, methane, nitrous oxide on ozone. Green house gases greatly affect the temperature of the earth.

In the above given background of increasing environmental degradation what should be the social responsibility of the higher education institution in environment conservation? The post graduate students of St Philomena college made an attempt to reduce the pollution through promotion of home bound

waste management system by spreading awareness for pipe composting among 3000 households in Puttur Taluk of Dakshina Kannada district in Karnataka. This paper makes an investigation into such a social responsibility initiative of Centre for Post Graduate Studies and Research, of St Philomena College.

### **Methodology and Research Design**

Environment Conservation and Social Responsibility of Higher Education Institution is the matter of investigation to study the factors effecting environmental degradation and its result and to bring changes in the attitude of the students towards proactive environment conservation through social responsibility initiatives.

### **Objectives**

1. To study the factors effecting environmental degradation
2. To create awareness among the youth
3. To make them socially responsible of environment protection

A descriptive design is used and the universe to be considered for the study would be the Post Graduate Students in St Philomena college Puttur. Among 350 students who got involved in Pipe Composting awareness generation programme 25 students were randomly chosen to study.

### **Data analysis**

According to the survey conducted among the Post Graduate Students, environmental degradation is the imbalance between environment as well as development or living things.

Environmental degradation occurs because of some important causes and the students who favoured each of the factors are analyzed with frequency measurement.

### **Pollution**

Pollution is a very important cause for reducing environmental up gradation and also for reducing environmental fertility. Main types of pollutions are: Air pollution; Air pollution is due to emission of dangerous smoke from industries, vehicles etc, opined 78% of the students. It causes various diseases. Soil erosion; Soil erosion is very important reason for environmental degradation as per 85%. Because of soil erosion, land slowly loses its fertility and degrading day by day.

Water pollution; Main reasons for water pollution are industrial effluents, throwing waste to water according to 90% of respondents. It causes various diseases like- Cholera, Diarrhea, Allergic cold, dengue fever etc.

### **Population**

Because of increasing population land becomes degraded as per 65%. Human needs are unlimited but resources are limited (Adam Smith). To satisfy his needs man exploits environment.

### **Global Warming**

Global warming is happening because of increasing temperature day by day supported by 75%.

### **Deforestation**

Main cause of deforestation is human greed as per 56%. To have shelter or to satisfy his needs man follows deforestation.

### **Use of Plastics**

Plastics are destroying our environment as it cannot be dissolved in the soil. If it is burnt it produces carbon monoxide, CO<sub>2</sub> and causes depletion of ozone layer supported by 88%.

### **Use of Mobiles**

High use of mobiles causes radiation as per 92%. These radiations kill the birds and species of environment.

### **Discussion, Finding and Results**

Environmental degradation is also a road block in the path of development, because of several causes. To reduce these things creation of environmental awareness is very essential. Through awareness programmes and making people to participate in programmes like pipe composting, recycling of plastics, bio gas, rain water harvesting etc., will help to reduce environmental degradation. The P G department of social work at St. Philomena College took initiative to teach waste management methods through pipe composting and biogas plants to 350 P G students who in turn will disseminate the same to 3000 families in Puttur taluk. It has been a major achievement in line with our study.

### **Suggestions**

1. Social workers to promote sustainable environment development.
2. Through various environment related agencies, social workers can work for environmental up gradation
3. In the community settings, formation of SHGs to protect environment
4. Inclusion of environmental studies in social work curriculum.
5. Organize a research activity for the promotion of environmental up gradation
6. Promote social responsibility activities in higher education sector across disciplines

### **Conclusion**

Our environment is coming under the threat of many factors related to human activities. There is an urgent need to take up action to protect the magnificent environment of our planet. We must create economic policies in order to maintain the environmental upgradation and take appropriate measures to protect environment. The study is an attempt to draw awareness upon the role of higher education institutions in the promotion of sustainable environment reducing the degradation factors.

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