Land Resources

- Land is regarded as the greatest among the natural resources. It is one of the important component of life support system.

Importance of land

- It sustains many of the living beings
- Agricultural activities , animal husbandry
- It supports forests and grasslands
- Human settlement and wildlife depends on land
- Industrialization, urbanization
- Construction of roads and railway lines is possible due to availability of land

Land slides

- Landslides refer to any down ward movement of mass of bed rock under the influence of gravity.

Types of Land Slides

Nature induced land slide

- These are caused by natural factors These are caused by natural factors such as heavy or prolonged rains, high temperature,Earthquakes ,winds, snow fall etc.

Man induced land slide

- These are caused due to human activities.

Land slides

Causes for Man induced land slides

- Mining activities in mountains or hills.
- Removal of vegetation in mountains or hilly regions.
- Construction of dams or reservoirs for hydro electric power.
- Cutting of slopes or mountains for construction purposes.
- Agricultural activities on hilly regions.
- Over grazing on hill slopes.
- Make tunnels on mountains for road, railway lines etc.

Effects of land slides

- Obstruct roads and raillines
- Flow of water is disturbed
- Increases the turbidity in water
- Loss of vegetation, animals and human life

Control of land slides :

- Control of deforestation
- Afforestation
- Control and reckless mining
- Control on over grazing
- Avoiding reckless cultivation

Soil erosion

- Soil is the loose material lying on the surface of the earth. Soil is formed by the disintegration and decaying of rocks by the weathering process.

Importance of soil resources

- Supports all forms of life.
- Plants abort all nutrients from soil.
- Soil determines the animal life industry.
- It also influences the population
- Provides raw materials for industries.
- Influences the agricultural growth, population.

Soil erosion

- It refers to loss of the top fertile layer or part of the soil by natural agencies like running water, ward and sea waves.
- **Normal Soil Erosion**: It is a natural phenomenon or process. It is a slow prices and helps in soil
- formation.
- **Sheet erosion :** Sheet erosion is refers to uniform Removal of soil Over a large area from the surface of Sloping lands by Rain water.

Soil erosion

- **Rill Erosion:** Refers to eroding of the soil in core use by rain water running along the slopes in the form of channel
- **Gully Erosion:** Refers to the eroding of soil in its course by rain water running along the slopes in the Form of rills or valleys
- **Wind soil Erosion:** which is caused by wind, more effective in arid and semi arid regions.

Soil erosion

Rill Erosion

sheet Erosion

gully Erosion

wind Erosion

Causes of soil erosion

- Deforestation
- Over Grazing
- Heavy rainfall
- Strong winds
- Improper methods of cultivation
- Careless and excessive irrigation
- Floods

Effects of soil erosion

- Reducing soil fertility
- Causing floods
- Making unfit cultivated land
- Resulting desertification
- Due to silt storage capacity of tanks are reduced

Conservation of soil :

- Afforestation
- prevention of reckless cutting of trees
- Controlled grazing
- Prohibition of shift cultivation
- Reclamation of wastelands
- Improvement of soil fertility by growing crops.

Desertification

It is a process which involves loss of regenerative capacity of soil due to depletion or absence of plant supporting factors.

Causes for desertification

- Deforestation
- over exploitation of soil cover
- Strong winds
- Improper agricultural practices
- Over grazing.
- Faulty land use.

Desertification

Effects of Desertification

It is a process which involves loss of regenerative capacity of soil due to depletion or absence of plant supporting factors.

Causes for desertification

- Loss of vegetation cover
- Loss of habitats of wild animals
- Affects the industrial, agricultural and economic development of country
- Land degrades and not suitable for production

Control measure

- Regulation of cutting trees
- Control of over grazing
- Growing of ecologically suitable plants in affected areas.
- Public awareness
- Proper farming practices
- Proper use of available ground water