



Food and Agriculture
Organization of the
United Nations

**GLOBAL SOIL
PARTNERSHIP**
13th Plenary Assembly
03-05 June 2025

International Network of Soil Information Institutions (INSII)

Isabel Luotto -GSP-Secretariat

***(on behalf of
Luca Montanarella -
INSII Chairperson)***



INSII - International Network of Soil Information Institutions

GSP's First Technical Network

- Formalized in 2016
- Development of the **Global Soil Information System** – GloSIS and Soil Data Products

Membership and Leadership

- 128 (+6 in 2025) National mandated institutions and GSP partners plus the European Union
 - New members from Djibouti, Iceland, Madagascar, Malaysia, Suriname, and Tonga
- Chaired by Mr. Luca Montanarella

Support and Collaboration

- Supported by the GSP Secretariat, ITPS, and Thematic Working Groups

INSII in Numbers 9+ Years

128

FAO Member Countries & EU

128

Soil Information Institutions

Global Data Products

4



36 Map Layers

+2 ongoing

System Development

9



National Soil Information
Systems

22 ongoing*
Philippines as a
first prototype

Capacity Development

85



Training Workshops
129 countries

5
Since 12th PA

Capacity Development



1900+ National Experts

173
Since 12th PA

Publications

13



Key Publications

Guidelines, Technical
Manuals, Reports

*Caribbean (SoilCARE), Asia
(AFACI), Azerbaijan



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GloSIS- Promoting standards

Case Example: Philippines

- First country to demonstrate full integration prototype with GloSIS
- Published 33 thematic soil map layers on the GloSIS Discovery Hub and Map Services
 - soil organic carbon, carbon sequestration potential, and soil nutrients
- Data now openly accessible via: <https://data.apps.fao.org/glosis/>



9+ Years of INSII
Thanks to all
partners' **in-kind**
and **financial**
contributions!



10th INSII meeting

**15–17 January 2025 | FAO Headquarters, Rome
(Hybrid)**

- 117 experts participated in person and online
- 7 invited talks on erosion mapping, field tools, monitoring, and policy

**INSII Implementation Plan 2025–2030 reviewed
and adopted**

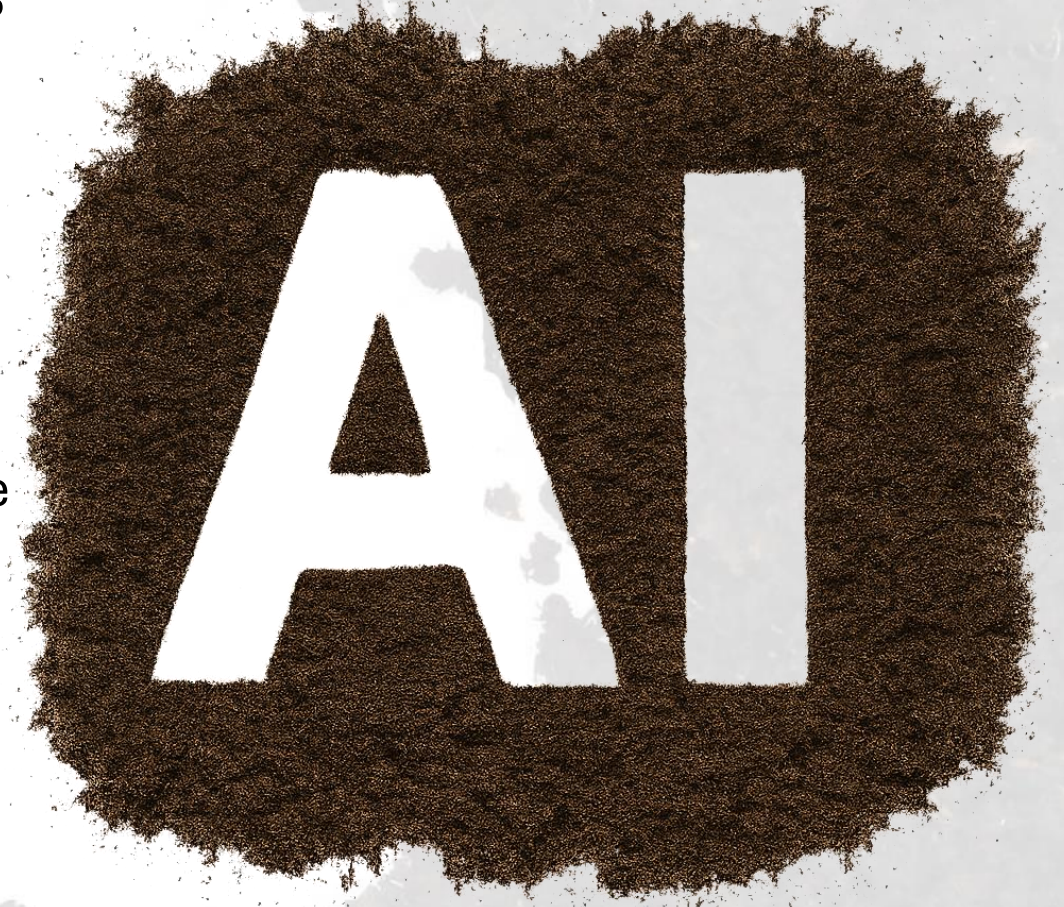
- Governance revision launched; new Chair to be elected under revised rules
- GloSIS, GSNmap, GSERmap, and SoilSTAT confirmed as priority areas
- Joint GLOSOLAN–INSII sessions held to enhance collaboration



2025–2030

Innovation & Future Directions

- We're actively exploring how **AI** can enhance the GloSIS platform — making soil data more accessible, visual, and actionable.
 - *For example, we're prototyping tools that could interpret spatial data and generate soil management recommendations tailored to specific contexts.*
- This aligns with FAO's broader digital strategy, and we're closely collaborating with the Digital Agriculture and AI Innovation Working Group.



2025–2030

our top priorities include:

- Consolidating the governance structure of INSII
- Strengthening the GloSIS federation and national systems
- Finalizing and publishing the GSNmap and GSERmap
- Rolling out the **SoilSTAT framework**
- Develop a proof of concept prototyping AI-driven recommendations tailored to specific soil conditions.
- All of this continues to support our core objective: building country-driven systems and data products for informed decisions



FAO's 80th Anniversary marks decades of work dedicated to measuring, monitoring, and mapping the world's soils



INSII institutions are building on this legacy, using cutting-edge science to close critical data and capacity gaps.



Scaling up this work means—empowering better decisions for food systems, climate resilience, and healthy ecosystems

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Action Items

- **welcome** the progress made by INSII in improving the quality and availability of soil data and information and in advancing their work plans
- **invite** FAO Members to establish national soil information systems in accordance with INSII guidelines and with the support of the GSP Secretariat;
- **invite** INSII and GLOSOLAN to strengthen their collaboration to facilitate the development of GloSIS and the technical components of SoilSTAT, which will serve as the main data platform for monitoring the implementation of the GSP Action Framework; and
- **encourage** all partners to support the development of national soil information systems, GloSIS, and the SoilSTAT platform, including capacity development, data infrastructure, and the operationalization of national and regional reporting mechanisms.





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THANK
YOU

