

A Study on the Deforestation and Its Consequences

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Abstract – Deforestation is one of the major causes to the environmental degradation which is affected by the agents like small farmers, ranches, loggers and plantation companies. There is a broad consensus that expansion of cropped areas and pastures are a major source of deforestation.

The term 'deforestation' describes the complete long term removal of tree cover. The loss forest cover influences the climate and contributes to a loss of biodiversity. The economic activity is adversely affected by siltation, flooding, soil degradation and reduced timber supplies. Thus, in turn, threatens the livelihood of people.

Deforestation is the cutting down of trees in a forest for construction, development, lumber, etc. Deforestation has several negative effects on the environment and organisms.

Keywords: Deforestation, Birds, Plants

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INTRODUCTION

One of the most immediate consequences of deforestation is erosion. Erosion is the movement of soil to a new location. Without the roots of the trees to hold the soil in place, the soil becomes free and loose to move by wind, animals, or rain. This movement of the earth can cause the forestry that does remain in a deforested location to become unsettled. The unsettlement of these trees could affect their root systems and prevent the trees from absorbing the needed nutrients. Even worse, the trees may become so unsettled that they fall and die.

When deforestation occurs, the habitat(s) of many organisms is/are disheveled. Thus, deforestation can also cause a decrease in the biodiversity as the organisms emigrate to other habitats in order to survive.

Actually the concern should not be about losing a few plants and animals; mankind stands to lose much more. By destroying the tropical forests, we risk our own quality of life, gamble with the stability of climate and local weather, threaten the existence of other species, and undermine the valuable services provided by biological diversity.

While in most areas environmental degradation has yet to reach a crisis level where entire systems are collapsing, it is important to examine some of the effects of existing environmental impoverishment and to forecast some of the potential repercussions of

forest loss. Continuing loss of natural systems could make human activities increasingly vulnerable to ecological surprises in the future.

The most immediate impact of deforestation occurs at the local level with the loss of ecological services provided by tropical rainforests and related ecosystems. Such habitats afford humans valuable services such as erosion prevention, flood control, water filtration, fisheries protection, and pollination—functions that are particularly important to the world's poorest people, who rely on natural resources for their everyday survival. Forest loss also reduces the availability of renewable resources like timber, medicinal plants, nuts and fruit, and game.

Over the longer term, deforestation of tropical rainforests can have a broader impact, affecting global climate and biodiversity. These changes are more challenging to observe and forecast from local effects, since they take place over a longer time scale and can be difficult to measure.

CAUSES FOR DEFORESTATION:

1. Agriculture:

Conversion of forests to agricultural land to feed growing needs of people. There are an estimated 300 million people living as shifting cultivators who practice slash and burn agriculture and are supposed to clear more than 5 lakh ha of forests for

shifting cultivation annually. In India, we have this practice in North-east and to some extent in Andhra Pradesh, Bihar and M.P. which contribute to nearly half of the forest clearing annually.

2. Commercial logging:

(Which supplies the world market with woods such as meranti, teak, mahogany and ebony) destroys trees as well as opening up forest for agriculture. Cutting of trees for fire wood and building material, the heavy lopping of foliage for fodder and heavy grazing of saplings by domestic animals like goats.

3. Mining:

This causes environmental impacts like erosion, formation of sinkholes, loss of biodiversity, and contamination of soil, groundwater and surface water by chemicals from mining processes. In some cases, additional forest logging is done in the vicinity of mines to increase the available room for the storage of the created debris and soil.

Contamination resulting from leakage of chemicals can also affect the health of the local population if not properly controlled. Extreme examples of pollution from mining activities include coal fires, which can last for years or even decades, producing massive amounts of environmental damage.

4. Increase in population:

The needs also increase and utilize forests resources. To meet the demands of rapidly growing population, agricultural lands and settlements are created permanently by clearing forests.

5. Urbanization and industrialization:

Since Industrialization and Urbanization needs land to grow, so major amount of forest lands are cut in order to promote Industrialization and Urbanization. This creates harmful effect on environment and forest ecological balance.

6. Construction of dam reservoirs:

For building big dams, large scale devastation of forests takes place which breaks the natural ecological balance of the region. Floods, droughts and landslides become more prevalent in such areas. Forests are the repositories of invaluable gifts of nature in the form of biodiversity and by destroying these we are going to lose these species even before knowing them. These species could be having marvelous economic or medicinal value. These storehouses of species which have evolved over millions of years get lost due to deforestation in a single stroke.

7. Forest fires:

They may be natural or manmade, and cause huge forest loss.

8. Overgrazing:

Overgrazing occurs when plants are exposed to intensive grazing for extended periods of time, or without sufficient recovery periods. It can be caused by either livestock in poorly managed agricultural applications, or by overpopulations of native or non-native wild animals.

Overgrazing reduces the usefulness, productivity, and biodiversity of the land and is one cause of desertification and erosion. Overgrazing is also seen as a cause of the spread of invasive species of non-native plants and of weeds.

CONSEQUENCES OF DEFORESTATION

Depending on the needs of the social group concerned, deforestation has made it possible for communities to be built. Forest makes way for residential houses, office buildings and factories. Governments are able to build roads to make trade and transport easier and therefore more convenient to residents.

Deforestation can also mean the conversion of forest land to productive land for agricultural uses. This results in better and more abundant production of food and materials, virtually eradicating periods of want and lack. Economically, deforestation has contributed much in giving many communities the opportunity to make positive changes in their times. Unfortunately, the negative consequences of deforestation outweigh its positive effects.

1. Food problems:

Non suitability of deforested area for conservation. Most of the area that has undergone deforestation is actually unsuitable for long-term agricultural use such as ranching and farming. Once deprived of their forest cover, the lands rapidly degrade in quality, losing their fertility and arability.

The soil in many deforested areas is also unsuitable for supporting annual crops. Much of the grassy areas are also not as productive compared to more arable soils and are therefore not fit for long-term cattle grazing.

2. Exposing soil to heat and rain:

Heavy rainfall and high sunlight quickly damage the topsoil in clearings of the tropical rain forests. In such circumstance, the forest will take much longer to regenerate and the land will not be suitable for agricultural use for quite some time.

3. Flooding:

Deforestation can result to watersheds that are no longer able to sustain and regulate water flows from rivers to streams. Trees are highly effective in absorbing water quantities, keeping the amount of water in watersheds to a manageable level. The forest also serves as cover against erosion. Once they are gone, too much water can result to downstream flooding, many of which have caused disasters in many parts of the world.

The fertile top soil is eroded and flooded into the lower regions, many coastal fisheries and coral reefs suffer from the sedimentation brought by the flooding. This results to negative effects in the economic viability of many business and fatalities in wildlife population.

4. Loss of biodiversity:

This is probably the most serious consequence of Deforestation. Put simply, it means the destruction and extinction of many plants and animal species, many of which remain unknown and whose benefits will be left undiscovered.

5. Displacement of indigenous communities:

Some indigenous people's way of life and survival are threatened by the loss of forests. Fewer trees result in an insecure future for forest workers.

6. Climate change:

Deforestation can cause the climate to become extreme in nature. It increases CO₂ concentration in the atmosphere and contributes to global warming.

7. Economic loss:

The occurrence and strength of floods and droughts affecting the economy. It also leads to loss of future markets for ecotourism. The value of a forest is often higher when it is left standing than it could be worth when it is harvested.

8. Health issues:

The stress of environmental change may make some species more susceptible to the effect of insects, pollution and diseases.

CONCLUSION

Deforestation can have a negative impact on the environment. The most dramatic impact is a loss of habitat for millions of species. Eighty percent of Earth's land animals and plants live in forests, and many cannot survive the deforestation that destroys their homes.

Deforestation also drives climate change. Thus, deforestation is an important issue to be discussed. It has adverse effects on each living being's life. Deforestation has become a huge concern in today's life as there has been a rise in the decline of forests.

Trees are cut down in order to manufacture paper products as well as for livestock farming and so on. In order to feed the ever increasing population of the Earth, trees and forests are converted to farm lands. This has become a threat to the world and it has been seen that rates of decline in the forests are increasing at a rapid rate. This has led the planet to warm up and leading to high temperatures. This cycle would continue for the following years to come unless necessary steps are taken to prevent deforestation. Deforestation has caused fewer trees to grow. It has also gone a long way in eliminating valuable ecosystems in the planet.

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