

Section-A



Land Pollution or Soil Pollution :-

Soil pollution is the reduction in the productivity of soil due to the presence of soil pollutants. Soil pollutants have an adverse effect on the physical, chemical and biological properties of the soil and reduce its productivity.

Pesticides, fertilisers, organic manure, chemicals, radioactive wastes, discarded food, clothes, leather goods, plastics, paper, bottle etc. all contribute towards land pollution.

Chemicals like iron, lead, copper etc. are present in industrial wastes and reach the soil either directly with water or indirectly through air.

Organic insecticides like DDT etc. are used against soil born pests. They accumulate in the soil as they degrade very slowly by soil and water bacteria.

Causes:-

1) Salination and water logging :

Salination is the increase in the concentration of soluble salts in the soil. It results from two processes:

(a) Due to poor drainage of irrigation and flood waters, the salt dissolved in these waters accumulate on the soil surface.

(b) In summers, the salts deeper strata are drawn up by capillary action and get deposited on the surface. Excess of these salt form a white crust on the soil surface and are injurious to the survival of plants.

2) Shifting Cultivation

3) Desertification

4) Urbanisation

✶ Control Of Land Degradation:- By

1) Afforestation and Reforestation :

Afforestation means growing forests where there were no forests before, may be due to lack of seed trees or adverse factors

Reforestation means replanting forests at places where they were destroyed by overgrazing etc. : It helps to check soil erosion, floods and water logging.

2) Better Agricultural Practices :

(a) Terracing: A large sloping drainage area is divided into a number of small distinctly separate flat fields called terraces. These slow down the speed of run-off water and control soil erosion.

(b) Regular Cultivation

(c) Crop Rotation

(d) Fallowing

3) Planting Wind Breaks and Shelter belts

* The Objectives of environmental Studies :

- (a) Creating the awareness about environmental problems among people.
- (b) imparting basic knowledge about the environment and its allied problems.
- (c) developing an attitude of concern

- for the environment.
- (d) motivating public to participate in environment protection and solving environment improvement.
 - (e) acquiring skills to help the concerned individuals in identifying and solving environment problems.
 - (f) striving to attain harmony with nature.

The guiding principles of environmental education should be as follows:

- (a) The environment must be comprehended as a system which is a functional unit composed of organised, interacting and independent parts.
- (b) Environmental education should be compulsory, right from the primary up to the post-graduate age.
- (c) ~~En~~ It should have an inter-disciplinary approach.
- (d) It should take into account the historical perspectives, the current and the potential historical issues.
- (e) It should lay more stress on practical activities and first hand experiences.

* Natural Resources:-

Resources are divided into two categories:

(a) Renewable Resources (Inexhaustible)

These have the inherent ability to reappear or replenish themselves by recycling, reproduction or replacement.

These sources include sunlight, plants, animals, soil, water and living organisms.

Biological organisms are self-renewing.

The rate at which their renewal occurs varies.

(b) Non-Renewable Resources (Exhaustible)

They are the earth's geologic endowments i.e. minerals, fossil fuels, non-mineral resources and other materials which are present in fixed amounts in the environment. They are finite in quality and quantity.

On the basis of origin, they are classified as:

(i) Biotic or Organic Resources:- They are obtained from biosphere for example forest and forest products, crops, animal, fish etc.

(iii) Abiotic or Inorganic Resources: Resources which are composed of non-living inorganic matter are called abiotic resources.
Eg:- land, water etc.