May 2022





Global Soil Partnership Plenary Assembly

Tenth session

Virtual, 23-25 May 2022

Report on normative tools and global actions on sustainable soil management: for information and decision (GSPPA: X/2022/5)

Executive Summary

- ➤ Given that the Global Soil Partnership (GSP) promotes sustainable soil management, a report on the main normative tools, initiatives and developments is presented during the PA.
 - ➤ The proposed new GSP Action framework (document GSPPA_X_2022_2) aims to consolidate the promotion of sustainable soil management through concrete actions on the ground.
- ➤ Improved soil governance is part of the core mandate of the GSP and as such a number of activities have been implemented to raise awareness and improve soil governance at the international and national level, including the launch and continuous update of the SoiLEX platform and the development of publications on soil governance.
- ➤ The <u>Voluntary Guidelines for Sustainable Soil Management</u> (VGSSM), which were endorsed at the 155th session of the FAO Council in December 2016, continued to be the main tool to advocate for sustainable soil management (SSM). Its adoption at national level constitutes the main challenge ahead.
- ➤ The 14th Global Forum for Food and Agriculture (GFFA) organized by the Federal Ministry of Food and Agriculture of Germany from 24-28 January 2022 attracted more than 2 200 participants and focused on, "Sustainable Land Use: Food Security Starts with the Soil". The Berlin Agriculture Ministers' Conference released a <u>Communiqué</u> affirming participants' commitment to maintaining and enhancing soil health and soil conservation.
- ➤ The implementation of the VGSSM is now complemented by the <u>Protocol for the Assessment of Sustainable Soil Management (SSM Protocol)</u> and a pilot was developed in Latin America

and the Caribbean, to validate it. This pilot will also facilitate the design of a database of SSM practices, which is expected to be replicated in all regions.

- ➤ The implementation of <u>The International Code of Conduct for the Sustainable Use and Management of Fertilizers</u> (Fertilizer Code) continued to be a priority for the GSP and it is advancing its' usage through various activities.
- ➤ The implementation of the Recarbonization of global soils (RECSOIL) initiative continues to follow the green or soil health path by five pilot sites in Costa Rica, Kenya, Mexico, and the Philippines. There is growing demand from more countries but the Secretariat faces financial limitations to accommodate such requests.
- ➤ The implementation of the Global Soil Doctors Programme continues in many countries around the world. The GSP Secretariat is providing technical support, soil testing kits, and posters for communication purposes, but there are financial limitations to accommodate all growing requests.

Suggested actions by the GSP Plenary Assembly

The Plenary Assembly may wish to:

- ➤ welcome the commitments and actions expressed in the 14th GFFA Communiqué and appreciate that they have been reflected in the new GSP Action Framework for 2022-2030;
- ➤ invite the GSP Secretariat to facilitate the implementation of activities cited in the 14th GFFA Communiqué provided there are resources available for it;
- ➤ acknowledge the efforts made in raising public awareness of soil governance, especially through the SoiLEX platform;
- > express appreciation for the efforts made in the implementation of the VGSSM and invite members to adopt the VGSSM and use its Protocol to assess if a given soil complies with the definition and principles of SSM;
- invite the Secretariat to advance the establishment of a global database on SSM practices following the launch of the technical manual on good practices for RECSOIL;
- ➤ invite countries and partners to adopt the Fertilizer Code and report the outcomes to the Secretariat;
- invite members, partners, focal points, and all relevant stakeholders to disseminate the results of the National Survey on the Use and Management of Fertilizers and the video to introduce the Fertilizer Code and to engage a wide public audience on the main issues related to fertilizer use and management across world;
- > acknowledge the progress made in the further developments and scaling up of RECSOIL's implementation worldwide;
- invite resource partners to provide financing to advance the RECSOIL initiative on the ground;
- > acknowledge the development and implementation of the Global Soil Doctors Programme and invite members and partners to adopt it.

5.1 Global Forum for Food and Agriculture (GFFA) Communiqué: Food Security Starts with the Soil

- 1. The last GFFA organised by the Federal Ministry of Food and Agriculture of Germany in January 2022 focused on "Sustainable Land Management: Food Security Starts with the Soil". The Berlin Agriculture Ministers' Conference confirmed the commitment shared by countries to promote a soil-preserving and future-proof agricultural sector. Some 80 agriculture ministers and high-level representatives from international organizations agreed to reflect such ambitions in the final Communiqué, which was presented to the Director-General of FAO, the Executive Director of the UN Convention to Combat Desertification (UNCCD), the Chair of the Committee on World Food Security (CFS) and the 2022 Chair of the Global Soil Partnership (GSP)'s Plenary Assembly (PA).
- 2. The commitments and actions expressed in the GFFA communiqué are reflected in the new GSP Action Framework for 2022-2030 and capture the global community's commitment to move towards healthy soils for all.
- 3. The fulfilment of the <u>Communiqué</u> will constitute an important milestone in advancing the adoption of sustainable soil management (SSM) by different stakeholders. It will serve as a key instrument to guide the GSP's actions and advocacy efforts to restore and conserve soil health.

5.2 Voluntary Guidelines for Sustainable Soil Management (VGSSM) and SoiLEX

- 4. Improving soil governance at all levels is part of the GSP's core mandate, as the Partnership supports and develops specific soil legislation and policies, making their implementation a tangible possibility for the benefit of future generations.
- 5. In January 2021, the SoiLEX platform was launched at a <u>virtual event</u> attended by over 800 participants from 160 countries. Since its launch, the platform is continuously updated thanks to the support of national focal points and experts.
- 6. The Soil Legislation Working Group, set up to oversee the proper functioning and full development of SoiLEX, was invited to participate in a special issue on soil governance in ELSEVIER's Soil Security journal. The issue is available for free access at this link.
- 7. In the framework of Eurosoil 2021, "Connecting People and Soils" which took place from 23-27 August 2021, the GSP organized the workshop, "Global Soil Governance: Status and Future Perspectives". This event aimed to reflect on the work done so far to put soils on the global policy agenda and to discuss the need to establish a binding mechanism on soils to ensure a strong commitment from all parties towards healthy soils.
- 8. The implementation of the <u>VGSSM</u>, has been a priority for the Secretariat and efforts to advocate for its adoption at national level are ongoing.
- 9. The implementation of the VGSSM is now complemented by the <u>Protocol for the Assessment</u> of <u>Sustainable Soil Management</u>, which was endorsed by the 8th GSP PA at an ad-hoc session in September 2020.
- 10. The protocol constitutes a fundamental tool to assess if any intervention implemented in the field, such as the improvement of productive systems, innovative new technologies, ecosystem restoration and carbon sequestration, is compliant with the definition of SSM.
- 11. A survey will be launched to learn about the adoption of the VGSSM on different levels to mark five years since the tool was launched.
- 12. The SSM Protocol and its manual will be widely used in all interventions, particularly related to those of RECSOIL.

13. The establishment of rewarding systems on the adoption of SSM under the framework of the VGSSM shall be explored.

5.3 The International Code of Conduct for the Sustainable Use and Management of Fertilizers

- 14. The International Code of Conduct for the Sustainable Use and Management of Fertilizers also known as the Fertilizer Code was jointly developed by the Intergovernmental Technical Panel on Soils (ITPS) and experts from academia, industry, civil society and the farming community and it was endorsed by the 41st Session of the FAO Conference in June 2019. Since then, the Fertilizer Code has been translated into all FAO languages and various activities have been planned for its application.
- 15. A global implementation plan was developed and focuses on four main components, a) the dissemination of the Fertilizer Code; b) the capacity development for the implementation of the sustainable management of fertilizers; c) the establishment of a holistic approach to sustainable soil and nutrient management; and d) the strengthening of enabling environments focusing on policy development.
- 16. A National Survey on the Use and Management of Fertilizers was launched in December 2021 in six languages with the goal of defining priority areas for the Fertilizer Code and the implementation and the identification of gaps and main obstacles to the sustainable management of fertilizers in participant countries. More than 150 participants from 60 countries responded to the survey which will support the action plan for the implementation of the Fertilizer Code. The survey was launched along with a <u>Video</u> in six languages for the dissemination of the Fertilizer Code and to further engage key actors directly or indirectly involved in the usage of fertilizers.
- 17. The Global Symposium on Soils for Nutrition will address and support several aspects associated with the Fertilizer Code, specifically under the themes 1. Sustainable soil management for food security and better nutrition, and theme 2: Impacts of soil nutrient management on the environment and climate change. More detailed information is included in item 6.1.
- 18. Two projects financed by the Chinese government are being implemented in sub-Saharan Africa. The projects focus on building national capacities on the sustainable use and management of fertilizers and soil fertility, improving national soil information systems on soils and fertilizers, guiding on fertilizer recommendations, validating current practices, and identifying opportunities for improving them, and strengthening capacities through training and educational courses for different stakeholders.
- 19. The Soils4Nutrition project financed by the German government, focuses on the demonstration that micronutrient contents of soils and crops can increase through the adoption of sustainable soil management practices, in association with capacity development and training activities for farmers, national agricultural research and extension research personnel.
- 20. The <u>International Network on Fertilizer Analysis</u> (INFA) was established in December 2020 to harmonize methodologies to assess the qualities of fertilizers and to strengthen capacities on fertilizer use. To date, INFA has more than 150 soil laboratories operating in more than 80 countries. For more information on the progress see item 8.3.
- 21. The development of the global soil nutrient budget map is a challenging task that will be divided into phases. The first phase will be carried out in 2022, and will consist of mapping soil nutrients inputs, including nitrogen, phosphorus, potassium, and micronutrients. The second phase will be developed in 2023 and will include the soil nutrient outputs including crop requirements, leaching, gas fluxes and erosion. Finally, the inputs and outputs will allow the

- GSP and partners to calculate and represent the soil nutrient budget. For detailed reporting on the progress and the timeline see item 8.1 (INSII).
- 22. The Secretariat and the ITPS are part of FAOs' Technical Advisory Group on Methane (TAG) contributing to the Global Methane Pledge which aims to reduce the emissions of methane and mitigate climate change.
- 23. The integration of the sustainable use and management of fertilizers is mainstreamed to all interventions on the ground including the SOILCARE project in the Caribbean.

5.4 RECSOIL: Recarbonization of Global Soils

- 24. The <u>RECSOIL</u> initiative was established in 2019 and officially launched on 17 June 2020 through a webinar to observe the World Day to Combat Desertification.
- 25. RECSOIL is an initiative to scaling up the adoption of SSM practices, soil organic carbon (SOC)-centred, to increase SOC stocks while boosting soil health and halting soil degradation.
- 26. In RECSOIL, there are two paths, the Green Path, and the Carbon Credit Path. The Green path is entirely focused on enhancing soil health and the provision of ecosystem services by increasing SOC stocks and minimizing greenhouse gas (CO₂, CH₄ and N₂O) emissions. In the RECSOIL-Green Path, the compliance with the VGSSM is critical and there are no carbon credits associated with it. The compliance with the protocol for the assessment of SSM is compulsory to measure and verify the implementation of SSM and for the provision of the ecosystem services. Additionally, the protocol for measurement, monitoring, reporting and verification of soil organic carbon (GSOC -MRV Protocol) is applied to quantify the SOC stocks and to reduce greenhouse gas (GHG) emissions.
- 27. With the launch of the Global Soil organic Carbon Sequestration map (GSOCseq), the identification of areas with potential for implementing RECSOIL on the ground was made possible. Accordingly, the Secretariat is piloting the RECSOIL programme in Costa Rica by including RECSOIL into the Payment for Ecosystem Services scheme PSA2. Similarly, the Secretariat is providing technical support to Mexico to prepare and submit a project proposal entitled RECSOILMEX to the Green Climate Fund (GCF). Mexico is also part of the pilot scheme of the Green Path together with Kenya and the Philippines.

5.5 Soil Doctors

- 28. The Global Soil Doctors Programme is a farmer-to-farmer training initiative that aims to support farmers to enhance their capacities and knowledge on SSM. The Programme was designed to support national and local extension services with the aim of empowering farmers within a community by training a lead farmer or, Soil Doctor, to advance the methods and tools to detect soil degradation problems and to provide on the ground solutions.
- 29. The <u>Global Soil Doctors Programme</u> includes a set of tools composed of educational materials. There are 28 posters on different topics, field exercises, a set of best practices and a soil testing kit which follows the VGSSM.
- 30. The launch in October 2020 was attended by 711 participants from 139 countries and provided the basis for the implementation of the Global Soil Doctors Programme around the world.
- 31. A global survey addressed to the potential promoters of the Programme, in different UN languages, allowed for a better understanding of the financial and technical needs for the implementation of the Programme. The resulting roadmap and training guidelines will allow

for the facilitation and implementation in the field and at the same time provide a flexible methodology.

- 32. Some national promoters and ongoing FAO projects started to implement the Programme and translated the educational materials into FAO languages including French, Spanish and Russian, and to some local languages like Bangla, Chichewa, Chimbutuka, and Kazak. These pilots allowed the training of 40 trainers and 740 farmers in Bangladesh, Malawi and Mexico.
- 33. A specific module called "Soils4Nutrition" was created in the framework of a German cooperation project, aimed at improving nutrition through the soil, crop, and human continuum, particularly in locally produced and consumed foods.
- 34. Several national institutions are developing collaboration projects for the implementation of the Global Soil Doctors Programme, at the national level such as in Bolivia, Colombia, Costa Rica and Ecuador in Latin America, Gambia and Kenya in Africa, and the Philippines and six countries from the Lakang-Mekong basin in Asia. GSP partners can now implement the Soil Doctors Programme into their activities, by registering as Soil Doctors Promoters. The common point among all these proposals is the willingness to establish a training programme that empowers farming communities to apply SSM.