



**সংলাপ (Sanglap)**

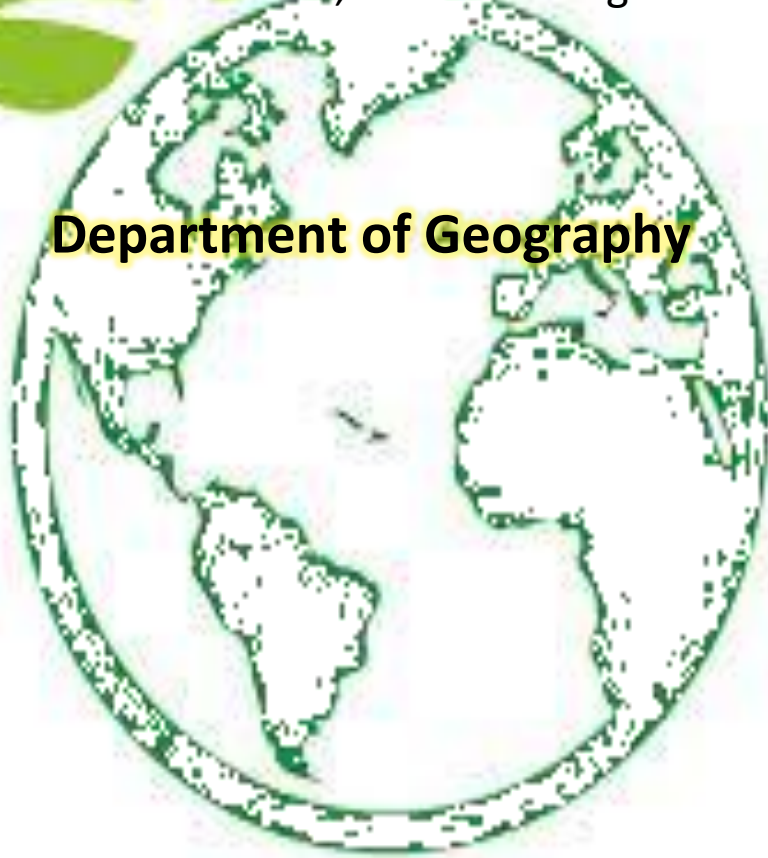


Departmental Publication

**DHRUBA CHAND HALDER COLLEGE**

Dakshin Barasat, South 24 Parganas

**Department of Geography**



# **Annual Publication**

**Year 2019-2020**

**Number - Second**

**Copyright : Dhruba Chand Halder College,  
Dakshin Barasat, South Twenty four Parganas**

## **Acknowledgment**

I am thankful to following personality-  
Honorable Principal Dr. Satrabrata Sahoo,  
Departmental all Professors  
Appointed all college staffs and  
S. K. Printers

## **Dedicate**

Dedicated to all the animals engaged in the work of protecting our planet the Earth

## **Greeting message from Principle**

As Principal of Dhruba Chand Halder College, I am proud of the students of the Department of Geography. They have brightened up the premises of our college. I believe their education and outlook will overcome the adversity of the present situation and play a potential and important role in building the country and the nation.

The content of the beautifully designed magazine is very relevant to our society and environment. The efforts of the professors and professors of the department for the students of the department are very valuable.

My sincere thanks to all associated with the magazine and my best wishes to all in the department

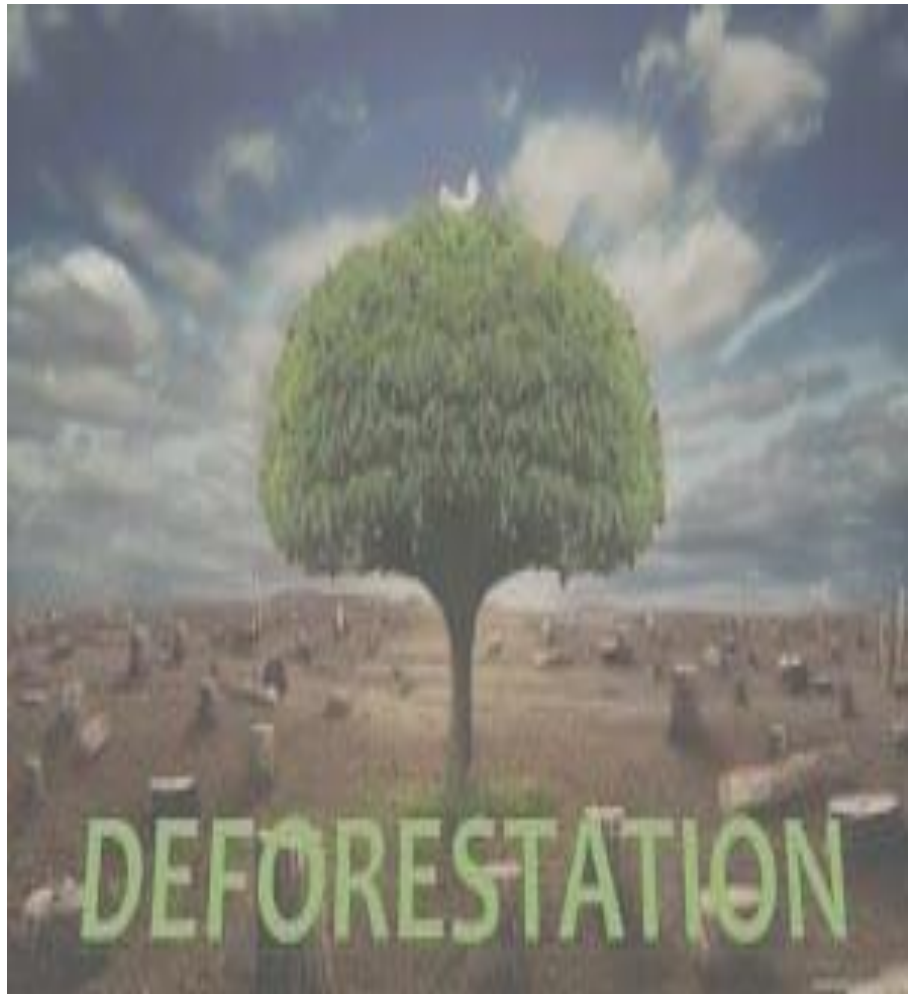
Dr. Satyabrata Sahoo

Principle, Dhruba Chand Halder College

## Preface

In the 21st century, the way we have combined two aspects of knowledge on one side and technology on the other hand is now the way of education. The Departmental Publication Sanglap( **संगलाप**) of Department of Geography of Dhruva Chand Halder College has started its way. The analysis of contemporary issues will make us think. From this thought will come the question, with that question will start a new construction, the name '**संगलाप**' is given for this reason, where this construction analysis will continue in a continuous flow. The publication of '**संगलाप**' once a year will continue to be written by different people.

This topic of this year is Deforestation, writer Departmental teacher Prof. Pujarini Ghosh. The globalization of modern society and the liberal economy that we have taken to improve our cultural environment has had a significant impact on our natural environment. Many of which have negative effects. As we move forward rapidly depending on urbanization and industrialization, we unthinkingly destroy our environment. Coming into the 20th century we have learned to appreciate the importance of our lost resources which has taught us to think to protect the environment. An aspect has been highlighted in this regard through this book.



**A Direct and Indirect Process of Environmental Degradation**

By Pujarini Ghosh

## **Contents:**

- ❖ Definition of Environmental Degradation
- ❖ Different types of Environmental degradation
- ❖ Factors of Degradation
- ❖ Deforestation is one of the main cause of Environmental Degradation
- ❖ After effect of Deforestation
- ❖ Consequences of Deforestation
- ❖ Remedies
- ❖ Reference

## Environmental Degradation

*“Saving our planet, lifting people out of poverty, advancing economic growth... these are one and the same fight. We must connect the dots between climate change, water scarcity, energy shortages, global health, food security and women’s empowerment. Solutions to one problem must be solutions for all.”*

*~ Ban Ki-moon*

Environmental Degradation is the deterioration or destruction of the environment through depletion of resources such as air, water and soil; the destruction of ecosystems or habitat or the extinction of wildlife. It is defined as any change or disturbance to the environment perceived to be undesirable.

Environmental issues can be seen by long term ecological effects, some of which can demolish whole environments. An environment is a unique unit and incorporates all the living and non-living components that live inside it. Plants and creatures are evident parts of the environment, but it also includes the things on which they depend on, for example, streams, lakes, and soils.

Environmental surroundings get to be divided when technological advancement splits up areas of land. Some examples of this can include streets which may slice through woods or even trails which wind through prairies.

While it may not sound all terrible on the surface, there are bad results. The biggest of these results are felt by some particular animal and plant groups, the vast majority of which are specific for their bio-region or need a large area in order to make sure that their genetic lines are kept intact.

As indicated by the I=PAT equation, environmental impact (I) or degradation is caused by the combination of an already very large and increasing human population (P), continually increasing economic growth or per capita affluence (A), and the application or resource depleting and polluting technology (T).

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.



## Different types of Environmental degradation

- **Land and soil degradation:** Degradation of soil quality from poor farming practices, excessive use of fertilizers and pesticides, leakage from landfills etc.



- **Water Degradation:** Pollution of water from trash dumped in oceans, illegal dumping, disposal of large amounts of industrial waste into nearby rivers or lakes etc.

- **Climatic change (change of temperature and precipitation)**  
This includes air degradation, particle pollution and the depletion of the ozone layer.



- **Population growth:** The human population on Earth is expanding rapidly, which together with even more rapid economic growth is the main cause of the degradation of the environment. Humanity's appetite for resources is disrupting the environment's natural equilibrium. Production industries are venting smoke into the atmosphere and discharging chemicals that are polluting water resources. The smoke includes detrimental gases such as carbon monoxide and sulphur dioxide. The high levels of pollution in the atmosphere form layers that are eventually absorbed into the atmosphere. Organic compounds such as chlorofluorocarbons (CFC s) have generated an opening in the ozone layer, which admits higher levels of ultraviolet radiation, putting the globe at risk.
- **Agriculture:** Agriculture is dependent on available soil moisture, which is directly affected by climate dynamics, with precipitation being the input in this system and various processes being the output, such as evapotranspiration, surface runoff, drainage, and percolation into groundwater. Changes in climate, especially the changes in precipitation and evapotranspiration predicted by climate models, will directly affect soil moisture, surface runoff, and groundwater recharge. The transfer of water from agricultural to urban and suburban use raises concerns about agricultural sustainability, rural socioeconomic decline, food security, an increased carbon footprint from imported food, and decreased foreign trade balance.
- **Water management:** The issue of the depletion of fresh water has stimulated increased efforts in water management. While water management systems are often flexible, adaptation to new hydrologic

conditions may be very costly. Preventative approaches are necessary to avoid high costs of inefficiency and the need for rehabilitation of water supplies, and innovations to decrease overall demand may be important in planning water sustainability.

## Factors of Degradation

- **Urbanization** : the growth of population and economic status of a region channelize towards urbanization depends on secondary and tertiary based economic sector which is a key of development but there is a another aspect, i.e.Landfills pollute the environment and destroy the beauty of the city. Landfills come within the city due to the large amount of waste that gets generated by households, industries, factories and hospitals.
- **Population growth** : Rapid population growth puts strain on natural resources, which results in the degradation of our environment. Mortality rate has gone down due to better medical facilities, which has resulted in an increased lifespan.More population simply means more demand for food, clothes and shelter. You need more space to grow food and provide homes to millions of people. This results in deforestation, which is another factor in environmental degradation.
- **Economic growth:** Poverty is a major cause of environmental degradation , and economic growth is thus necessary to improve the environment. It is depends on literacy and the awareness. The environmental impact of economic growth includes the increased consumption of non-renewable resources, higher levels of pollution, global warming and the potential loss of environmental habitats.
- **Intensification of agriculture:**Increase of population demands more food for survival,so people need more agricultural land for more production. This demand destroy the natural greenery of the world specifically in the third world countries.
- **Increase in energy use:** people below poverty line or live in remote areas fully depends on woods for



energy uses like cooking etc. They cut the trees to use or sale the woods.

- **Increase in transportation:** Urbanization and the industrialization are in hand in hand relation. It leads development in transport and communication because transport systems are the lifeline of a developed region. For that deforestation was done to expand many transport facilities like roadways,railways etc.

- **Forest loss due to Fruit Orchards and Plantation**

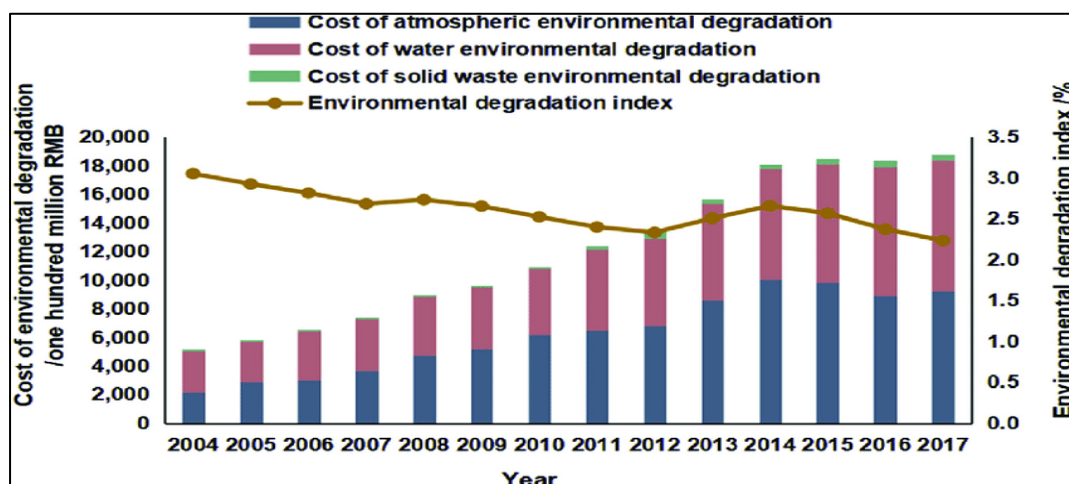
Rapid growth in population and urban sprawl are two of the major causes of deforestation.Apart from that, the use of forest land for agriculture, animal grazing, harvest for fuel wood and logging are some of the other causes of deforestation. Deforestation

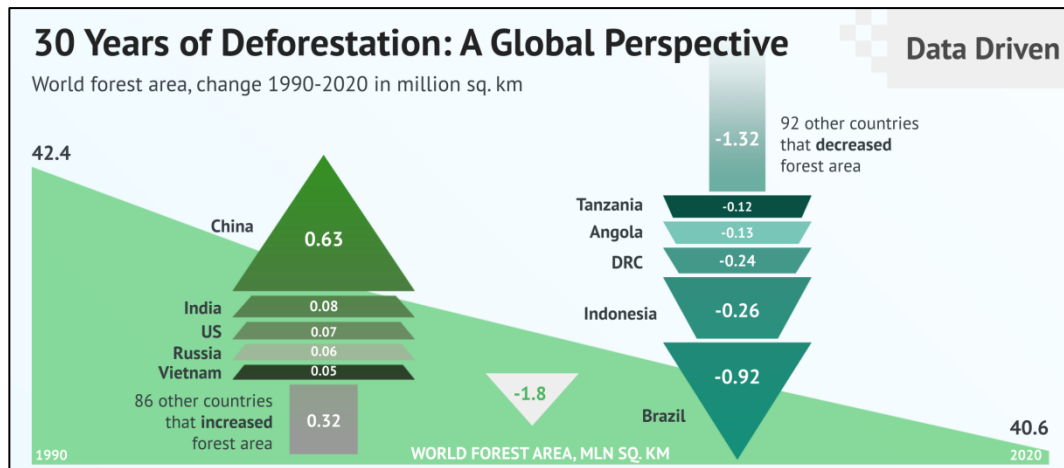


contributes to global warming as decreased forest size puts carbon back into the environment.

- **Forest Fires:** it is a natural issues that reduce amount of forest immensely.For e.g. there are 3 important worldwide examples of deforestation: the Amazon rainforest, Indonesia and Borneo, and Africa in recent time.

- **Others-Commercial logging, Mining:** these types of man made activities may caused environmental degradation if it take place without plannings,precautions,and geological knowledge.





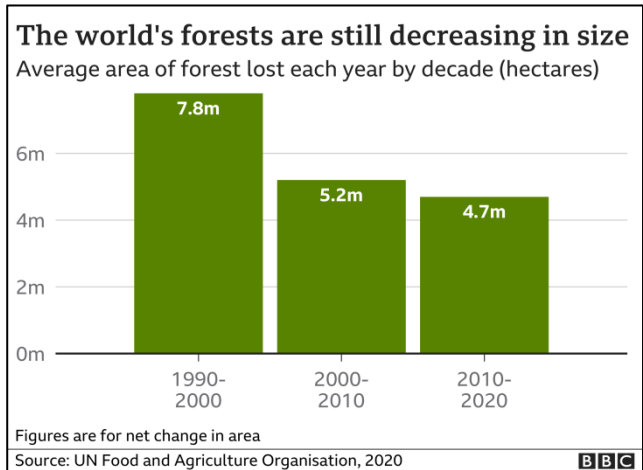
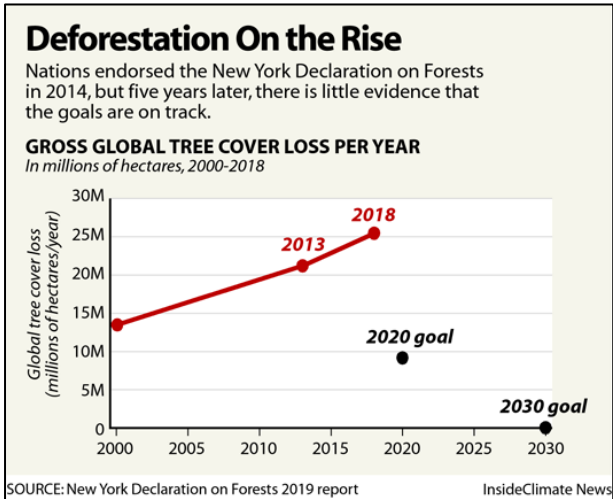
Of course, humans aren't totally to blame for this whole thing. Earth itself causes ecological issues, as well. While environmental degradation is most normally connected with the things that people do, the truth of the matter is that the environment is always changing. With or without the effect of human exercises, a few biological systems degrade to the point where they can't help the life that is supposed to live there.

### Deforestation is one of the main cause of Environmental Degradation

Clearance or clearing is the removal of a forest or stand of trees where the land is thereafter converted to a non-forest use is called Deforestation. Examples of deforestation include conversion of forestland to farms, ranches, or urban use. The most concentrated deforestation occurs in tropical rain forests.

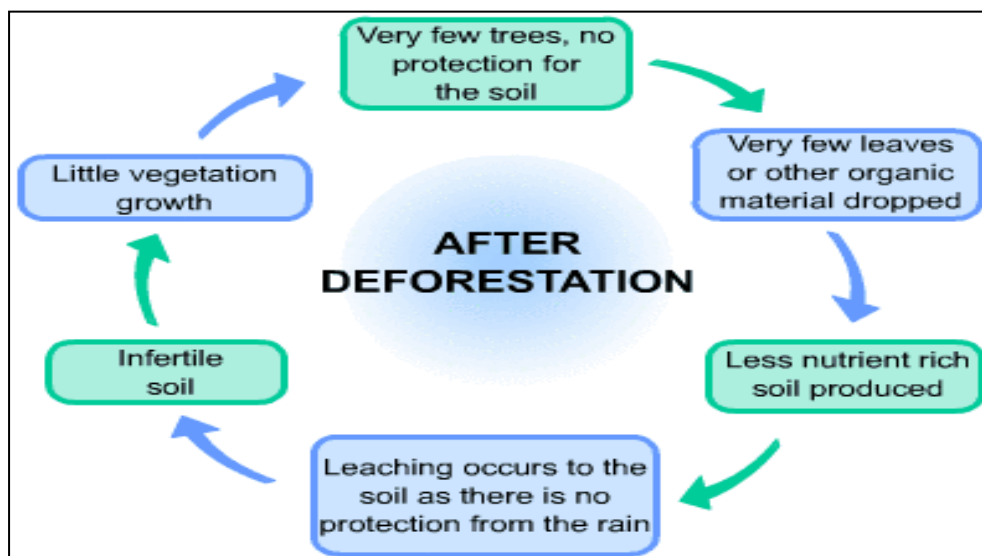
Deforestation in India is the widespread destruction of major forests in India. It is mainly caused by environmental degradation by stakeholders such as farmers, ranches, loggers and plantation corporations.

The major forest data monitoring agencies are Food and Agriculture Organization (FAO) of the U.N.O and the Ministry of Environment and Forest (MEF) of the Govt. of India (since 1987)



## After effect of Deforestation

The loss of trees and other vegetation can cause climate change, desertification, soil erosion, fewer crops, flooding, increased greenhouse gases in the atmosphere, and a host of problems for indigenous people. It has both the short term and long term effects on our life.



## Consequences of Deforestation

### 1. Food problems:

There are 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 businesses and fatalities in wildlife population.

### 4. Loss of biodiversity:

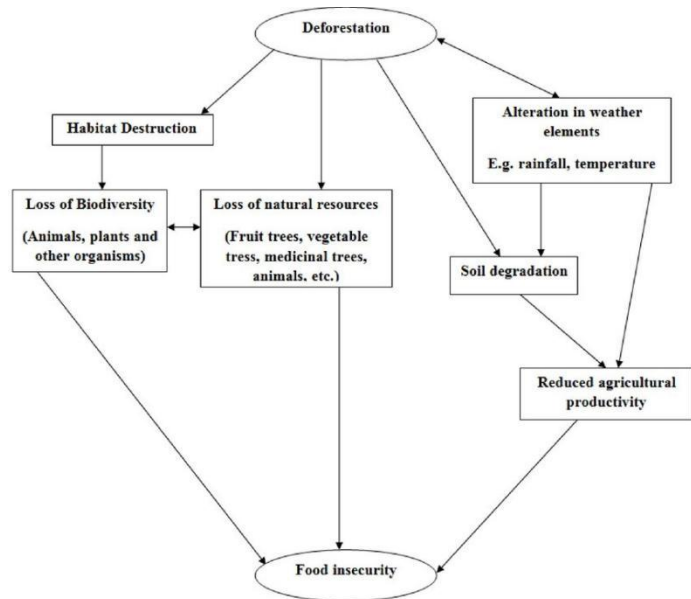
This is probably the most serious consequence of Deforestation. Put simply, it means the destruction and extinction of many plants and animal species, many of which remain unknown and whose benefits will be left undiscovered.

### 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.

**Remedies:-**

It is very much important to us as an inhabitant of the environment or the civilization or as a human being to protect our surrounding from ruin. We have to be aware about the deforestation and its effect. We have to spread the awareness first. Then we have to choose those ways of living that should be less dependent on wood or trees; some of them are-

- Decrease or control the growth of population.

Avoid forest woods as fuel

Less use wooden furniture or interior decoration.

Channelize those people to the other economic activity who depends on Forests resources mainly, pastoral activities, undeveloped or traditional agricultural system.

We should stop the wastage of papers and reduce the use of papers.

Afforestation is a very important key to unlock those problems – that is the one most solution of the problems due to deforestation like- soil erosion, desertification, pollution, climatic changes and global warming also and can maintain the balance of biosphere.

Planting of shelter belts of plants, control on over grazing, stabilization of sand dunes by growing thorny bushes<sup>3</sup>. In industrial and suburban areas, proper management of waste lands, control of mining activities, proper discharge and disposal of industrial effluents and wastes after treatment can solve the problems of deforestation. lastly we can say that, controlling Environmental Degradation is very important. The environment provides us with basic needs essential for survival. Humans play an integral role in the ecosystem and are guilty of harming the planet. Our activities affect not only the environment but also the organism that exists with us.

---

**Reference:**

Dictionary of Oxford

Savindra Singh-Environmental Geography

<https://planningtank.com/environment/environmental-degradation-types>

[https://en.wikipedia.org/wiki/Environmental\\_degradation](https://en.wikipedia.org/wiki/Environmental_degradation)

<https://www.conserve-energy-future.com/>