

# THE EFFECTS OF ENVIRONMENTAL DEGRADATION

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## ABSTRACT

*In the present existence, there have been number of aspects that lead to the degradation of the environmental conditions; this has become a major problem not only in India but in other countries of the world as well. Environmental degradation is the deterioration of the environment through the depletion of resources such as air, water, and soil; the destruction of the ecosystems and the extinction of wildlife are also aspects of environmental degradation. When the environment becomes damaged and loses its important aspects or when its components gets demolished, then it is stated that the environment has been degraded. When the habitats are destroyed, loss of biodiversity has taken place, or depletion of natural resources has happened then the person understands that environmental degradation has come about. Either human activities or natural processes are the factors that lead to the degradation of the environment. The main purpose of this research paper is to understand the effects of environmental degradation upon the surroundings, conditions and the existence of the individuals. The effects of environmental degradation are always negative and have an unconstructive influence upon the lives of the human beings. The main areas that have been taken into account are causes of environmental degradation, environmental problems, human activities on the environment, main components of disaster management and prevention, and measures for combating environmental degradation. The most serious problem that has lead to the environmental degradation has been the problem of poverty within the country; when people lack the funds and the resources, they largely depend upon the environment for their existence, for instance in rural areas, people make use of water from the water bodies and there has also been an increase in water pollution, the tribal people are dependent upon the forests and the natural environmental conditions for their basic requirements such as food, clothing, dwellings, water and meeting the other household needs; hence, excessive dependence upon the environment leads to environmental degradation.*

**Keywords:** Environmental Degradation, Human Activities, Disaster Management, Prevention, Poverty, Industrialization, Urbanization

## INTRODUCTION

Before understanding the effects of environmental degradation, it is vital to understand the term environment, the word environment, means the surroundings in which one lives, there are different kinds of environments, social, political, economic, educational, school and organizational. In this research paper, the meaning of the term environment means the physical surroundings, all the constituents, procedures and conditions around along with their relationships. It is defined as the entirety of all the conditions and circumstances and the living and non living things around an organism which has an influence upon ones existence. The

environment comprises of two components, living and non-living; the living component is known as biotic, which includes the organisms themselves that is human beings, plants, animals, other organisms, their food and communications. The second component; is regarded as non-living which is known as abiotic, which includes factors such as sunlight, soil, air, water, land, wind, climate etc. (Environmental Degradation, n.d.).

Conservative environmental researchers are of the viewpoint that poverty is one of the most important sources of environmental degradation, hence recommending an unconstructive relationship between poverty and sustainable development and suggesting that if much of the environmental problem is paucity, then, eliminating the conditions of poverty and deprived people by means of development becomes a solution to saving the environment; thus, this group of researchers are of the opinion that there is an unconstructive correlation between poverty and sustainable development. Prevailing discussion on development has tended to hold responsible the deprived people for environmental degradation, while avoiding the function of other processes. In their opinion, the conception is that there is a connection between poverty and environmental degradation that is long standing yet continuously being found again; this has led to the emergence of poverty and the environmental degradation being considered as a cooperative interactive process (Udofia & Udom, 2011).

## CAUSES OF ENVIRONMENTAL DEGRADATION

The causes of environmental degradation have been identified as follows: (Environmental Degradation, n.d.).

1. Increasing Population – When increase in the population takes place, which is regarded as a major resource of any country, then it results in environmental degradation. The rapid increase in population leads to a major utilization of natural resources; there is an increase in different forms of pollution such as land, water, air and noise and augmented pressure on the arable land; therefore, these lead to immense stress upon the environment and the natural resources.
2. Poverty – It is the cause and effect of environmental degradation, poverty stricken individuals make more use of natural resources for different purposes such as for their household chores, preparation of meals, etc. for these purposes the depletion of natural resources takes place at a faster pace. Due to their conditions, the poor people have no access to other types of resources that are mainly utilized by the wealthier people.
3. Urbanization – The people residing in rural areas move to urban areas in search for a better livelihood, this has led to unplanned and rapid expansion of cities, thus giving rise to increased pressure and stress upon the infrastructural facilities. There have been an increase in the slum areas and they are the major sources of pollution. Urbanization has led to depletion of forests and natural resources and these have led to environmental degradation.

4. Changing Life Style – The changes in living patterns of the individuals have lead to environmental degradation; there has been an increase in the consumption patterns of the people, there has been an increase in the human activities that have lead to environmental degradation in numerous ways. There has been an increase in the use of modern gadgets such as refrigerators and air conditioners and global warming.
5. Agricultural Development – Agricultural development is an important aspect for the country, on the other hand, various kinds of farming activities especially directed towards increasing agricultural production have a direct effect upon the environment. These activities have been contributing to soil erosion, land salination, alkalization and loss of nutrients. Excessive usage of fertilizers and pesticides has been a major source of contamination of water bodies and land degradation.
6. Industrialization – The rapid increase in industrialization, the emergence of small scale and large scale industries, whether they are manufacturing, production or services have lead to environmental degradation. Industrialization adopts technology and equipment that places huge pressure on the land; there is depletion of natural resources such as fossil fuels, minerals, timber, and contamination of land, water and air. All these factors lead to immense damage to the ecosystems and hence leading to health problems.
7. Economic Development – Any measures that are being initiated to bring about economic development are also leading to environmental degradation. The natural resources such as trees, water and land are being extensively used in order to bring about economic development of the country. The economy in the present existence has become consumption extensive which demands wide-ranging use of resources in order to bring about transformations within the lifestyles.

## ENVIRONMENTAL PROBLEMS

Some of the environmental problems that cause severe effects upon the existence have been stated as follows: (Kesiena, 2009).

**Pollution** – It is a phenomenon when potentially detrimental substances are released into the environment; pollution can be a natural process but it is normally caused by the human activities. There are different types of pollution, air, water and noise. Air pollution is the contamination of air with unwanted gases, smokes, particles and other substances. The discharge of industrial and household wastes into the water bodies, and soil erosion lead to water pollution. Noise pollution is defined as the unwanted sound that is generated normally in high density urban areas as a result of industrial plants or any other factor.

**Solid Waste** – It has become one of the major problems, with its effects upon the pollution of land, water and air; it has proved to be hazardous upon the health of the individuals as well as their social well being. The urban and the rural areas are faced with this problem about how to properly manage the solid waste. In urban areas, there has

been disposal of solid waste on the roads which is affecting the living of the people in a negative manner.

**Global Warming** - This is the continued increase of greenhouse gases in the atmosphere. These gases, which include carbon dioxide, methane, nitrous oxide and chlorofluorocarbons, block some of the heat radiated from the earth to cause a greenhouse effect. According to the inter-government panel on climate change (IPCC), the last two decades of the 20th century were the hottest on record. Some of the main sources of growing releases of greenhouse gases are the burning of fossil fuels for energy and transportation, the removal of forests which decreases the carbon dioxide absorption, cattle rearing which produces methane emission as a by-product, and the use of technology that causes pollution. Accordingly, global warming leads to an increase in seawater level and to soil erosion, flooding and drought.

**Land Degradation** – This is one of the most serious environmental problems facing many countries of the world. Land degradation is caused due to improper management of resources, demolition of the forest areas, over grazing or over cropping of the arable lands, flooding and wind erosion hazards, agricultural methods, the usage of insecticides, pesticides and other chemicals, natural land slides, demolition of wetlands and demonstrations for development. The increase in population and issues relating to housing, construction and ownership of property are also some of the issues that lead to land degradation.

**Violence and Conflicts** – Violence and conflicts have been considered to be factors that have always proved to be detrimental to the existence and development of the human beings, their surroundings, environment and the nation. Violence and conflicts have not just been limited to the deprived sections of the society but there has been an interconnection between the conditions of poverty, land degradation and violence and conflicts. The utilization of the natural resources, different kinds of pollution, and the conditions of extreme poverty and backwardness have lead to conflicting situations and disputes regarding the ownership and utilization of land (Aworawo, n.d.).

## **HUMAN ACTIVITIES ON THE ENVIRONMENT**

There is an interrelation between the human activities and the environment. This is because any activity that is implemented by the individual is carried out within the environment and the resulting consequence is either positive or negative to his existence. Human activities are varied. There have been positive as well as negative consequences of these economic and domestic activities. For instance, agricultural methods require the usage of pesticides; these pollute the atmosphere or enter drainage system by the use of run off and sewers. Other activities which lead to pollution include thermal power stations, burning of fossil fuels, exhaust fumes etc. All these release injurious pollutants like sulphur dioxide, carbon monoxide, etc, that cause acid rain, global warming, and the malfunctioning of human haemoglobin (Kesiena, 2009).

Human activities are able to cause the environmental annoyance and the degradation such as; destructive logging of forests, overgrazing and over-cropping of arable lands, and strip mining. These may be comprehensive to comprise oil exploitation, industrialization, inappropriate disposal of domestic solid waste and human excretal including liquid waste, over-utilization of non-degradable materials for packaging among others. All these human activities have merged to reduce the earth's resources, degrade the environment and cause loss in biodiversity. The environment in which these human activities take place is the external physical and biological systems of the earth in which the human beings and external organisms exist. Although it is difficult, there are numerous interrelated components. The physical environment is made up of air, water, and land. In order to exist, human activities intrude on the environment, as it has been stated earlier, environmental degradation may have either positive or negative effects upon the individuals. However, the positive effects would be used by the individuals in a proper way but what are of concern to man are the negative effects especially as they concern depletion of natural resources (Kesiena, 2009).

## **MAIN COMPONENTS OF DISASTER MANAGEMENT AND PREVENTION**

**Early Warning** – The main activities that are involved in early warning regarding the occurrence of the disaster are continuous observation, examination of surroundings, estimation of inconsistent situations and an effective and timely dissemination of information. Meteorological data, hydrological data from within the country as well as neighboring regions have to be obtained and analyzed (Zeil, n.d.).

**Emergency Operations** – Planning, management and communication are the main activities that come under the emergency; information available should be relevant, concise and accurate; the dissemination of information should also be of significance and quality standards. On the basis of the assessment procedures that have been implemented, operational plans have been framed to organize existing resources and create applications for additional support (Zeil, n.d.).

**Rehabilitation** – Once the disastrous conditions have passed, next step comes rehabilitation, what is required is analysis of damages, direct development planning, and examining and estimation of the measures and procedures. For example, if one has to look at food production, then first step is the analysis of damaged agricultural production areas, measures have to be implemented to anticipate food scarcity and undertake procedures and help of agricultural scientists to restore food production and distribution (Zeil, n.d.).

**Prevention** – Knowledge, awareness, dissemination of timely information, precautions and measures have to be established in all cases in order to prevent massive destruction. Hazard mapping and allocation of safe areas are the ones that have to be implemented in order to prevent disasters (Zeil, n.d.). For example, it is recommended that in order to prevent drought, more and

more trees should be planted so that there is sufficient rainfall hence severe drought can be avoided.

Disaster Classification – It is important to classify all kinds of disasters and natural hazards in accordance with their nature, time scale, influence, intensity, causes and the aftermaths. The disasters can be earthquakes, cyclones, drought, landslides, floods and so forth. All kinds of indicators have to be formed by which they are measurable (Zeil, n.d.).

## MEASURES FOR COMBATING ENVIRONMENTAL DEGRADATION

The measures for combating environmental degradation have been stated as follows: (Donohoe, 2003).

1. One should read various books, articles and journals on the environment in order to become aware of different factors that lead to environmental degradation and effectively adopt the preventing measures.
2. Health education is an important area for all the individuals to become aware of, when they will possess the required knowledge of health education then they would implement measures for combating environmental degradation.
3. Planting of trees should be encouraged; one should aim at spreading greenery around so that there is a reduction in air pollution.
4. In rural areas, people largely depend upon the usage of water bodies, and even dispose waste materials into them, thus causing water pollution; they should be prevented from disposing any kinds of waste materials into the water bodies so that they remain clean and uncontaminated.
5. The waste management department should promote reduction, reuse, recycle and cause an edge upon the toxic waste production. Industries and vehicles do emit gases that cause air pollution but proper management of the environment would prevent the environment from getting polluted and reduction in different kinds of pollution.
6. Automobiles should be supported; these include electric cars and electric trolley systems; which generates less carbon dioxide than regular gasoline, solar cars and hydrogen powered cars, whose product is water. Trains that are more energy efficient should be utilized more as compared to the automobiles.
7. Significance of education, improvements in the status of women and strengthening of the family planning programs would lead to a decrease in the demand for large families which leads to an existence of a more equitable world.

## DISCUSSION

Human beings depend upon the environmental conditions for their effective life and existence; people normally within the rural areas depend upon the water bodies for numerous purposes such as washing, bathing etc. The rural and the tribal people depend upon the natural environmental

conditions such as trees for obtaining wood for cooking purposes, wild animals, plants, food such as fruits and so forth. When people in urban areas go to the parks for playing or morning walks, they take pleasure in the natural environmental conditions; therefore, it can be understood that the existence of the human beings depend upon the natural environmental conditions.

There have been emergences of factors that have led to the degradation of the environmental conditions such as increasing population, when the population growth takes place then more pressure is put on the land and more utilization of resources takes place. Poverty is one of the most serious factors that have led to environmental degradation, when people reside within the conditions of poverty, then their dependence upon the natural environmental conditions increases. Urbanization takes place when more people from the rural areas migrate to urban areas in search for an enhanced livelihood. The changing lifestyle has led to environmental degradation, such as more usage of gadgets such as refrigerators and air conditioners has led to global warming. Agriculture is the main occupation of the people in rural areas and improvement in the agricultural methods has led to soil erosion and contamination of water bodies. Industrialization has led to environmental degradation, with the establishment of industries, there has been emission of gases which has led to air pollution, from the industries also there has been excessive disposal of waste materials into the water bodies that have led to water pollution. For the economic development of the country, there has been excessive utilization of land, water and air; therefore environmental degradation has taken place.

It is vital to adopt measures that would curb environmental degradation, it can take place through natural or man made processes. The measures that are required to get implemented when natural processes, hazards or disasters take place are early warning, emergency operations, rehabilitation, prevention and disaster classification. When environmental degradation takes place through the utilization of natural and environmental resources by the human beings then they are required to adopt various measures such as not disposing any kinds of waste materials into the water bodies, keeping them clean, planting more trees, recycling waste materials, supporting the automobiles, being aware of health education, as harmful gases are injurious to ones health, recognizing the significance of education, because education provides knowledge to the individual about all the essential aspects and maintaining appropriate environmental conditions and causing reduction in the conditions of poverty. Effective implementation of all the measures would certainly contribute in maintaining an efficient environment which would prove to be advantageous to all the sections of the society and make their living useful.

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