



Global Soil Partnership Plenary Assembly

Twelfth session

Hybrid, 3-5 June 2024

**Work of the Intergovernmental Technical Panel on Soils (ITPS)
(GSPPA: XII/2024/4)**

Executive summary

- This document – the annual report of the Intergovernmental Technical Panel on Soils (ITPS) – provides a succinct overview of the main activities carried out by the panel over the past 11 months and introduces the revised ITPS work programme for 2024 and 2025.
- The members of the fourth panel were appointed at the tenth session of the Plenary Assembly and will complete their term in 2025. Since their appointment, the members have been working at full capacity to continue previously initiated activities and to support the implementation of new ones.
- The main activity in which ITPS has been involved is the preparation of regional assessments for the second edition of the *Status of the World's Soil Resources* (SWSR) report, for which the members have mobilized a wide network of experts.
- The nineteenth working session of the ITPS took place virtually from 13 to 15 November 2023 and the twentieth working session of the ITPS was held in person at FAO headquarters from 19 to 21 March 2024. The panel has continued to operate through virtual channels throughout the year.

Suggested actions by the GSP Plenary Assembly

The Plenary Assembly may wish to:

- review and comment, as relevant, on the range of activities undertaken by the ITPS over the past 11-month period;
- endorse the ITPS workplan 2024–2025 and invite donors and partners to support its implementation by providing financial and in-kind resources;
- welcome the progress made in the preparation of the second edition of the SWSR report and encourage ITPS members to continue actively contributing to its preparation by involving a wide range of experts from all the regions; and
- invite countries and partners to encourage their experts to participate in the different activities led by the ITPS, particularly for the preparation of the second edition of the SWSR report.

4.1 Report by the chairperson on main activities and outcomes of the work programme 2023–2024

1. Over the past 11 months, the present panel has performed the following activities:

- published an ITPS letter: issue #8 *Biochar in sustainable soil management: potential and constraints*;
- supported the implementation of the Global Symposium on Soils for Nutrition (GSOIL4N22) outcome document, including the launch of the International Soil Fertility and Fertilizer Network (INSOILFER) and the development of its workplan;
- supported the organization of the Global Symposium on Soils and Water (GSOWA23) held from 2 to 5 October 2023 and led the development, review and publication of the GSOWA23 outcome document;
- guided the preparation of the Global Soil Nutrient and Nutrient Budget Maps (GSNmap);
- supported the design of the implementation plan of the Global Soil Biodiversity Observatory (GLOSOB) in the framework of the International Network of Soil Biodiversity (NETSOB);
- continued to support the development and implementation of the Recarbonization of agricultural soils (RECSOIL) initiative as a contribution to the implementation of decision 16/COP14 of the United Nations Convention to Combat Desertification (UNCCD);
- contributed to the preparation and review of the report on the Global Status of Salt-affected Soils;
- continued to support and guide the different international networks of the GSP;
- supported the organization of the Global Symposium on Soil Information and Data (GSID24) to be held in September 2024;
- led the preparation of the second edition of the *Status of the World's Soil Resources* (SWSR) report to be issued in 2025, including the establishment of the editorial board, with one ITPS member representing each region;
- prepared the scientific paper titled *Status of the World's Soils* published in *Volume 49 of the Annual Review of Environment and Resources*;
- presented the GSP activities as a keynote presentation at the Congress of the Latin American Soil Science Society in Florianopolis (Brazil);
- assisted with the celebration of World Soil Day (WSD) 2023 under the theme *Soil and Water: a source of life*, including the dissemination of campaign materials, selection of the WSD Award, the Glinka World Soil Prize, and the review of submissions and selection of winners for the poster and booklet contests;
- led the work of the Working Group to develop the Indicator System of the GSP Action Framework (ISAF); and
- continued collaboration with international organizations and panels, such as:
 - the International Union of Soil Sciences (IUSS) presented several abstracts related to the ITPS/GSP's activities as oral presentations and organized a side event on the SWSR report at the centennial of the IUSS, held in Florence, Italy from 19 to 21 May 2024;
 - the 4 per 1 000 Initiative – regularly participated and attended meetings of the 4 per 1 000 Scientific and Technical Committee;

- the International Research Consortium (IRC) on Soil Carbon (ORCaSa) project – members of the ITPS are part of the IRC technical committee;
- Intergovernmental Panel on Climate Change (IPCC) - participated at the 59th session of the IPCC; and
- United Nations Environment Programme (UNEP) - contributed to the UNEP report on Global Environment Outlook (GEO7).

4.2 ITPS work programme 2024–2025

2. The ITPS workplan until mid-2025 will include the following:

- ensuring follow-up actions to the Global Symposium on Soil Erosion (GSER19), including advising on the preparation of the methodology to evaluate the costs of erosion and value of erosion control practices as public benefits and for the conservation of ecosystem services;
- supporting the implementation of the GSOWA23 outcome document;
- leading the organization of the Global Symposium on Soil Information and Data (GSID24) in September 2024 and the development, review and publication of its outcome document;
- guiding the finalization and launch of the Global Soil Nutrient and Nutrient Budget Maps (GSNmap);
- supporting the implementation of GLOSOB;
- continuing support to the development and implementation of the RECISOIL initiative as a contribution to the implementation of decision 16/COP14 of the UNCCD and contributing to its wide dissemination in different fora;
- continuing to support and guide the different international networks of the GSP;
- leading the preparation of the second edition of the SWSR report scheduled for 2025;
- assisting with the celebration of WSD 2024 devoted to *Caring for soils: measure, manage, monitor*, including the dissemination of campaign materials, selection of the WSD Award, the Glinka World Soil Prize, and the review of submissions and selection of winners for the poster and booklet contests;
- leading the work of the ISAF working group and supporting the finalization of the Global Soil Health Index and the Global Soil Health Dashboard;
- assisting with the organization of the Global Symposium on Soil Sealing and Urbanization to be held in 2025;
- preparing and publishing scientific and technical notes (ITPS letters) on soil pollution and water quality, soils and One Health, soil monitoring, soil management under a changing climate, soil governance, soil awareness, and developing ITPS manuscripts to be published in scientific journals; and
- continuing collaboration with international organizations and panels, such as:
 - IUSS;
 - Science-Policy Interface of the United Nations Convention to Combat Desertification (UNCCD);
 - 4 per 1 000 Initiative;
 - IRC - ORCaSa project;

- IPCC;
- International Union for Conservation of Nature (IUCN);
- Convention on Biological Diversity (CBD); and
- Global Soil Biodiversity Initiative (GSBI).

4.3 Preparation and launch of the Second edition of the Status of the World's Soil Resources

Report

3. The Status of the World's Soil Resources (SWSR) report is a major technical output of the ITPS. It will be published on 5 December 2025, ten years after the publication of the first SWSR. The report will focus on how our understanding of the state of the main threats to soil functions and the ability of sustainable soil management to address these threats has progressed since the first report in 2015.
4. The report will consist of a summary and a main report. The Summary for Policy Makers will be a brief document that summarizes the main findings of the overall report in a concise format and in accessible language. The Main Report will have two main elements: a summary of the literature since 2015 and regional assessments of the state of soil threats and sustainable soil management approaches to address these threats.
5. The biggest changes in scientific literature since 2015 are: a) an increase in the number of global modelling studies of threats and implementation of sustainable soil management practices and; b) publication of many meta-analyses on the efficacy of sustainable management approaches. Both allow the ITPS to be more definitive in the recommendations to policymakers and other soil users (although many gaps remain).
6. The second, and more important, part of the Main Report is the seven regional assessments. These regional assessments are carried out by 64 Lead Authors and over 120 Contributing Authors from the seven regions. The ITPS members on the established SWSR Working Group are the Coordinating Lead Authors for their region and are responsible for compiling the material into a complete first draft.
7. The report will undergo a thorough peer review process. Each element of the report undergoes three levels of review: by outside scientific experts, by the ITPS and by FAO. The ITPS reviews each section and ultimately approves the report. The ITPS-approved report will then be submitted to the 13th Plenary Assembly of the Global Soil Partnership for its consideration.
8. Over the past 11 months, the present panel has performed the following activities in furtherance of the preparation of the SWSR report:
 - created a Working Group to oversee the development of the report. The Working Group meets monthly. The Working Group is chaired by David Lobb and consists of ITPS members from all regions;
 - the day-to-day work of the editorial team is overseen by the Working Group Executive, which consists of David Lobb, Rosa Poch and the members of the editorial team. The Executive meets weekly;
 - the Regional Assessment Panels for each region, consisting of the ITPS members for that region and the Chair of the Regional Soil Partnership, mobilized multiple authors who have contributed to the regional assessments;
 - selected the lead authors for the Regional Assessment chapters;

- almost all of the content from the regions has been submitted and has undergone editorial review;
 - completed the first drafts of the summary of the literature since 2015 which were reviewed by at least two eminent scientists in a peer review process overseen by the Review Editor, Megan Balks; and
 - drafted a stand-alone document on the thresholds for individual soil threats beyond which significant impairment of soil functions can occur (in accordance with the definition of sustainable soil management established in the revised World Soil Charter).
9. The workplan until mid-2025 includes the following items:
- a review process will be carried out for the regional assessment chapters. It will be overseen by the Review Editor and will be reviewed and revised by the ITPS at the November 2024 ITPS meeting;
 - review, revision and approval of literature review chapters (since 2015) on the threats to soil functions;
 - finalising the draft of a standalone document on the thresholds for individual soil threats beyond which significant impairment of soil functions can occur;
 - drafting and review of the Summary for Policymakers;
 - review and approval of the Summary for Policymakers by FAO and ITPS; and
 - preparation of the final documents for consideration by the Plenary Assembly prior to the editing and layout process.