

Importance of Soil

Soil plays a vital role in the Earth's ecosystem. Without soil human life would be very difficult. Soil provides plants with foothold for their roots and holds the necessary nutrients for plants to grow. it filters the rainwater and regulates the discharge of excess rainwater, preventing flooding. it is capable of storing large amounts of organic carbon. it buffers against pollutants, thus protecting groundwater quality. it provides Man with some essential construction and manufacturing materials, we build our houses with bricks made from clay, we drink coffee from a cup that is essentially backed soil (clay). it also presents a record of past environmental conditions.

Soil functions are general capabilities of soils that are important for various agricultural, environmental, nature protection, landscape architecture and urban applications.

Degradation of Soil

Soil degradation is the decline in soil condition caused by its improper use or poor management, usually for agricultural, industrial, or urban purposes. It is a serious environmental problem. Soils are a fundamental natural resource and are the basis for all terrestrial life. Avoiding soil degradation is crucial to our well-being.

Examples of soil degradation

Soil degradation is the physical, chemical, and biological decline in soil quality. It can be the loss of organic matter, decline in soil fertility, and structural condition, erosion, adverse changes in salinity, acidity or alkalinity, and the effects of toxic chemicals, pollutants, or excessive flooding. Soil degradation can involve:

- ✦ **water erosion (includes sheet, rill and gully erosion)**
- ✦ **wind erosion**
- ✦ **salinity (includes dryland, irrigation, and urban salinity)**
- ✦ **loss of organic matter**
- ✦ **fertility decline**
- ✦ **soil acidity or alkalinity**
- ✦ **structure decline (includes soil compaction and surface sealing)**
- ✦ **mass movement**
- ✦ **soil contamination (including effects of toxic chemicals and pollutants).**