



Food and Agriculture
Organization of the
United Nations

12th European Soil Partnership Plenary Meeting

6 - 7 March 2025

Hybrid, Webex platform

FAO HQ , Austria Room (C25obis)

Item 6. GSP activities and involvement from ESP partners

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GSP Secretariat



6. GSP activities and involvement from ESP partners

6.1 Overview: GSP networks: tasks, ESP participants

6.2 EUROSOLAN 2024/2025

6.3 GSP writing processes: Ad hoc WG on GSP institutional matters, ISAF

Overview of GSP activities and involvement from ESP members

- GSP Technical Networks
 - INSII – 41 out of 128 members (+14 non-INSII members) - **32%**
 - GLOSOLAN – 253 out of 1 173 members - **22%**
 - INSAS – 199 out of 904 members – **22%**
 - GSAS report – 38 authors and 61 contributors to national reports and map
 - INBS – 14 out of 42 members - **33%**
 - NETSOB – 368 out of 1 150 members - **32%**
 - INSOP – 325 out of 1 300 members - **25%**
 - INSOILFER – 127 out of 747 members - **17%**
- SWSR report – 73 authors

Overview of GSP activities and involvement from ESP members

1. RECSOIL partner project in France and Belgium - "European Soil Revitalization Programme" managed by South Pole and GaiaGo
2. Risk assessment and mitigation of cadmium pollution in cocoa plantations in Brazil and Trinidad and Tobago – partnering with NICOLE Europe and Latin America
3. Soil health assessment in war-affected areas of Ukraine – partnering with BESOLAN and VITO
4. GLOSOB first trainings by U. Coimbra/SoilBON

1. RECSOIL partner project managed by South Pole and GaiaGo

- Listed as a RECSOIL Partner Project (not funded/implemented by FAO)
- Implementing the RECSOIL Carbon Market path
- Helping to:
 - Adapt RECSOIL MRV protocol to grouped projects
 - Better define the process for new engaged farmers in an ongoing Project
 - Better define the sampling protocol and monitoring

2. Risk assessment and mitigation of cadmium pollution in cocoa plantations

➤ Checklist for soil remediation

To guide stakeholders in implementing soil remediation, outlining action areas that must be addressed

➤ In-person training on the implementation of soil remediation checklist, Trinidad and Tobago



3. Soil health assessment in war-affected areas of Ukraine

- FAO and WFP “Restoring Livelihoods and Revitalizing Rural Communities Affected by Mines and Explosive Remnants of War in Ukraine” four-year project.
- Assess the damage caused by land warfare to farmland, identify priorities for Mine Action support, and provide technical assistance for resuming production safely.
- FAO and BESOLAN have developed a tailored training program for Ukrainian scientists and technicians working in institutions mandated to manage soil chemical contamination.



Capacity development



Trainings on soil pollution

As part of the FAO programme “Restoring Livelihoods and Revitalizing Rural Communities Affected by Mines and Explosive Remnants of War,” the Global Soil Partnership (GSP) is equipping academics, governments, NGO's with the knowledge and tools needed for accurate soil pollution identification, risk mitigation, and the development of contaminant reduction strategies. These efforts aim to support a sustainable and resilient agricultural future for countries affected by mines and explosive remnants of war. In collaboration with the [Global Soil Laboratory Network \(GLOSOLAN\)](#) and the [International Network on Soil Pollution \(INSOP\)](#) experts, the GSP has developed comprehensive theoretical courses to establish a strong foundation in soil pollution assessment protocols.

TRAININGS

- + **Module 1 – Basic principles of soil and groundwater related to pollution**
- + **Module 2 – Contaminated soil sampling techniques**
- + **Module 3 – Modelling of distribution of pollutants in plants**
- + **Module 4 – Modelling pollutant transport in soil and groundwater**
- + **Module 5 – Data interpretation with respect to plant uptake**
- + **Module 6 – Analyses of polycyclic aromatic hydrocarbons (PAH) in soil samples**
- + **Module 7 – Dealing with energetic materials**
- + **Module 8 – Techniques for remediation of contaminated soil and groundwater**
- + **Module 9 – Soil major nutrient analyses**
- + **Module 10 – Soil micronutrient analysis**
- + **Module 11 – Dealing with radioactivity in soil and groundwater**
- + **Module 12 – Determination of pH**
- + **Module 13 – Groundwater sampling techniques and methods**
- + **Module 14 – Determination of electrical conductivity (EC)**
- + **Module 15 – Determination of soil organic carbon (SOC)**
- + **Module 16 – Strontium 90 and caesium 137**
- + **Module 17 – Determination of elements in soil using inductively coupled plasma optical emission spectroscopy (ICP OES)**
- + **Module 18 – Energetic materials**

3. Soil health assessment in war-affected areas of Ukraine

- In-person training provided by VITO, the Belgian Royal Military Academy, Belgian Nuclear Research Centre and the University of Liège.
- Trainings now openly available to everyone through GSP website.



4. GLOSOB first trainings by U. Coimbra/SoilBON



- GLOSOB was launched at CBD COP15
- Proposes a tiered approach on soil biodiversity assessment/monitoring
- 3 pilot countries (Costa Rica, Togo and Uzbekistan) will be trained on soil sampling for/and biological parameters analysis
- In cooperation with University of Coimbra, Portugal hosting SoilBON



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EUROSOLAN 2024/2025





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Ad hoc WG on GSP institutional matters



GSP writing processes: Ad hoc WG on GSP institutional matters

- 12th Plenary Assembly requested the Secretariat to review the GSP ToRs (and RoP) according to the GSP Action Framework 2022-2030
- It also requested to prepare an analysis of the possible mandate of a Sub-Committee on Soil under COAG avoiding duplication with the GSP
- An ad hoc working group was set up to guarantee the participation of the GSP members and to respond to both requests in a transparent and collaborative manner.

GSP writing processes: Ad hoc WG on GSP institutional matters

- The WG met on 26-27 February for a first discussion
- Written comments being sent to the Secretariat until 12 March
- Some preliminary discussions:
 - 5 pillars replaced by action areas
 - Role of the RSPs should be better clarified
 - Technical Networks to be included
 - Policy process either to be covered by the Sub-committee or to be activated through GSP mechanisms already in place (soil governance WG, report to COAG, etc).
 - Connection to the Rio Conventions, 2030 Agenda and other MEAs to be highlighted



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SoilSTAT & GSP Action Framework



Overview

- GSP Action Framework
- The ISAF Working Group
- Progress
- Overview of the Indicators
- Global Soil health Dashboard
- Reporting
- Next Steps

The GSP Action Framework

adopted by the 10th GSP Plenary Assembly and endorsed by the 28th Session of the COAG (2022).

Implementation of the GSP Action Framework to be monitored by **SoilSTAT**, and it will be reporting on



1

GSP Key Performance Indicators

monitoring Key Performance Indicators (KPIs) for soil-related activities and initiatives of the GSP

2

Soil Health Indicators

monitoring key soil health indicators at global scale

3

Soil Health Index Assessment & dashboard

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Indicator System for the GSP Action Framework (ISAF)– 2023



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Call for a Working Group to develop the Indicator System of the GSP Action Framework (ISAF)

Background

In May 2022, the 10th GSP Plenary Assembly (PA) adopted the new [GSP Action Framework 2022–2030](#) that was endorsed by the 28th Session of the FAO Committee on Agriculture (COAG). In this regard, “COAG encouraged FAO and all GSP members to implement the activities outlined therein, as well as tools and initiatives of the GSP including the Voluntary Guidelines for Sustainable Soil Management, the International Code of Conduct for the Sustainable Use and Management of Fertilizers, among others, as appropriate”.

The overarching principle of the GSP Action Framework is that in a world in which soils are healthy and resilient, the provision of ecosystem functions and services by soils are sustained for all, leaving no one behind. The vision is that the GSP must work to improve and maintain the health of at least 50 percent of the world's soils by 2030. To further develop the GSP towards a flexible action-oriented approach and meet this objective, Pillars of Action have been replaced by Action Areas linked to concrete actions, initiatives, and programmes.

- Action Area 1: Manage sustainably and restore soils for the provision of ecosystem services
- Action Area 2: Strengthen soil governance
- Action Area 3: Promote knowledge and literacy on soils
- Action Area 4: Promote awareness raising and advocacy on soil health
- Action Area 5: Assess, map, and monitor soil health in a harmonized way
- Action Area 6: Foster technical cooperation (including gender and youth)

Another novelty of the GSP Action Framework is the inclusion of concrete and quantifiable targets to measure the impact of actions at the global, regional, national and local levels. In this regard, the GSP Action Framework is made up by clear actions and targets focused on addressing the different global challenges – from food insecurity, climate change, pollution, land degradation and the loss of biodiversity – through the improvement and enhancement of soil health. Key performance indicators (KPIs) are to be developed and agreed upon with GSP members and partners to allow monitoring of activities and progress towards these targets.

The Action Framework also proposes the development of a Global Soil Health Index (GSHI), as a composite index including the indicators endorsed in the Protocol for the assessment of sustainable soil management (SSM Protocol) to provide a proxy on the soil health status at global level.

- ✓ ITPS Chairperson (*Lead*) & ITPS Members
- ✓ Chairs of the Regional Soil Partnerships
- ✓ Chairs of the GSP Technical Networks
- ✓ Experts nominated by GSP National Focal Points
- ✓ Global Soil Partnership Secretariat (facilitator)



70+ Members; ISAF WG has convened over six meetings. The last meeting was held on 28th February 2025.

Progress – The ISAF WG

1 ✓ **GSP Key Performance Indicators**

- **15 KPIs**
- **6 Domains** (SSM, Soil Governance, Knowledge and literacy, Awareness raising, Soil Information and Data, Technical Cooperation)

2 ✓ **Soil Health Indicators**

- **19 Soil Health Indicators**
- **10 Domains** (Soil Threats)

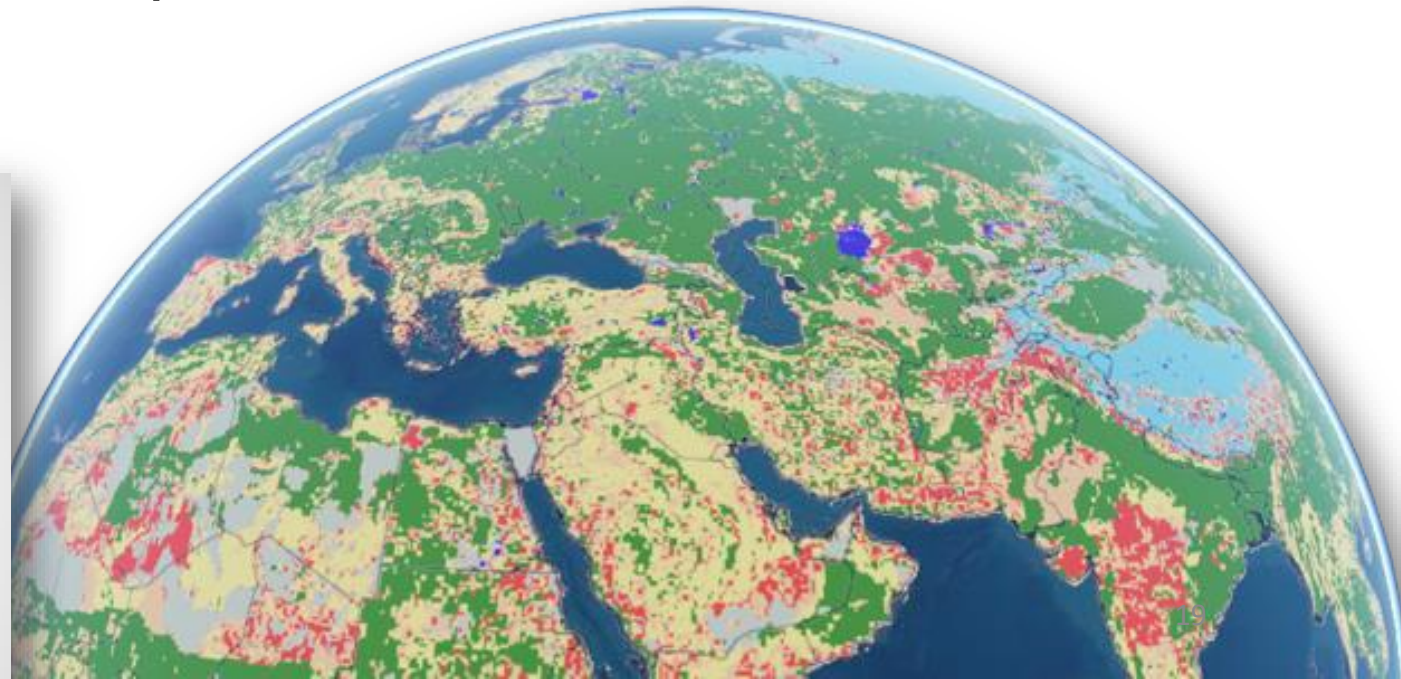
3



Global Soil Health Index & Dashboard

- No composite soil health index (Indicators) will be developed but degradation processes (Domains) will be used as descriptors and proxies to soil health,
- Similar to the European Soil Observatory (EUSO) Soil Degradation in the EU Dashboard, where multiple soil degradation processes are used to provide a comprehensive view of soil health

Global Soil Health Dashboard





Global Soil Partnership Action Framework 2030

SoilSTAT

Development and Integration of Key Performance Indicators for
the Global Soil Partnership,
the Soil Health Indicator System, and the
Global Soil Health Dashboard

Technical Concept Note

ISAF Working Group

2025

◆ Gemini



Summarise this document



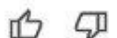
This document describes the creation of a global indicator system for the Global Soil Partnership (GSP) New Action Framework, to monitor soil health and track progress towards the goals of the GSP Action Framework, which combats soil degradation and seeks to improve soil health globally.

- The **Global Soil Partnership Performance Indicator System (GPIS)** will measure the effectiveness and impact of the GSP's activities and programs.
- The **Soil Health Indicator System (SHIS)** will assess the health and quality of soils at various scales using indicators including the Global Soil Health Index (GSHI).

The document also provides:

- An overview of soil health and its importance.
- Details on the selection of soil health indicators and the calculation and spatialization of the GSHI.
- Reporting guidelines for performance indicators and a classification system for the GSHI.
- A description of the Global Soil Health Dashboard, which will provide a user-friendly interface for visualizing and exploring the GSHI and other relevant data.

▼ Sources (1)



SoilSTAT - GSP KPIs

Key performance Indicators for the GSP

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SSM

- **Adoption** rate of SSM Practices
- **Adoption** rate of SSM in national programmes
- **Proportion** of degraded soils under SSM measures



Governance

- Development of national and regional legal instruments focused on soil health
- Implementation of the Fertilizer Code
- Formalization of cooperation between the FAO/GSP and others



Knowledge

- Capacity development programmes/courses on SSM
- Global assessments reports on the state of world's soils and soil threats



Awareness

- Outreach of the World Soil Day
- International agreements, communiqués, strategies, or partnerships focused on soil health.



SID

- National Soil Information System Development
- Country Driven Global Datasets



Cooperation

- Representation status in the GSPs Technical Networks.
- National projects supported by the GSP on SSM

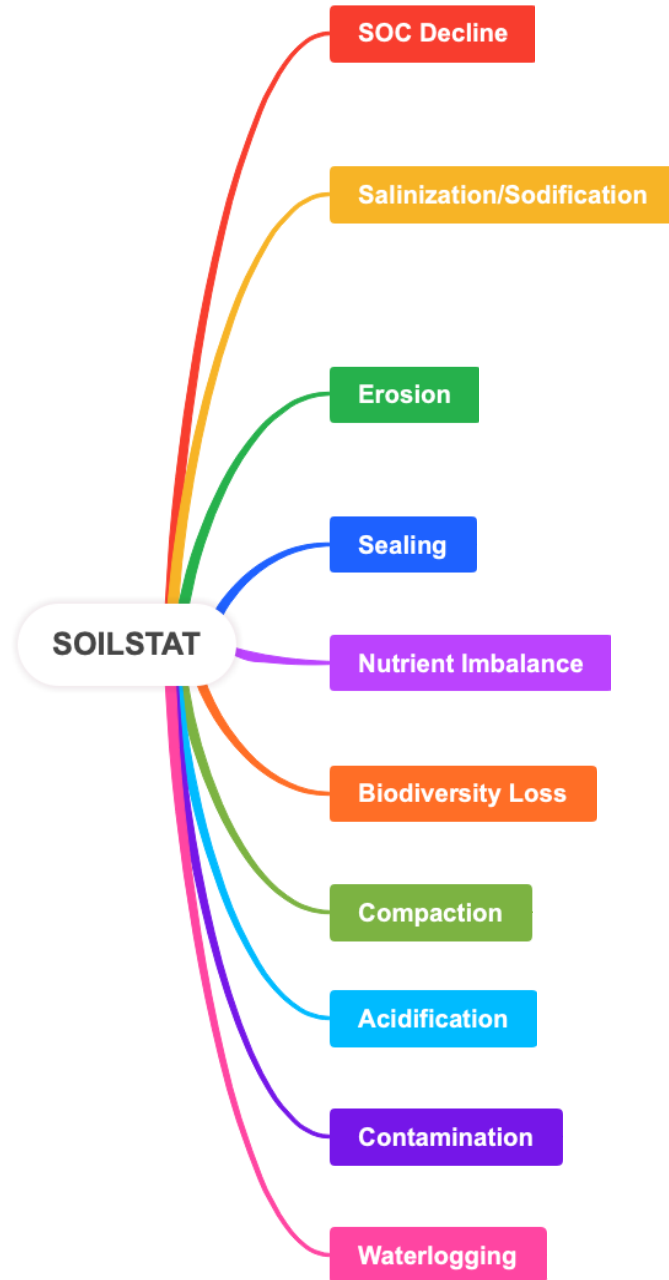
SoilSTAT - Soil Health

Soil Health Indicators

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DOMAINS



2025

DOMAINS >>> INDICATORS



2025



DOMAINS >>> INDICATORS >>> METRICS



2025

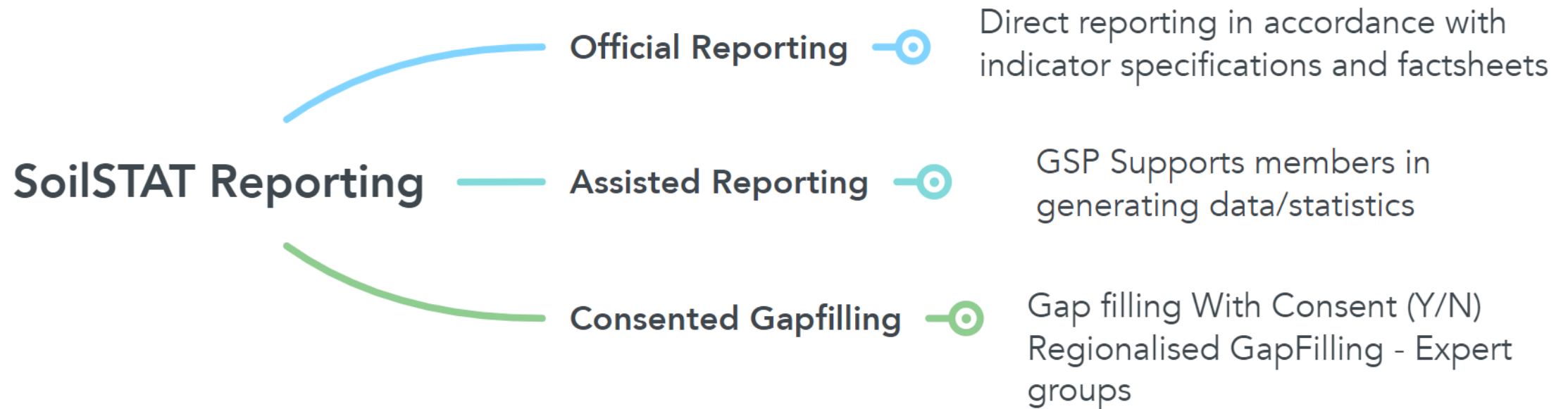


EU, EJP SOIL, ISAF proposed indicators

Proposed by EU Commission	Changes by EJP SOIL (D6.5)	Proposed by ISAF WG
<ul style="list-style-type: none"> SOC Content, SOC/clay SOC Stock 	<ul style="list-style-type: none"> Delete: SOC/clay Add: SOC/SOCexp and SOC/SOCmax 	<ul style="list-style-type: none"> SOC seq pot SOC stock SOC conc
Nutrients: Total N, Extractable P	Add : P stocks (not only available P) and C/N ratio (N pot. deliv.)	Av. Nutrient content (NPK), nutrient budget
	CEC and ESP to be added	Exch. Na or Na adsorp. rate
pH in Water		pH
Electr. Conductivity		EC
Available water capacity	Infiltration rate, permeability soil profile and/or the soil porosity and structure stability	Soil drainage classes
Biodiversity (soil respiration)	Biodiversity (functional and structural indicators)	Soil microbial biomass, soil respiration
Structure: Bulk density		Bulk density
Contamination: Trace elements and selected organics		Nr contaminated sites, heavy metals (predicted/measured)
Soil sealing		Sealed area
Soil erosion: loss rate		Water and tillage erosion, water erosion risk, susc to wind erosion



REPORTING – Voluntary Process





12th GSP PA

Item 2. Status on the implementation of the Global Soil Partnership (GSP) Action Framework (GSPPA: XII/2024/2)

Mr Yusuf Yigini (GSP Secretariat), presented the progress on the implementation of the GSP Action Framework, adopted by the 10th GSP Plenary Assembly and endorsed by the 28th Session of the

6

GSPPA-XII/2024/Report

Committee on Agriculture (COAG) to be monitored by SoilSTAT. He reported on the GSP Key Performance Indicators (KPIs), Soil Health Indicators and Soil Health Index and the dashboard being developed by the GSP Action Framework Indicator System (ISAF) working group. He explained that the working group has taken a pragmatic approach and decided to establish a Global Soil Health Indicator System based on degradation processes given the complexity of developing a single global soil health index that is relevant to all soil types under various land uses. This approach is similar to that adopted by the European Commission's Joint Research Centre and its European Soil Observatory (EUSO). To date, the ISAF working group has identified and agreed on 15 key performance indicators for GSP and 6 areas (sustainable soil management, soil governance, knowledge and literacy, awareness raising, soil information and data, and technical cooperation). Mr Yigini then explained the SoilSTAT reporting methodology, describing its functions and component elements. Mr Yigini invited members to formally endorse the final document that will be presented at the 13th Plenary Assembly. Presentation on item 2 is available [here](#).



The Plenary Assembly acknowledged the progress made in the definition of the indicator system of the GSP Action Framework 2022-2030 and the Global Soil Health Indicator System.

The Assembly urged the ISAF working group and the GSP Secretariat to finalize the indicator system of the GSP Action Framework 2022-2030 and the Global Soil Health Indicator System.

The Plenary Assembly requested that the proposal be first shared with the focal points for validation and presented to the 13th GSP Plenary Assembly for approval.

Next Steps

BEFORE PA13

- ***ISAF to***
 - finalize the SoilSTAT Concept Note (***Done***)
 - ITPS Endorsement (***Done***) (22nd Working Session)
- ***The PA will be requested to***
 - endorse the final document at its 13th Session

AFTER PA13

- ***GSP secretariat to***
 - establish a dedicated working group (SoilSTAT WG) and task with finalizing the development of technical elements, technical specifications, fact-sheets, and Implementation Framework for SoilSTAT.

The Plenary Assembly may wish to:

- **Endorse** the current concept note and the deliverables listed in the document for the development phase.
- **Mandate** the GSP Secretariat to proceed with the development phase (June 2025 – December 2026), which should include development of the SoilSTAT Implementation Plan, producing detailed indicator fact sheets (for all GSP KPIs and the prioritized Soil Health Indicators), and establishing the technical protocols for data collection, standardization, integration, and quality control.
- **Task** the Secretariat to engage closely with our key networks —INSII, GLOSOLAN, and the ITPS—to develop the necessary technical elements and reporting mechanisms.
- **Note** the preliminary budget estimate for the development phase and indicate that detailed budget and reporting lines will be developed further as part of the final SoilSTAT Implementation Plan.
- **Encourage** funding partners to mobilize the required resources to support both the development and initial implementation phases, with the GSP Secretariat actively leading resource mobilization efforts.

Next steps (development phase) 2025-2026

- SoilSTAT Implementation Plan
 - Governance (Protocols for data collection and reporting lines)
 - Timelines
 - Reporting Cycles
- Indicator Fact Sheets
 - Technical Specifications and Guidelines for individual indicators

Next steps (development phase) 2025-2026

- Stakeholder engagement
 - Organize quarterly meetings (online and in-person)
 - Implement a piloting phase (6 countries, one per GSP region)
- Technical Guidance and oversight
 - GSP Technical Networks (INSII and GLOSOLAN) and ITPS
 - SoilSTAT WG to identify lead technical experts/institution for specific indicators

Potential financial implications

- GSP secretariat is considering to include a financial implication section which would cover:
 - Development phase budget for the GSP secretariat for 2025-2026
 - Dedicated team (e.g. full-time consultants and thematic experts)
 - In-person meetings
 - Piloting phase – implementation in 6 pilot countries to test and refine data collection

Next steps (implementation phase) 2027 - 2030

- **Priority Roll-Out of Indicators:**
 - Each year, several Global Soil Partnership KPIs will be implemented.
 - One major Soil Health Indicator will be rolled out annually (four by 2030).
- **Reporting, Monitoring, Evaluation:**
 - Monitoring, evaluation, and refinement of data collection, integration, and reporting processes will be conducted, leveraging stakeholder feedback and lessons from the pilot phase.
- **Platform Integration:**
 - National datasets will be fully integrated into the SoilSTAT system, and the Global Soil Health Dashboard will be launched to provide real-time monitoring and decision support.

2030 ...

- Additional indicators beyond the priority ones are planned for later phases, ensuring the system remains adaptable to emerging scientific insights and evolving sustainability needs