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GLOBAL SOIL PARTNERSHIP

Global Soil Partnership
Plenary Assembly

Tenth session

Virtual, 23-25 May 2022

Status of Global Symposia: for information and decision (GSPPA: X/2022/6)

Executive Summary

- Since 2017, the Intergovernmental Technical Panel on Soils (ITPS) has led the organization of Global Symposia addressing the ten soil threats identified in the Status of the World Soils Resources (SWSR) report.
- The topics covered or planned so far are: Soil Organic Carbon (2017), Soil Pollution (2018), Soil Erosion (2019), Soil Biodiversity (2021), Soil Salinity (2021) and Soils for Nutrition (2022). These symposia are successful in bringing together the science and policy dimensions under each theme, involving substantial numbers of participants who agree on and commit to an action-oriented outcome document.
- Each outcome document sets out a comprehensive agenda for action addressing a pertinent theme. Under the lead of the ITPS, the GSP Secretariat facilitates the implementation process involving all co-organizers.
- To-date, all outcome documents have been conducive to the active implementation of recommended actions making use of available resources (financial and in-kind). Hence, the symposia have been able to catalyse action at national, regional, and global levels, as appropriate.
- Despite the COVID-19 pandemic, the Global Symposium on Soil Biodiversity (GSOBI21) was held successfully in a virtual format, with more than 5 000 participants from 160 countries. The outcome document entitled: “Keep soil alive, protect soil biodiversity” was produced.
- The Global Symposium on Salt-affected soils (GSAS21) was held virtually on 20-22 October 2021, with more than 4 000 participants from 185 countries. This Symposium attracted a great deal of attention from participants from the global South and illustrated the pressing need to find solutions that help produce food and thus fight poverty by nurturing soils affected by salinity and sodicity. The outcome document of the GSAS, “Halt soil salinization, boost soil productivity” collected the main findings and solutions for the productive management of salt-affected soils.

- The ITPS, the GSP Secretariat and interested partners will organize the Global Symposium on Soils for Nutrition: "Soils, where food begins," on 26-29 July 2022 in a virtual format.

Suggested actions by the GSP Plenary Assembly (PA)

The Plenary Assembly may wish to:

- express recognition for the efforts made in organizing global symposia thus far and the active implementation of the related outcome documents;
- commend the resource partners who have financially supported the organization of these symposia, and encourage new resource partners to fund the forthcoming ones;
- acknowledge the outstanding work undertaken in organizing the GSAS in a virtual format and encourage the implementation of recommendations developed as a result of Symposium and summarized in the GSAS outcome document;
- call for strong participation in the Global Symposium on Soils for Nutrition: Soils Where Food Begins to be held on 26-29 July 2022;
- reaffirm its decision for 2023 Global Symposium on Soil and Water to be held in May 2023, and invite all partners to actively contribute to its organization; and
- encourage countries and other partners to join in the efforts of the ITPS, the Secretariat and co-organizers to implement the actions indicated in the outcome documents of all symposia.

6.1 Global Symposium on Soils for Nutrition

1. In light of the global challenges humanity faces today, including poverty, food insecurity and malnutrition, migration, environmental degradation and climate change, and the priorities of the One Health approach – spanning human health, environmental health, animal health and soil health – the ITPS and the GSP Secretariat named the next Global Symposium "Soils for Nutrition". It aims to highlight the strong connection between food security, crop, human, and animal nutrition and soil health. It is also intended to stress the fact that soil is where food begins, and as such is the origin of nutrients for human nutrition and health. Healthy soils (not only fertile) have a key role to play in combating malnutrition and food insecurity.
2. In response to these complex challenges, the ITPS and the GSP Secretariat, together with other partners, will organize the Global Symposium on Soils for Nutrition (GSOIL4N) in July 2022. The main objective of the Symposium is to review the state of play on the role of soil fertility in delivering sufficient, high quality, safe, and more nutritious food for animals and people. The Symposium is expected to identify critical knowledge gaps and provide the basis for discussion among policymakers, food producers, scientists, the fertilizer industry, practitioners and other stakeholders on the creation of solutions for a more nutritious agrifood system for enhanced human health and wellbeing while protecting the environment. The Symposium strives to help fulfil some of the targets of the 17 UN Sustainable Development Goals (SDGs).
3. The Symposium will bring science and policy together to review the status and challenges of soil nutrient management. It will be divided into four main themes:

    - Theme 1: Status and trends of global soil nutrient budget
    - Theme 2: Sustainable soil management (SSM) for food security and better nutrition
    - Theme 3: Impacts of soil nutrient management on the environment and climate change
    - Theme 4: Governance of soil fertility/soil nutrients.

6.2 Highlights of the implementation of outcome documents of past symposia

6.2.1 Global Symposium on Soil Organic Carbon (GSOC17)

4. The implementation of the GSOC'17 Outcome Document is complete for all eight recommendations. Since the 9th GSP PA, the following activities have continued or been carried out.

    - As per recommendation 1, since the beginning of 2021 the GSP Secretariat has organized five online training sessions focusing on mapping soil organic carbon (SOC) stocks and SOC sequestration potential at the national scale reaching over 320 participants from over 50 countries.
    - As per recommendation 3, the Global Soil Organic Carbon sequestration potential maps (GSOCseq) were launched (September 2021). The map is continuously being updated following a country-driven process by fostering and leveraging local expertise and data. After two years of extensive capacity development involving over 500 experts from 120 countries, national experts shared their results and main findings. The GSOCseq is generated by simulating the effects of adopting SSM practices and projecting their usage 20 years into the future to trace SOC stocks.
    - As per recommendation 5, the technical manual of recommended management practices for SOC maintenance and sequestration was published in September 2021. This technical manual is the first attempt to gather, in a standardized format, the existing data

on the impacts of the main soil management practices on SOC content in a wide array of environments, including the advantages, drawbacks and constraints.

- As per recommendation 6 and 7, a capacity development programme was kick-started to support the members of the International Network of Black Soils (INBS) to map the distribution of black soils at the national scale. The first version of the Global Black Soil Distribution Map (GBSmap v1.0) was prepared.
- As per recommendation 8, the GSP-Secretariat has launched the RECSOIL initiative. RECSOIL is an innovative initiative for scaling up SOC-centred sustainable soil management (SSM) in agricultural and degraded soils. Its objective is to support the provision of financial incentives for farmers who agree to implement good practices.

6.2.2 Global Symposium on Soil Pollution (GSOP18)

5. The follow up to the "be the solution to pollution" GSOP18 outcome document was addressed by the following actions:

    - As per recommendation 2, specific training and educational materials on soil pollution have been developed for the Global Soil Doctors programme and are to be delivered according to the country and local priorities.
    - As per recommendation 5, the expert working group, composed of more than 60 international experts, continues to make progress in developing technical guidelines for assessing, mapping, monitoring and reporting on soil pollution. This publication is expected to be finalized by the end of 2022. This work will be one of the first outputs of the newly established International Network on Soil Pollution (INSOP).
    - INSOP's first area of work on soil pollution assessment is based on a close collaboration with the Global Soil Laboratory Network (GLOSOLAN) to define and harmonise the best laboratory methods to quantify the main soil contaminants, thus addressing Recommendation 7 of the GSOP18 outcome document.
    - The Global Assessment of Soil Pollution report was launched in June 2021 and presented to the UN Environment Assembly (UNEA) at its fifth session, as requested by UNEA-3 and the recommendation 8 of the GSOP18 outcome document.

6.2.3 Global Symposium on Soil Erosion (GSER19)

6. There were six recommendations in the outcome document from the GSER19 Symposium. Although the Symposium was organized in 2019, the implementation of its recommendations was delayed due to the high workload at the GSP Secretariat between 2019 and 2021. Most of the subsequent GSER activities were concentrated on getting the conference presentations published. Two special issues were successfully published in the International Journal of Soil and Water Conservation Research and in the Journal of Land Degradation and Development. Towards the end of 2021, the implementation of the Symposium recommendations began as follows:

    - Recommendation 1 on the creation of an expert and multi-stakeholder working group: an expanded special working group on soil erosion (SWGSER) was formed after the International Network of Soil Information Institutions (INSII) meeting in October 2021. The Intergovernmental Technical Panel on Soils (ITPS) Working Group on Soil erosion met in early February 2022 and endorsed a plan of activities for the special working group SWGSER. The SWGSER held meetings in early March to strategize on the planned activities.

- Recommendation 2 on the organization of capacity development and training for countries to develop national soil erosion assessments: the guiding document on country guidelines and technical specifications has been drafted and is under discussion by the erosion working groups. The document will be instrumental in helping the countries prepare necessary data towards harmonized national soil erosion assessments. The implementation of recommendation 2 from GSER19 outcome document started in January 2022.
- Recommendations 3 to 6: The ITPS advised global soil erosion (GSER) activities start with the implementation of recommendations 1 and 2 throughout 2022-2023 to pave way for the implementation of the remaining GSER19 outcome document recommendations.

6.2.4 Global Symposium on Soil Biodiversity (GSOBI20)

7. Follow up on the "keep soil alive, protect soil biodiversity," outcome document (https://www.fao.org/documents/card/en/c/cb6005en), was addressed by the following actions:

- As per recommendation 1, the GSP Secretariat launched a global survey to define the state of the art of assessment and monitoring of sustainable management and conservation of soil biodiversity, which will lay the groundwork for the establishment of the Global Soil Biodiversity Observatory (GLOSOB).
- As per recommendation 2, the International Network on Soil Biodiversity (NETSOB) was established and through working group 1 (WG-1), started to develop the guidelines for measuring, assessing, and monitoring (MAM) soil biodiversity. During the first meeting of the WG-1, the table of contents was discussed and approved. A survey will be sent to the members of the WG-1 in which they can nominate themselves as authors in the sections of their interest.
- As per recommendation 4, NETSOB, through working group 2 (WG-2), started to develop a field manual on good management practices to conserve soil biodiversity and prevent soil biodiversity loss. During the first meeting of the WG-2, the table of contents was discussed and approved. A survey will be sent shortly to the members of the WG-2 in which they can nominate themselves as authors in the sections of their interest.
- As per recommendation 6, NETSOB, through working group 3 (WG-3), started to develop a methodology for the economic valuation of ecosystem services provided by soil biodiversity. During the first meeting of the WG-3, the table of contents was discussed and approved. A survey will be sent shortly to the members of the WG-3 in which they can nominate themselves as authors in the sections of their interest.
- As per recommendation 7, NETSOB, through working group 4 (WG-4), started to develop a report on the global status and regional trends in public policy on soil biodiversity. During the first meeting of WG-4, the table of contents was discussed and approved. A survey will be sent shortly to the members of the WG-4 in which they can nominate themselves as authors in the sections of their interest.

6.2.5 Global Symposium on Salt-affected Soils (GSAS21)

8. The outcome document made nine recommendations under three courses of action:

- Assessment, mapping, and monitoring of salt-affected soils (SAS).

- Integrated soil – water – crop solutions for the rehabilitation and management of salt-affected areas.
- An action plan designed to prevent and rehabilitate salt-affected soils, protect natural saline and sodic soils, and scale-up SSM practices.

9. As per Course 1, the INSAS has developed a global online questionnaire to define the latest techniques in assessment, mapping, monitoring, and sustainable management of salt-affected soils (SAS), which will be summarized in the global report on the status of salt-affected soils. The questionnaire will be sent to all stakeholders engaged in salt-affected soils.
10. As per Recommendation 2 on Refining and updating the protocols for mapping salt-affected soils using modern approaches, the INSAS Working Group on SAS assessment has developed a table of content of the protocol for sampling, measuring, and mapping SAS.
11. As per Course 2, the INSAS Working Group on SAS management has developed a template for a database on good practice or technology for the sustainable management of SAS.

6.3 Upcoming symposia: Global Symposium on Soil and Water (GSOW23)

12. The Global Symposium on Soil and Water GSOW23 to be held in May 2023 will focus on the soil-water relationships: healthy soils for water and clean water for healthy soils. The slogan of the Symposium will be decided at this PA and the proposals are presented in document 9 under the World Soil Day (WSD) theme. The Symposium will also contribute to the UN Water Action Decade 2018-2028 and provide the opportunity to follow upon the outcomes of 2023 UN Conference on Water during 24-25 March.