

MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE



(UGC-AUTONOMOUS INSTITUTION)

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A **Report on World Soil Day** Organized by: **ASCE MITS Student Chapter** Department of Civil Engineering.

05.12.2023



Submitted by: Mrs. Kandukuri Anitha, Assistant Professor, Department of Civil Engineering, MITS.

Dignitaries present:

Dr. P. Ramanathan, Vice Principal, Madanapalle Institute of Technology and Science, Madanapalle

Dr. Dipankar Roy, Professor & Head, Department of Civil Engineering & ASCE Faculty Advisor, Madanapalle Institute of Technology & Science, Madanapalle

Dr. Tulasiram Naidu, Professor & Head, Department of Humanities, Advisor to R&D and Consultancy Madanapalle Institute of Technology & Science, Madanapalle.

Mrs. Kandukuri Anitha, Event Coordinator, Civil Department, Madanapalle Institute of Technology & Science, Madanapalle.

Objective of the program:

World Soil Day is observed on December 5th each year, and its objective is to raise awareness about the importance of soil and promote sustainable soil management practices. The day serves as a platform to highlight the critical role that soil plays in food security, climate change mitigation, biodiversity conservation, and overall sustainable development. The specific objectives of World Soil Day include:

Promoting Soil Awareness: World Soil Day aims to increase public awareness and understanding of the importance of soil in sustaining life on Earth. It emphasizes the need for responsible soil management to ensure the well-being of current and future generations.

Advocating Sustainable Soil Management: The day encourages the adoption of sustainable soil management practices. This involves promoting methods that maintain or enhance soil fertility, minimize soil erosion, and prevent soil degradation. Sustainable soil management is crucial for ensuring the long-term productivity of agricultural lands.

Addressing Soil Degradation: World Soil Day raises awareness about the threats of soil degradation, such as erosion, nutrient depletion, pollution, and loss of biodiversity. It calls for collective action to address these issues and implement measures to prevent further degradation.

Supporting Food Security: Healthy soils are essential for agriculture and food production. World Soil Day emphasizes the connection between soil health and food security, highlighting the role of sustainable soil management in ensuring a stable and sufficient food supply for the global population.

Mitigating Climate Change: Soil plays a vital role in climate change mitigation through carbon sequestration. Healthy soils can store large amounts of carbon, helping to offset greenhouse gas emissions. World Soil Day promotes practices that enhance soil carbon sequestration to contribute to climate change mitigation efforts.

Encouraging Research and Innovation: The day encourages research and innovation in soil science and management. It recognizes the importance of ongoing scientific efforts to understand soil processes, improve soil fertility, and develop innovative solutions for sustainable soil management.

Fostering International Cooperation: World Soil Day provides a platform for international cooperation and collaboration in addressing global soil challenges. It encourages governments, organizations, and individuals to work together to implement effective soil management strategies and policies.

Program details

All the participants were gathered in the seminar hall at 3:00 PM. The inaugural session of this program was honoured by Dr. P. Ramanathan, Vice- Principal Academics, Dr. Dipankar Roy, Head of the Department (Civil) and ASCE Faculty Advisor, and the faculty Coordinator, Mrs. Kandukuri Anitha, Asst. Professor, Civil Engineering addressed the students regarding the World Soil Day. They have shed light on the importance of soil from a perspective which is different from usual approach of civil engineering where mainly strength of soil gets the highlight. Soil does much more than providing strong foundation to structures. It is alive and sustains lives.

Take-away from the session:

Some key points from a session on World Soil Day that can help students better understand its significance:

Critical Role of Soil: Emphasize that soil is a crucial natural resource that supports life on Earth. It provides the foundation for agriculture, which is essential for food production and human sustenance.

Global Awareness Day: World Soil Day is an international observance dedicated to raising awareness about the importance of soil health. It serves as a reminder for people worldwide to appreciate and understand the role of soil in various aspects of our lives.

Sustainable Soil Management: Introduce the concept of sustainable soil management, highlighting practices that maintain or improve soil health without depleting its resources. This includes methods to prevent soil erosion, nutrient depletion, and degradation.

Link to Food Security: Connect soil health directly to food security. Explain that healthy soils contribute to higher agricultural productivity, ensuring a stable and sufficient food supply for the growing global population.

Climate Change Mitigation: Discuss how soil plays a key role in mitigating climate change. Healthy soils act as carbon sinks, sequestering carbon dioxide and helping offset greenhouse gas emissions.

Threats to Soil Health: Highlight the various threats to soil health, including erosion, pollution, nutrient depletion, and loss of biodiversity. Discuss how human activities and unsustainable practices contribute to soil degradation.

Importance of Biodiversity: Stress the importance of soil biodiversity in maintaining a healthy ecosystem. Diverse soil organisms contribute to nutrient cycling, pest control, and overall ecosystem resilience.

Individual and Collective Responsibility: Encourage a sense of responsibility among students. Emphasize that individuals, communities, and nations all play a role in ensuring the sustainable management of soil resources.

Call to Action: Conclude by inspiring students to take action. Whether through personal choices, community initiatives, or advocating for policy changes, everyone can contribute to the conservation and restoration of soil health.

Interdisciplinary Nature: Highlight that the study of soil involves various disciplines, including biology, chemistry, geology, and environmental science. World Soil Day provides an opportunity for interdisciplinary learning and collaboration.

By focusing on these key points, students can develop a holistic understanding of World Soil Day and its significance in the context of environmental sustainability and global well being.

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