







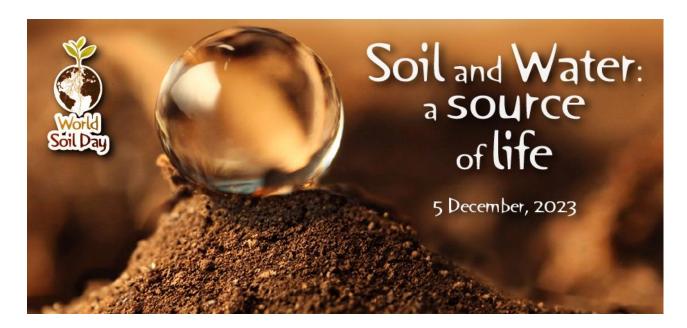




### Report

on

# **World Soil Day 2023**



**Organized by** 

### **EIACP Programme Centre**

on

Forest Genetic Resources and Tree Improvement ICFRE-Institute of Forest Genetics and Tree Breeding

(Indian Council of Forestry Research and Education)

Coimbatore

#### World Soil Day 2023 celebrations by ICFRE-IFGTB EIACP PC

As part of Mission LiFE and in connection with World Soil Day 2023 EIACP (Environmental Information, Awareness, Capacity Building and Livelihood Programme) Programme Centre (erstwhile IFGTB ENVIS) Resource Partner on Forest Genetic Resources and Tree Improvement at the ICFRE-Institute of Forest Genetics and Tree Breeding, Coimbatore organized an awareness campaign on 05.12.2023 at Corporation Higher Secondary School, Coimbatore.

Dr Kannan CS Warrier, Scientist F and EIACP Coordinator, in his awareness lecture explained that soil and water are essential resources for sustaining life on Earth. Soil and water provide the foundation for food production, ecosystems, and human well-being. Recognizing their invaluable roles, we can take proactive measures to safeguard these resources for future generations. Healthy soil plays a crucial role as a natural filter, purifying and storing water as it infiltrates into the ground, Dr Warrier added. He also highlighted that rainfed agriculture systems account for 80% of croplands, contributing to 60 percent of the global food production. These systems rely heavily on effective soil moisture management practices. Irrigated agriculture systems withdraw 70% of the world's freshwater and account for 20% of croplands. Soil erosion and compaction disrupt the capacity of soil to store, drain and filter water, and exacerbates the risk of flood, landslides and sand/dust storms. It can take up to 1000 years to produce just 2-3 cm of soil and soils are formed through the slow physical, chemical, and biological weathering of bedrock. The FAO, estimated that 33% of soil is degraded through erosion, salt stress, compaction, acidification, chemical pollution and nutrient depletion. These in turn hamper the function of soils and ultimately affecting food production adversely. Dr Warrier also emphasised that 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.

Dr C. Kunhikannan, Director, ICFRE-IFGTB inaugurated the campaign and released the awareness poster on the current year's theme, Soil and Water: A Source of Life. During his special address, he emphasized the indispensable role of soil and water in sustaining biodiversity both above and below the ground. He explained that soil and water serve as the foundation for the livelihood of all living organisms, housing millions of diverse entities such as earthworms, nematodes, mites, insects, fungi, bacteria, and actinomycetes. Moreover, soil plays a crucial role in preserving clean water and regulating the climate. Dr Kunhikannan highlighted that fertile soils are thriving ecosystems teeming with microorganisms, which actively contribute to the biological fertility of the soil. Indeed, soil

and water are not only fundamental resources but are also essential sources of life on our planet. They form a vital nexus that sustains ecosystems, supports biodiversity, and facilitates the growth of all living organisms. The Director also emphasized the importance of preserving soil and water for the sake of a healthy life, urging everyone to engage in conservation efforts.

A drawing competition on the theme "Soil and Water: A source of life" was conducted to the students of Corporation Higher Secondary School, North Coimbatore on 04.12.2023. Among the participants Shri M. Saran, Shri A. Azarudeen and Shri. Francis John Fredric Won the first, second and third prizes respectively. Shri J. Gowtham and Shri A. Arivarasan won consolation prizes. An Awareness Quiz on soil was also organized for students and the general public from 10.11.2023 to 05.12.2023. People from all walks of life have participated and E Certificates were awarded to all. Copies of the awareness poster were disseminated to various schools & the general public in and around the district and its digital copies were shared with all the stakeholders. All the events were registered in the worldwide events organized by the FAO of the United Nations. Mrs B. Punitha, Head Mistress, Mrs K. Prema District Eco-coordinator and staff of Corporation Higher Secondary School, North Coimbatore were present in the awareness campaign. Dr S. Vigneswaran, Senior Programme Officer, EIACP PC proposed the vote of thanks.































## **EIACP Resource Partner on Forest Genetic Resources and Tree Improvement ICFRE-Institute of Forest Genetics and Tree Breeding**

Ministry of Environment, Forest and Climate Change (Indian Council of Forestry Research & Education)
P.B.No. 1061, Forest Campus, R.S.Puram PO, Coimbatore - 641 002

## **WORLD SOIL DAY - 2023**

### Theme: Soil & Water: A Source of Life

Our planet's survival depends on the precious link between soil and water. Over 95 % of our food originates from these two fundamental resources. Soil water, vital for nutrient absorption by plants, binds our ecosystems together. By prioritizing the health of our soils and water systems, we can work towards securing a more resilient and sustainable future for both ecosystems and the human population. This involves a holistic approach that integrates ecological principles, technological innovations, and community engagement to promote environmental sustainability.

#### Did you Know?

- •95% of our food comes from soils
- · 33% of soils are degraded
- It can take up to 1000 years to produce just 2-3 cm of soil
- Soils supply 15 of the 18 naturally occurring chemical elements essential to plants
- There are more living organisms in a tablespoon of soil than people on Earth
- Over the last 70 years, the level of vitamins and nutrients in food has drastically decreased
- 2 billion people worldwide suffer from lack of micronutrients, known as hidden hunger
- Agricultural production will have to increase by 60% to meet the global food demand in 2050
- Up to 58% more food could be produced through sustainable soil management
- Up to half of our household waste could be composted to nurture our soil

#### Benefits of Healthy Soil













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