

WORLD SOIL DAY

5th Dec 2022

Theme: *"Soils: Where food begins"*



World Soil Day

World Soil day is held annually on 5th Dec as a means to focus attention on the importance of healthy soil and to advocate for the sustainable management of soil resources.

This year World Soil Day is celebrated under the theme, *"Soils: Where food begins"*. The aim is to raise an awareness of the importance of maintaining healthy ecosystem and human well-being by addressing the growing challenges in soil management, increasing soil awareness and encouraging societies to improve soil health.

Importance of Soil

Soil is very important when it comes to our quality of life. It not only plays a role in how things grow but also in the air that we breathe.

There are more living organisms in a tablespoon of soil than people living on Earth. Soil is made up of organisms, minerals, and organic components that provides food for humans and animals through plant growth. Soils need a balanced and varied supply of nutrients in appropriate amount to be healthy. Agricultural systems lose nutrients with each harvest, and if soils are not managed sustainably, fertility is progressively lost, and soils will produce nutrient-deficient plants.

Soil nutrients is a major soil degradation process threatening nutrition. Soil degradation induces some soils to be nutrient depleted losing their capacity to support crops, while others such as high nutrient concentration that represent toxic environment to plants and animals, pollutes the environment and cause climate change.

Over the last 70 years, the level of vitamins and nutrients in food has drastically decreased. This resulted in estimation of 2 billion people worldwide suffer from lack of micronutrients known as hidden hunger.

Benefits of Soil:

- Soil regulates the movement of water and prevents floods by controlling whether rainfall, snowfall, and irrigation water will flow over land or through it.
- Healthy soil contains high biodiversity, which helps to fight off pests and allows fresh, nutritious plants to grow.
- Soil provides physical stability for plants by allowing the roots to anchor to something. This in turn helps create oxygen and clean water for all life on Earth.
- It also contains organisms that can kill harmful bacteria. A variety of medicines have been made from organisms that live in soil, such as penicillin.
- Soil plays a vital role in migrating climate change. It is the second largest carbon sink.
- Millions of organisms that live within soil interact with one another and contribute to a number of cycles that make all life on Earth possible.

Ways to Conserve and Protect Soil:

1. **Forest Protection:** The natural forest cover in many areas has been decreased due to commercial activity. Business involved in building constructions can conserve by ensuring these areas are protected.
2. **No-Till Farming:** No-Till Farming is an approach that allows crops to remain in place for a season. This allows the soil from being left bare and unprotected.
3. **Terrace Planting:** Terrace planting is done by maximizing the topography of the land. It benefits from the way the rainwater flows naturally. This is a way to protect the soil from erosion.
4. **Plant Trees to Secure Topsoil:** Planting trees is a good conservation method as it secures topsoil and erosion is prevented.
5. **Monitor Grazing:** Monitoring the areas that cows and other animals graze is important as it helps to prevent the depletion of the soil.



Nagaland ENVIS Hub
Email: envisnagaland@gmail.com

Nagaland Pollution Control Board
(State Nodal Agency, NGC Eco Club)

