

5. Environmental Degradation: Causes, Effects and Mitigation

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5.1 Introduction:

Environment is the physical surrounding where one lives. It is the aggregate of all the biotic and abiotic components and its impact on human beings and their quality of life. Long back our environment was very clean and pure and was not degraded. It is rightly said by Gandhiji that “The earth provides enough to satisfy every man's needs but not every man's greed” so as our need was fulfilled but due to our greed and the interference with the mother nature our environment is completely degraded at this point of time and is one of the alarming issues.

The preset chapter will deal with the meaning of Environment Degradation, its causes, effects, and the solutions to stop this degradation of environment and save the Mother Nature.

5.1.1 Meaning of Environmental Degradation:

Definitions:

- **According to Oxford Reference-** Environmental Degradation is “Depletion or destruction of a potentially renewable resource such as air, water, soil, forest, or wildlife, by using it at a rate faster than it can be naturally renewed.”
- **According to your dictionary-** Environmental Degradation is “Environmental degradation are defined as actions taken by people that cause the planet Earth or its systems (air, water, etc.) to become damaged or harmed in some way.”
- **The United Nations International Strategy for Disaster Reduction defines environmental degradation** as "the reduction of the capacity of the environment to meet social and ecological objectives, and needs”
- **Glossary of Environment Statistics:** Environmental Degradation is defined as “Environmental degradation is the deterioration in environmental quality from ambient concentrations of pollutants and other activities and processes such as improper land use and natural disasters.”
- **According to United Nation Economic and Social Commission for Western Asia,** “Environmental degradation is the deterioration of the environment through depletion of resources such as air, water and soil, the destruction of ecosystems and the extinction of wildlife. It is any change or disturbance to the environment perceived to be deleterious or undesirable.

From all the above stated definitions it can be concluded that the term Environmental degradation is made up of two words 'Environment' and 'degradation' which simply means degradation of environment. It is defined as the depletion or deterioration of environment which may occur sometimes naturally and then mostly due to human interference. It is the destruction of environment due to misuse of all the natural resources provided to us by Mother Nature. In other word it can be said that degradation of the environment just for the sake of economic benefits which further leads to the destruction of ecological system is called as Environmental Degradation. The series of action taking place by humans, the result of which is harm to the environment is Environment Degradation.

5.2 Causes of Environmental Degradation:

Environmental Degradation can occur on its own in Mother Nature but most of the times it is due to the human meddling. There are many underlying causes of Environmental Degradation which are as follows:

- **Overpopulation:** A sudden surge in population from around 1 billion in 1800's to 7.9 billion in the year 2022 (World meter) has parallelly increased the need of basic necessities such as food, clothing and shelter for people due to which more deforestation is done so that food could be grown to meet the needs of such huge population and houses could be made to provide shelter which further puts strain on the natural resources and degrades the environment.
- **Land Damage or Land Disturbance:** Land Damage occurs when the weedy species arise at some place which is unknown as well as invasive, take the charge over there and spread to such an extent that they put an end to the local greenery present there due to which food assets could not grow. Such interfering species are responsible for degradation of environment.
- **Pollution:** Pollution is one of the key causes for degradation of the natural surroundings which is caused due to Techno centrism. Pollution is defined as the addition of unwanted and harmful substances in the environment and these substances may get added to environment through air, water, soil, radioactive elements and transport further deteriorating the quality of air, water and soil leading to environmental degradation.
- **Deforestation:** Cutting down of trees and other plantation in large numbers is called as Deforestation. Deforestation is generally done to make home for the huge population, setting up of industries, in need of land for agricultural activities, grazing of animals, collecting the fuelwood etc. The result of deforestation is that the forest cover is reduced to a great extent which further contributes to the global warming and carbon is released back to earth bringing changes in the environment drastically.
- **Landfills:** Landfills are formed at the place where the solid waste is disposed. When large amount of waste generated from homes, factories, industries, and infirmaries gets collected in the solid form in the urban areas, it puts the life of individuals in risk who live there and creates a foul smell when burnt eventually degrading the environment.
- **Natural Causes:** Environmental degradation is not only caused by human actions but sometimes it occurs naturally too. Several naturally occurring phenomenon such as Avalanches, earthquakes, storms, cyclones, tides, tsunamis, landslides and wildfires destroys the nearby places so that no plant and animal species could live there. These could happen either due to a natural disaster or by long term degradation.

5.3 Effects of Environmental Degradation:

Degradation in environment caused affects the life to a great extent. There are several harmful effects of Environmental degradation which are as follows:

- **Impact on Human Life:** Human disturbance is considered as one of the causes contributing to degradation of environment, because of which their own life is affected or impacted a lot. Health of the humans is at severe risk. Air pollution damages the lungs of persons and toxic air pollutants released in the air causes many respiratory problems such as pneumonia, asthma etc. When harmful wastes are released in water, water gets contaminated due to which again humans suffer.
- **Biodiversity Loss:** To maintain our ecosystem, restoring nutrients and protecting climate, it is very important to have a large biodiversity, but we are losing our biodiversity at a rapid rate, species are vulnerable, and few are at a risk of extinction due to the activities such as deforestation and pollution.
- **Ozone Depletion:** To protect the earth from UV rays, we have ozone layer but due to the environmental degradation and disruption, activities like air, water, land pollution, presence of CFCs, the ozone layer is getting thinner and there is a hole in it and UV rays are passing to the surface of earth, affecting life of human drastically.
- **Loss of Tourism Industry:** Due to degradation of environment, green cover is decreased, and pollution is increased which ushers a great setback for tourism industry as tourists will not visit the place where green cover is absent, polluted areas are there, biodiversity is not there, landfills are huge, and environment is not good.
- **Economic Loss:** Environmental Degradation brings loss for the economy of the country as when degradation occurs, the environment must be protected to stop degradation and for that purpose huge economy has to be invested to restore green cover, clean all the landfills and protection of species.

5.4 Mitigation:

Environment is degrading day by day and if steps are not taken towards its protection, there will be a huge loss. There are some measures that can be adopted to reduce environmental degradation which are discussed below:

- **Stop cutting of trees:** Deforestation degrades the environment to a great extent as it reduces oxygen, store of greenhouse gases and habitat of many animals and birds is destroyed due to it. To stop it, cutting of trees should be banned and reforestation and afforestation programs should be organized.
- **Avoid using Plastic:** Plastic causes lot of degradation in the environment. To protect the environment, plastic should be banned and instead of that paper, products or bamboo products could be used so that degradation can be prevented.
- **Government Protocols:** Whenever there is a global problem, government steps in and take care of it. In case of Environmental degradation also government has framed and should frame more such laws and regulations that prevents the people from degrading the environment. Factories, industries throw their trash in an unorganized way which causes a great trouble for environment. Government should impose high fines and penalties on the people that are responsible for destroying or harming the environment.

- **Follow 7 R's:** To save the environment we should follow 7 R's – Reduce (buy less products that cause damage to environment, for this we can buy things with no packaging or degradable packaging), Reuse(instead of throwing away things that add waste we can upcycle and use the things again), Recycle(putting things back into waste and use it as something else), Refuse (refuse to buy things that are of no use), repair (before buying new things which will add waste , try to repair the old ones) and rethink (think before buying again that this does not poses any harm to environment) .
- **Awareness programs:** Awareness programs regarding preventing environmental degradation can be organized to make the citizens aware and educated about the harmful consequences of degradation of nature and how to save the environment and follow environmentally friendly behaviour in their day to day lives.

5.5 Conclusion:

One of the most pressing environmental challenges in the present times is environmental degradation. There are several causes owing to the Environmental Degradation such as population explosion, urbanization, different kinds of pollution, deforestation and landfills which has long-term effects such as health issues, loss of biodiversity, economic loss. We all are the children of mother earth, and it is our utmost responsibility to save the environment from degrading and preserve it for our future generations. We can do this by taking initiatives like spreading awareness, education people about its adverse effects, by stopping cutting down of trees and community participation.

5.6 References:

1. Glossary of Environment Statistics, Studies in Methods, Series F, No. 67, United Nations, New York, 1997.
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