



Report  
on  
**World Soil Day 2021**



Organized by

**ENVIS Resource Partner**

on

**Forest Genetic Resources and Tree Improvement  
Institute of Forest Genetics and Tree Breeding  
(Indian Council of Forestry Research and Education)  
Coimbatore**

## **Digital Observance of World Soil Day 2021 by IFGTB ENVIS**

As a part of Azadi Ka Amrit Mahotsav (AKAM) and Ek Bharat Shreshtha Bharat (EBSB), ENVIS Resource Partner on Forest Genetic Resources and Tree Improvement at the Institute of Forest Genetics and Tree Breeding, Coimbatore commemorated the World Soil Day 2021 digitally on 03.12.2021. An awareness event on the theme "Halt soil salinization, boost soil productivity" prescribed by the FAO of the United Nations was organized through Facebook live in order to contain the spread of COVID 19. The digital observance also found a place in the worldwide events organized by the FAO of United Nations and also got the attention of the Ministry of Environment, Forest and Climate change (MoEFCC), Government of India.

The event began with an invocation on nature in Sanskrit, 'Prakruti Vandanam' based on Yajur Veda composed and recited by Dr Kannan CS Warriar, Scientist F and ENVIS Coordinator. In his awareness lecture, Dr Kannan CS Warriar explained that soil salinization and sodification are major soil degradation processes threatening ecosystem and are recognized as being among the most important problems at a global level for agricultural production, food security and sustainability in arid and semi-arid regions. World Soil Day 2021 and its campaign "Halt soil salinization, boost soil productivity" aims to raise awareness of the importance of maintaining healthy ecosystems and human well-being by addressing the growing challenges in soil management, fighting soil salinization, increasing soil awareness and encouraging societies to improve soil health. The FAO has warned that over 90% of soil could become degraded by 2050. Soil is being swept and washed away 10 to 40 times faster than it is being replenished. FAO has reported that around 7140 sq m of soil is eroded every five seconds. Worldwide, the damage from soil erosion is some 400 billion dollars a year (29.4 lakh crores). India loses up to 28.4 billion dollars per year due to soil erosion (2.1 lakh crores)!

Dr C. Kunhikannan, Director, IFGTB in his special address pointed out that soil is essential for the maintenance of biodiversity above and below the ground. Soil is the basis for sustenance for all living things. It contains millions of organisms including earthworms, nematodes, mites, insects, fungi, bacteria and actinomycetes and preserves clean water and helps to regulate the climate. Fertile soils team with microorganisms, which directly contribute to the biological fertility of that soil. In addition to fertility, soil microorganisms also play essential roles in the nutrient cycle that are fundamentally

important to life on the planet, he added. Dr Kunhikannan also highlighted soil degradation reduces agricultural yields and threatens farmers' livelihoods. Soil that has been leached off its nutrients cannot support crops, or plants that prevent desertification. Healthy soil is essential to ensure a steady supply of food and biodiversity. Soil loss translates into widespread poverty and slower economic development. He urged that future generations should understand the importance of the soil and contribute towards protecting soil through their actions and behaviours.

An Awareness Quiz on soil was also organized for students and general public. People from all walks of life have participated and E Certificate was also awarded to all. An awareness poster highlighting the current year's theme "Halt soil salinization, boost soil productivity" was released during the occasion and its digital copies were shared with students and all the stakeholders. Dr S. Vigneswaran, Senior Programme Officer, ENVIS proposed the vote of thanks. The online event can be accessed at <https://bit.ly/31opMI2>.









**ENVIS Resource Partner on Forest Genetic Resources and Tree Improvement**  
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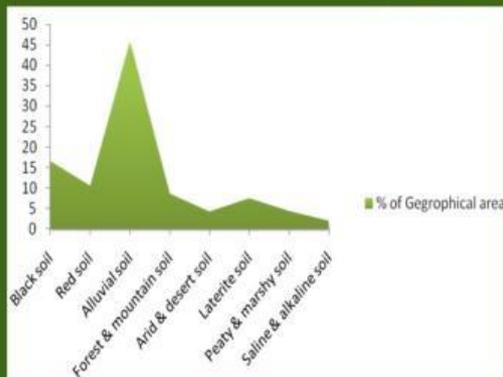
Ministry of Environment, Forest and Climate Change (Indian Council of Forestry Research & Education)  
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# WORLD SOIL DAY 2021

Theme: "Halt soil salinization – boost soil productivity"

Healthy soils are fundamental to our survival and are essential for healthy plant growth, human nutrition, and water filtration. Healthy soil supports a landscape that is more resilient to the impacts of drought, flood, or fire. Soil helps to regulate the Earth's climate and stores more carbon than all of the world's forests combined.

## Soil Distribution in India



Type of Soil	% of geographical Area
Black soil	16.6
Red soil	10.6
Alluvial soil	45.73
Forest & mountain soil	8.67
Arid & desert soil	4.32
Laterite soil	7.56
Peaty & marshy soil	4.45
Saline & alkaline soil	2.07

## How To Prevent Soil Salinization and Boost Soil Productivity?



**Optimize irrigation**



**Add organic matter and manure**



**Use cover crops**



**Practice crop monitoring**



**Plant salt-tolerant crops**



**Restore soil nutrients**

PHOTOS: SHUTTERSTOCK/ENZO DECEMBER 2021