



Food and Agriculture
Organization of the
United Nations

22nd Working Session of the Intergovernmental Technical Panel on Soils (ITPS)

4-6 March, 2025

WSD 24, Preparation of the Global Symposium on Soil Sealing and Urban Soils 2025 & WSD26

FAO HQ
Mexico Room
(D211)

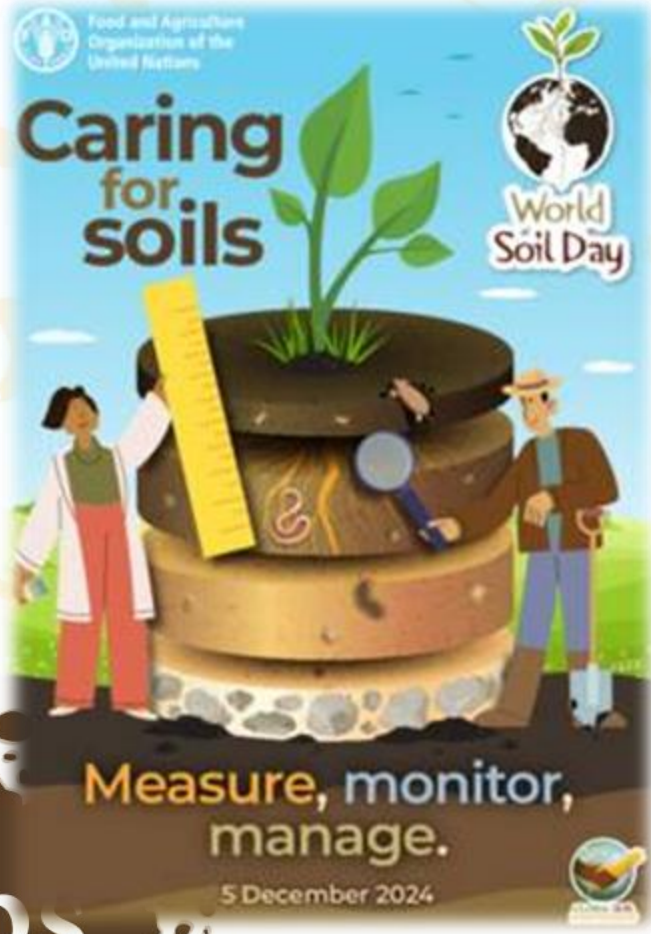
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Isabelle Verbeke



WSD24 Key figures



Over 9 000 events pinned on the official World Soil Day map

Over 550 news articles featuring World Soil Day were read by nearly 3.8 billion people

The hashtag #WorldSoilDay and #SoilHealth trended on Twitter on 5 and 6 December

A total of 25 037 posts were detected using the World Soil Day related hashtags.

The campaign reached 136 million people and generated 529 million impressions.

Over 3 000 people from 180 countries attended the official FAO ceremony in person and virtually

3 official contests were launched with extremely high engagement rates

World Soil Day 2024 campaign materials

Challenges of collecting and using soil data & information

This infographic depicts a winding path with various obstacles representing challenges in soil data collection and use. The challenges include:

- Low awareness:** Public and policy makers fail to grasp soil data's importance.
- Gaps in coverage:** Lack of data in many areas.
- High costs:** Expenses associated in collecting, accessing and high-resolution data.
- Misaligned research strategies:** Fragmented efforts and lack of collaboration for sharing.
- Inconsistent methods:** Difficulty in regional comparisons.
- Data silos:** Isolated systems with no incentives for sharing.

Logos: Food and Agriculture Organization of the United Nations, GLOBAL SOIL PARTNERSHIP

FAO's GLOSOLAN network brings together soil laboratories for reliable data

This infographic illustrates the GLOSOLAN network, which brings together soil laboratories for reliable data. It features icons for various laboratory techniques and quality assurance measures:

- Capacity development
- Quality assurance and control
- Soil spectroscopy
- Standard operating procedures harmonization
- Equipment
- Health and Safety

Did you know? Over + 1 200 labs belong to the GLOSOLAN network.

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This infographic shows a corn plant growing from soil, with icons representing various benefits of soil data and information:

- Better environment:** Did you know that accurate soil data and information can enhance sustainable soil management and effective carbon sequestration by soils up to 2 gigatons of CO2 per year?
- Better production:** Soil data and information help shape decisions and support the transformation towards resilient agrifood systems, leaving no one behind.
- Better life:**
- Better nutrition:**

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What is soil data & information?

This infographic defines soil data and information and their importance for effective soil resource management:

- Soil Data:** Measurements describing the physical, chemical, and biological properties of soil. Collected through sampling, laboratory analysis and sensing technologies.
- Soil Information:** Analyzed and interpreted representations of soil data (used to assess the soil status, support evidence-based decision and policy making).

Both are essential for effective soil resource management

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6 reasons why soil data matters

This infographic lists six reasons why soil data matters, each with an icon:

- Monitor and assess soil health
- Guide climate change adaptation and mitigation strategies
- Support informed decision making
- Empower farmers to optimize resources
- Improve agricultural productivity and food security
- Tailor sustainable management practices

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This infographic links soil data to the Sustainable Development Goals (SDGs). It features icons for SDGs 2, 3, 6, 11, 12, 13, and 15, along with a central text box:

Among the 17 Sustainable Development Goals (SDGs), 7 of them refer to targets that commend direct consideration of soil resources.

Soil data is essential for reporting on the status and progress of the 2030 Agenda for Sustainable Development of the United Nations

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Caring for soils: measuring, monitoring and managing through time

This infographic shows the evolution of soil management over time, divided into three eras:

- PAST:** Traditional soil surveys. Based on expert knowledge and hands-on fieldwork. Deep insights but labor intensive and time consuming.
- PRESENT:** Digital soil mapping. Integrates remote sensing and advanced modeling. Faster, more accurate, and accessible soil data.
- FUTURE:** Emerging technologies. Artificial insights for dynamic, real-time soil monitoring, supporting sustainable agriculture and global food security.

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WSD Contests

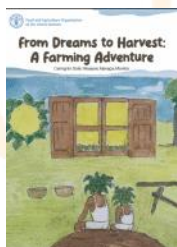
Book Contest | 109 entries



1st Classified
John James
Girao,
Philippines



2nd Classified
Stacey Beardsley
from the United
Kingdom



3rd Classified
Mihret Dawit from
Ethiopia



Podcast Contest | 27 entries



1st Classified
Ella Jane Mira,
Philippines



2nd Classified
Aditya Chettri,
India



3rd Classified
Axel Cerón González,
Belgium/Mexico

Farmer Contest | 75 entries



1st Classified
Mr. Bao Wei, China

2nd Classified
Mr. Alirio Martinez, Guatemala

3rd Classified
Mr. Thiru Valluvan, India

Special award

Mr. Sanit Dumban, Thailand

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Glinka World Soil Prize 2024

Thanks to the financial support of the

Russian Federation



The **Glinka World Soil Prize 2024** was awarded to the **Land Development Department (LDD) of Thailand**, for their remarkable achievements demonstrating its global leadership in integrating science, policy, and community driven initiatives to enhance soil health.



King Bhumibol World Soil Day Award 2024



The **Water and Soil Department of the Ministry of Agriculture Jihad of the Islamic Republic of Iran** received the **2024 King Bhumibol World Soil Day Award** for engaging millions across Iran in celebrating soil and its importance.



Thanks to the financial support of the
Kingdom of Thailand



Land Development Department of Thailand

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World Soil Day 2025

The theme in languages

OPTION 1: Healthy soils for healthy cities

OPTION 2: Living soils for lively cities

FRENCH

Des sols sains pour des villes en bonne santé

Des sols vivants pour des villes pleines de vie

RUSSIAN

Здоровые почвы для здоровых городов

Живые почвы для цветущих городов

SPANISH

Suelos sanos para ciudades saludables

Suelos vivos para ciudades llenas de vida

CHINESE

健康土壤造就健康城市

土壤生机孕育活力城市

ARABIC

تربة سليمة لمدن صحية

تربة حية لمدن نابضة بالحياة

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Why Urban Soil and Soil Sealing?

Extent of urbanization:

- **70 percent of the global population** expected to live in urban areas by 2025 (UNCTAD 2022)
- **Global issue** – no region unimpacted

Severity of threat to soils:

- **Soil sealing** - permanent covering of an area of land and its soil by impermeable artificial material such as asphalt or concrete, tar and buildings or other structures that cannot be easily removed. (FAO and ITPS, 2015)
- **Once urbanized, soils lose many soil functions, especially, ability to**
 - support **plant growth** and **water infiltration**
 - store **organic carbon** and
 - host **biodiversity**



Sealed surfaces exacerbate climate effects, contributing to **urban heat islands** and **increasing runoff pollution**

Symposium themes and objectives



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Relevant Stakeholders:

- Policy makers
- Urban planners
- Food producers
- Agronomists and soil scientists
- Researchers

Themes:

1. Unsealing and restoring sealed soils
2. Management of urban soils for the optimization of urban land use
3. Urban land governance for food security, sustainability and management of socioeconomic impacts of soil sealing



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Objectives:

1. Review the current knowledge gaps regarding the use of urban soils a;
2. Identify best practices for avoiding and reducing soil sealing, planning the use of unsealed urban soil
3. Set research priorities for further development of sound policy to mitigate soil sealing and its impacts.

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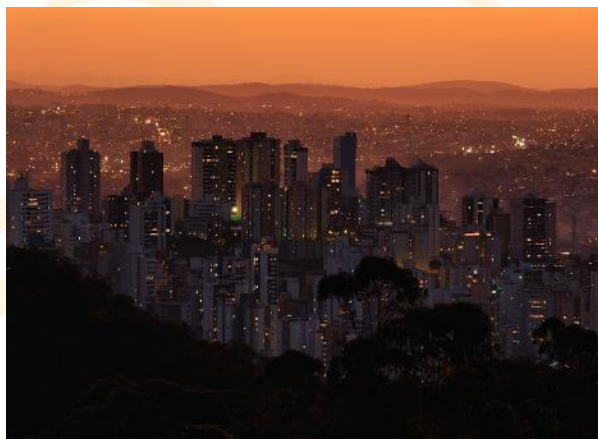
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Key figures



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Since the turn of the century, annual soil loss in Europe has ranged between 300km² and 500km².

At the current rates of urbanization, loss due to soil sealing may double in the next 20 years and even triple in developing countries by 2030.



©FAO

If well managed, urban forests and trees can reduce temperatures by up to 8 degrees Celsius and reduce costs of air conditioning by up to 40 percent



©FAO

Land use change, especially through habitat transformation, is responsible for endangering 85% of species at risk



©FAO

GSUS25 and WSD25, visual proposals

GLOBAL SYMPOSIUM ON URBAN SOILS AND SOIL SEALING



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**GLOBAL SYMPOSIUM
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World Soil Day 2026!

Topic of soil compaction and physical degradation, as agreed at the 11th Plenary Assembly



World
Soil Day

1. Protect soil structure, preserve our future!
2. Fight compaction, feed the future!
3. Prevent compaction, protect soil life!
4. Stop soil compaction, nourish life below
5. Free the soil from compaction
6. Break compaction for your soil to breathe
7. Stop compaction and give air to your soil
8. Stop compaction, boost soil's action!

...More proposals ?

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Thank you

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