



The Impact of Degradation of Soil and Measures to Prevent Degradation of Soil

KEYWORDS

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ABSTRACT Soil is a important part of the nature. It is a main foundation of human being. In our project we are going to perform a case study or analysis of soil degradation and prevention of soil. Soil causes very harmful for the nature as well as all on the earth. Everyone on the earth doing well but no under staidly the soil pollution which are created by human being activities so we have mention some of the ways to show the some of the points degradation of soil as well as prevention techniques.

Introduction:-

The fundamental component of life supporting system is Lithosphere. Land is the major constituent of the lithosphere and it is the source of many materials essential to man and other organisms. It forms about one fifth of the earth surface, covering about 13393 million hectares.

When plants (trees & shrubs) are cleared from a site, soil is exposed to sunlight and the eroding effects of wind and water. Soil aeration is increased and the rate of weathering increases. Apart from erosion, the proportion of organic matter in the soil gradually decreases, through the action of microbes in the soil which use it as a source of energy unless the new land use provides some replacement.

Objective:-

- 1) To study the impact of soil degradation
- 2) To study the measures to prevent the soil degradation
- 3) To study the causes of soil degradation
- 4) To study the Component of Land Management

Types of Soil:-

The type of soil is determined by the composition of the paternal rock and the size and relative proportion of different types of particles such as gravel, sand, silt and clay. Therefore, soil is classified in to four types:

- a) Sand Soil
- b) Loamy Soil
- c) Loam Soil
- d) Silt Soil

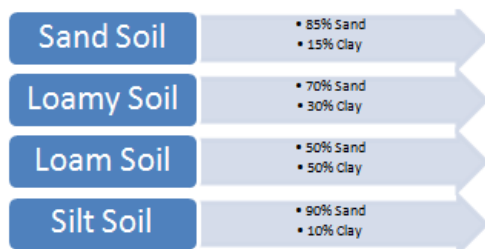


Fig: Types of Soil

Above figure represents pictorial representation of soil. It

shows percentagewise parameter available in soil and that percentage and parameter differentiate the types of soil. In our country or our world there are different types of soil depending upon the contents available in the soil.

Causes of Soil Degradation

There are several factors responsible for soil degradation. Industrial area affect more on soil degradation. The chemicals which are thrown outside from industry affect more on land.indirectly it affect on soil.

1. Soil Pollution
2. Salination of Soil
3. Soil Erosion
4. Desertification
5. Chemical Fertilizers
6. Industrial Wastes
7. Pesticides
8. Plastic, Rubber,
9. Ashes
10. Salts
11. Crop residues
12. Discarded Garbage, Food, Paper

Measures Taken to Control Soil Degradation:

Following are some important measures to be taken to Control the Soil Degradation:-

- 1) Proper Disposal of Solid Wastes :-
- 2) Incineration of Wastes :-
- 3) Recycling and Recovery:-
- 4) Use of Bio Fertilizers
- 5) Biological Control of Pest
- 6) Legislation
- 7) Education

Impact of Soil Degradation:-

Soil Degradation adverse impact on Environment and the Human life. They are as follows:-

1) Yields Impact:-

Recent Increases in the human population have placed a great strain on the world's soil system. More than 6 billion people are now using about 38% of the land area of the earth to raise crops and live stock. Many soil suffers from various types of degradation that can ultimately reduce

their ability to produce food resources.

2) Natural Disasters:-

Natural Disasters such as mud flows, floods are responsible for the death of many living beings each year.

3) Deterioration of Water Quality:-

The increase in the turbidity of water and the contribution of Nitrogen and of Phosphorous can result in eutrophication. Soil particles in surface waters are also accompanied by agricultural inputs and by some pollutants of Industrial, Urban and Road origin (such as heavy metals). The ecological impact of agricultural inputs is known but difficult to evaluate because of the multiplicity of the products and their broad spectrum of action.

4) Biological Diversity:-

Soil degradation may involve the disappearance of the climax vegetation and decrease in animal habitat, thus leading to a bio-diversity loss and animal extinction.

5) Economic Loss:-

The estimated costs for land degradation are US\$ 40 Billion per year. This figure does not take into account negative externalities such as increased use of fertilizers, loss of bio-diversity, and loss of unique landscape.

Prevention:-

Following are some of action prevented by which Degradation of Soil can be reduced to a certain extent. These are the actions using which we can prevent or minimize the degradation of soil to some extent and can maintain balance of environment.

- 1) Proper use of land for Cattle Grazing
- 2) Preventing Land Slides by not mining into the Deep
- 3) Tree Plantation at open space
- 4) Proper use of Land for Agricultural Purposes
- 5) Proper land management for Housing
- 6) Educating the peoples on Land Management
- 7) Strict Legislations
- 8) Monitoring changes in Land resulting after use.
- 9) Conservation of Forests.

Conclusion

By providing different techniques we can prevent the degradation of soil. Providing proper methods and ways will prevent soil degradation.

REFERENCE

- 1) <http://www.acsgarden.com/articles/other-gardening/soil-degradation.aspx> | 2) Environmental Awareness, Text Book, Prin.Dr.Pawar K, pg 5.47-5.50 | 3) <http://www.wikipwdia.com/soil> |