

# ROLE OF HIGHER EDUCATION IN ENVIRONMENT PROTECTION

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## Abstract

The subject of education and environment is chief agenda of the green debate. The environment can no longer be viewed as a separate entity from the education. Environmental degradation is of many types and have severe consequences. Lessening exposure to environmental risk factors by enhancing air quality and access to improved sources of drinking and bathing water, sanitation and clean energy is found to be associated with significant health benefits and can contribute significantly to the achievement of the Millennium Development Goals of environmental sustainability, health and development. In this paper, an attempt is made to describe the national and global causes and consequences of environmental degradation and role of Education in sustaining environment. In modern society, education plays an important role in the economic and social development of the country and promotion of National integration. Through education, one may develop the capacity to think rationally and logically and to cope with transitions, stress, sufferings, and losses that occur in our lives. India is challenged by both environmental degradation and economic growth. These challenges are directly linked with the conservation and maintenance of the life supporting systems such as land, water, air, and biological diversity. The major causes of environmental degradation are population growth, industrialization, changes in consumption patterns and poverty which are threatening the dynamic equilibrium. In an effort to think of these issues, environmental education for sustainable development is emerging as the need of the hour to encourage students of higher education to conserve and protect the natural environment along with their studies. Present paper is aimed at to describe the causes of the environmental degradation and suggestions to eliminate the causes of environment degradation.

**Keywords:** Environment degradation, consequences, pollution and climate, sustainable development

## INTRODUCTION

“Man tends to increase at a greater rate than his means of subsistence” Charles Darwin, The Descent of Man (1871)

Environment is a biggest natural asset of human beings which must be protected at any cost. It is the practice of protecting the natural environment by individuals, organizations and governments. Its objectives are to conserve natural resources and the existing natural environment and also to repair the damage caused to it. Due to increasing overconsumption, population growth our bio physical environment is being destroyed. The word environment is derived from the French word “Environ” which means surroundings. The surroundings that is our natural ecosystem is getting disturbed which is ultimately resulting in the degradation of environment. Environmental degradation is a wide term which is influenced by many factors like deforestation, global warming, animal extinction, acid rain etc. Environmental degradation is a process through which natural environment is compromised in some way which is reducing biological diversity and general health of environment. Some international organizations recognize environmental degradation as one of the major threats facing the planet. All human beings have been gifted with one common gift of living which is earth and it is duty of every individual to take care of environment because if the environmental degradation continues at this pace then the day is not far when our natural habitat earth will be destroyed which would mean the end of human existence.

We know that our environment is being clasped by the different pressures given by human beings i.e. the natural ecosystem is being disturbed very wildly which is resulting in the degradation of the environment.

Environmental degradation means reduction in the quality of the environment due to man-made and natural factors. The resources are depleting and the quality of air, water and soil is also diminishing. The natural habitat, the forests and the water sources are getting destroyed and polluted. Environmental degradation is wide term that is influenced by various factors like deforestation, desertification, global warming, and animal

extinction, formation of acid rain, pollution and drastic change in climate. Some of the natural causes of environment degradation are earthquakes, wildfires, volcanic eruptions, hurricanes, landslides, tornado, tsunami and cyclones.

## CAUSES OF ENVIRONMENT DEGRADATION

The major causes of the environmental pollution are modern urbanization, industrialization, over-population, deforestation etc. Environmental pollution refers to the degradation of quality and quantity of natural resources. Different kinds of the human activities are the main reasons of environmental degradation. These have led to environment changes that have become harmful to all living beings. The smoke emitted by the vehicles and factories increases the amount of poisonous gases in the air. We can see pollution in urban areas where population is increasing rapidly. The waste products, smoke emitted by vehicles and industries are the main causes of pollution. Unplanned urbanization and industrialization have caused water, air and sound pollution. Urbanization and industrialization help to increase pollution of the sources of water. In the present scenario of modernization, environment is being polluted day by day. This rapid environmental degradation will definitely lead to reduction in quality and quantity of natural resources. Growing urbanization, industrialization, population and deforestation contribute to the causes of environmental degradation. Moreover, one of the major causes of environmental degradation is human activities which may be for the sake of fun, need etc. Following causes may be laid out for environmental degradation:

**1. Agricultural Demand:** - Population is increasing day by day with great speed. To fulfill basic needs of food man is continuously increasing the area of cultivating land. Deforestation is the only method to increase the area of agricultural land. The result of deforestation is loss of wild life and trees. Different species of animals and birds have to lose their habitat which ultimately leads to extinction of those species due to deforestation. Mankind is losing greenery which is a major asset for the future generation. Deforestation also leads to soil erosion which is removal of upper layers of soil with water. To meet the growing demand of food, man uses harmful pesticides and insecticides for bulk of harvest. Excessive use of pesticides leads to soil degradation and water pollution because harmful pesticides move into deeper layers of soil and water.

**2. Enjoyment or fun:** - Man is a social and selfish creature who does not bother to harm wild life and natural vegetation for the sake of mere enjoyment or fun or for social causes. Man, usually hunts animals for pleasure only without thinking of loss of wild life. Moreover, the trunk of many trees are used by man for decorative purposes which is ultimately a great loss to green vegetation.

**3. Natural Causes:** - In addition to man-made causes there are certain natural causes for environmental degradation like wild fires, landslides, earthquakes, volcanic eruptions, Tsunami etc. These causes cannot be predicted in advance because they occur naturally but these factors add to environmental degradation a great loss which can neither be controlled nor be fulfilled. Moreover, the loss caused by natural causes is also huge.

**4. Unplanned Development:** - One of the major factors of environmental pollution is unplanned development which is contributing a great role in worsening the situation. Building of shopping malls, offices spaces, industrial sites, parking areas, roads and rail networks, mining projects, thermal plants are the major factors that contribute in worsening environment.

**5. Improper disposal of waste:** - One of the major causes of environmental degradation is carelessly disposal of waste. Household waste is generally thrown away carelessly here and there which is consumed by animals and they generally fall ill. Moreover, chemical waste of factories is also thrown away in water bodies which contaminates the water resources. The massive smoke from factories and big industries pollutes air which is breathed in by plants, animals and humans.

## EFFECTS OF ENVIRONMENTAL DEGRADATION

Some of the effects of Environmental degradation are as below: -

**Soil Erosion:** - Man is continuously cutting tree to fulfill his basic needs of living at a safe place. The increase in cutting of trees is leading to loss of soil health. Deforestation on a large scale makes the upper layer of earth bare and due to rainfall and strong winds the upper layer of soil is removed which is also called soil erosion. Basically, soil erosion is the displacement of the upper layer of soil due to natural processes like water, ice, snow air, plants, animals and humans. Soil erosion is a slow process that continues relatively unnoticed or can occur at an alarming rate which can cause serious loss of topsoil.

**Atmospheric Changes:** - Environmental degradation also leads to change in atmospheric conditions. The bad effects of environmental degradation are that water cycle and natural habitat of plants and animals also change severely. The climate and weather are also changing due to increased pollution. Increasing pollution is also depleting ozone layer which is of course a big loss for the environment. Human activities are also responsible for atmospheric changes for example burning of fossil fuel is producing a worldwide increase in the atmospheric carbon dioxide. The result of which is that gases in Earth's atmosphere trap the sun's heat. The increase in carbon dioxide will also lead to increase in the surface temperature also.

**Global Warming:** - Global Warming is long-term heating of Earth's climate system due to human activities which are estimated to have increased. Studies indicate that the earth's climate system is continuously warming in a way that has no precedent in the history of human civilization. This continuously increasing temperature might break the balance of human ecosystem. Global Warming is an issue which needs to give attention in the present scenario. Global Warming is rapid melting of ice glaciers which will also create an alarming situation. Global warming is divided into two broad categories- "natural" and "human influences". "Natural" issues include greenhouse effect and "human influences" include industrial production, burning fossil fuel, mining of minerals, cattle rearing and deforestation.

**Human Health:** - The Environment degradation has a negative impact on human health. Day by day there has been decrease in quality of air and water and average life span of human is decreasing. The number of people who die due to diseases are also increasing. As the quality of air diminishes, lots of people die due to chronic diseases like lung cancer, heart attack etc. Hazardous waste of landfills enters the food chain which deteriorates the quality of food which obviously human beings consume. Moreover, the pesticides which increases the yield are also dangerous for human health.

**Biodiversity loss:** - Environmental degradation is also leading to the loss of biodiversity. Most of the species of animals are under the threat of extinction and the animal species which are alive are also losing their reproductive capacity. The reason behind this cause is only and only increased human activities which has caused exploitation of natural resources, soil erosion, falling of water level etc. However, deforestation is also leading to cutting down of trees on large scale. Deforestation is converting forest land to farms, or for urban use. Basically, deforestation is the permanent removal of trees to make room for something besides forest. Forests cover more than 30% of the earth's land surfaces, according to the World Wildlife fund. Forest fires are also a big reason for loss of forest health.

**Drought and Water scarcity:** - Other major effects of environmental degradation are drought and water scarcity. Droughts are likely to displace millions of people all over the world, affecting food insecurity and human lives. Wastage of water by human activities is also a major cause for drought and water scarcity. Drought is an event of prolonged shortages in the water supply.

## ROLE OF HIGHER EDUCATION TO REDUCE ENVIRONMENTAL DEGRADATION

The problem of environmental degradation has been increasing day by day and taking a disastrous shape. Thus, it has become the need of the hour to protect the environment for the future generation. Environment is a natural resource which should be protected at priority. Education whether is of school or college plays a significant role in saving environment. As far as role of higher education is concerned, the higher education institutions under the able guidance of Department of Higher Education, Haryana organizes various activities to aware the students about this alarming issue. In colleges, different cells and committees like NSS, NCC, Eco club, YRC, Road Safety club etc. are constituted to organize different activities. Seminars, workshops, conferences, extension lectures are also organized in the Colleges to interchange views and knowledge. The government also implements different schemes to aware students and staff of higher education for the importance of saving environment. Moreover, an Important Day Celebration committee is also constituted at college level to celebrate all days related to the issue of saving environment. Apart from these suggestions, home culture is very much necessary to aware the youth about the need of saving and protecting environment.

**NSS/NCC/YRC/Eco-Club/Road Safety Club:** - In the starting of the academic session, Annual duty list is prepared by the principals to assign or give charges of different committees to the faculty members. The purpose of constituting different cells is to raise certain issues and provide social services to the society. Through the activities conducted by these clubs and cells, students personally come to know the situation of the villages and the society. In the colleges, students are prepared to do social service whether it is for humanity or for environment. Environment protection has gained momentum in the recent time. In this direction, the government and the NGO's have initiated many programs to protect the environment.

NSS (National Service Scheme) is implemented by the govt. of India under the Ministry of Youth Affairs and Sports on Gandhi Ji's birth centenary year 1969. NSS has provided a platform for the students to support best environmental practices. Involvement of student volunteers in environmental activities through NSS can contribute to the overall development of positive qualities in young people and develop among them a sense of social and civil responsibility.

N.C.C. (National Cadet Corps) also motivate students to take up tree plantation, make home for birds, reduce use of plastic, reduce energy conservation for the sake of protecting environment. The cadets also take part in rallies to celebrate World Environment Day, Be Vocal for Local etc.

Other clubs like YRC, Road Safety club, Eco Club are also constituted to celebrate each and every day which contribute to the practice of saving environment. Various Inter College and Intra College activities like Quiz, Declamation, and Poetic Recitation etc. are also organized to aware the students, staff and society about issues related to the environment.

**Government Schemes:** - Government of Haryana runs various schemes like SBSI, Unnat Harit Abhiyan etc. to enhance students' participation in the environment saving activities. Under the scheme of SBSI, students work for environment protection for at least 100 hours

**Seminars/Workshops/Conferences:** At college level, seminars, workshops, conferences and extension lectures are arranged to exchange knowledge and information from one person to other, from one college to other and from one university to other. The students and staff actively participate in these academic activities. The themes of these seminars and workshops are the topics related to environmental issues. The ultimate aim of these activities is to train the students and staff on the significance of being kind to nature. The emphasis is also laid to motivate students to assist the government to meet the objectives of environment protection.

**Psychological Education:** - The students of the institution should be given psychological education to prepare them mentally for the need of saving environment. Psychological education should be made compulsory part of the curriculum so that students at their academic platform are well aware of the need of saving environment. Environmental psychologists often study how the built or physical environment affects human behavior. They also study the impact that environments –both natural and urban have on human inhabitants.

**Celebration of Important days and special Days:** - In the institutions, Important Days are celebrated by organizing different activities. By such celebrations, students learn the importance of these days and are also motivated to save environment. World Forest Day (21 march), World Water Day and Sanitation Day (22 March), World Resources Day (23 march), World Atmosphere Day (10 April), Earth Day (22 April) are celebrated at college level to contribute to protect environment. As far as celebration of special days are concerned, students are motivated to celebrate special days like birthdays and other memorable days by planting a sapling each year. Planting more and more trees is the best way to achieve the goal of saving environment. Trees also play an important role in enlightening human senses because nothing delights the heart and refreshes the mind more than viewing land covered with greenery.

**Home Culture:** - Young people constitute a large part of the world's population and young people will have to live longer with the consequences of current environmental degradation. Future generations will also be affected by the decisions and the extent to which they have addressed the concerns such as the depletion of resources, biodiversity loss and long-lived radioactive wastes. Young people can play an active role in protecting and improving the environment. Home environment can do doubt play an important role in engaging youth in environmental protection. Youth are backbone of the nation. They can change the future of the society with their well-being and courageous behaviour at home and schools.

## SUGGESTIONS

Protection of environment is a major responsibility and a natural way of caring for self and for our future generations. Environmental pollution is one of the key problems faced in our modern world. All the technological advancement has invited negative effects to the environment. Environment which is a survival truth must be protected at any cost. Following are some suggestions which can be implemented to save environment:

**Planting Trees:** - We should plant more and more trees to improve air quality. We should also take a stand against deforestation. We should also teach our children to respect nature and save nature because losing our rainforests means losing millions of trees that would otherwise be cleaning the air for us.

**Choosing a Transportation Facility:** - We should avoid using a car for short-distance travel, instead, we can make use of a bicycle which will be beneficial in terms of health as well as in the reduction of air pollution.

**Food Choices:** - Transporting the food across various parts of the country would lead to consumption of considerable fuel. We can minimize the consumption of excessive fuel by choosing food products that have been grown locally and naturally using viable methods.

**Energy Savings:** - Ensure that you switch off the lights and other electrical appliances when you are not in the room. Unplugging them when not in use would also help to save energy. We should also use energy-efficient light bulbs.

**Usage of Chemicals:** - Make use of eco-friendly chemicals because for washing utensils, cars etc. because homes chemicals get washed down into the sewage system that would, in turn, get collected as groundwater.

**Avoid Flushing of Medicines:** - Medicines with high dosage when end up in the sanitation system, are very difficult to isolate from the water system and would cause an adverse effect on people who would consume this water.

**Conservation of Water:** - Avoid excess unwanted usage of water. Some of the simple ways to prevent wastage of water include making use of water-saving apparatus, fixing leakage of taps and avoid washing utensils with running water. We can also collect waste water from water purifier system and air conditioners.

## HOW TO CREATE AWARENESS

There are several ways that you can educate people about environmental pollution. Do some research online and get to know about the causes of pollution in your area. Share with many people as much as possible so that

they are aware of the strictness of pollution and the ways to prevent it. One can also create awareness by creating an environmental group.

Experts say that proper handling of waste materials, such as reusing or disposing of them properly, should constitute an important part of our efforts to preserve energy and protect the environment. All countries should use less coal and more reusable power like hydro or solar power.

Let us plan our cities according to the available water resources. Saving energy reduces air pollution and greenhouse gases. The less we pollute our environment, the more we prevent global warming. Let us check the seas from rising and submerging our lands.

Increasing number of organizations are being formed to prevent the planet from premature extinction. More and more people have joined the race to save the planet. We can simply begin by buying recycled products for our office, home or school. The greater the demand for recycled products, the more these companies will be encouraged to add recycled material to their products.

We can also make simple changes, like using reusable bags and containers. We should try and conserve electricity by turning off the lights, TV or other electrical appliances when not in use. Use cold water in the washer whenever possible.

We should avoid littering our roads and highways. And prevent others from doing so. Always dispose your litter properly. Littering is not only bad for the environment; it is also an offence carrying heavy fines. We should use more organic fertilizers. Our farms need less pesticides and more organic methods.

Plant trees to improve air quality. Take a stand against deforestation. Losing our rainforests means losing millions of trees that would otherwise be cleaning the air for us. Let's teach our children to respect Nature.

## REFERENCES

- [1] Bakshi, T., 1978: Environmental Education: Principles, Methods and Applications, Platinum Press, New York.
- [2] Barry, J., 1999: The Environment and Social Theory, Routledge Press, London.
- [3] Bateman, I. J., 2001: Environmental Analysis for Decision Making: The Economics of Non- Market Goods and Resources, Kluwer Academic Publishers, Netherlands.
- [4] Kim, J., 2001: Environmental Education Processes: Indoor and Outdoor Learning, Department of Tourism and Development, South Africa, May.
- [5] Kemmis, T., 1986: Perspectives in Environmental Studies, Environmental Research Science Expo, No.11, May
- [6] Barr, J.J. (2016). Developing a positive classroom climate. IDEA (paper #61).
- [7] Müller, F.H. & Louw, J. (2004). Learning environment, motivation and interest: Perspectives on self-determination Theory. South African Journal of Psychology 34 (2), 169-901.
- [8] www.fastweb.com