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Global Soil Partnership Plenary Assembly

Ninth session

Virtual, 08-10 September 2021

**Report on Regional Soil Partnerships: for information and decision
(GSPPA: IX/2021/8)**

Executive Summary

- An effective network of Regional Soil Partnerships (RSPs) is key to the achievement of the Global Soil Partnership (GSP) mandate and objectives, as specified in its Terms of Reference. To date, all regions and in many cases sub-regions, have established RSPs.
- The Secretariat has continued to make use of all available funds and opportunities to support viable RSPs, particularly with regards to the execution of Regional Implementation Plans (RIPs).
- In the present COVID-19 pandemic context, the GSP Secretariat has organized two virtual meetings with the Chairpersons of all Regional Soil Partnerships. They briefed each other on respective challenges, stressed the need for adequate support in overcoming them and discussed proposals on how to promote horizontal, inter-regional cooperation. It was agreed that meetings would be held at regular intervals, depending on the urgency of matters to be addressed.
- According to the Terms of Reference and Rules of Procedure of the GSP, there is no advisory board or steering committee in the GSP structure, but the Chair of the Plenary Assembly. Between the Plenary Assemblies, some decisions are taken by the Intergovernmental Technical Panel on Soils (ITPS) and the GSP Secretariat. The Chairs of the RSPs considered that, in order to improve ownership and a more active role of the GSP Focal Points, a GSP Steering Committee could be established to support the implementation of decisions made at the Plenary Assembly. This would require a change in the Rules of Procedure, which could be a lengthy procedure. An alternative could be the creation of an ad hoc Steering Committee composed of the Chairs of the RSPs, the representatives of the GSP Focal Points and the GSP Secretariat.

Suggested actions by the GSP Plenary Assembly

The Plenary Assembly may wish to:

- reiterate the need for strong support to the RSPs by mobilizing resources (financial, expertise, hosting of meetings, etc.) and facilitating main regional activities, including networks and soil information systems;
- further encourage full involvement of the GSP Focal Points in regional activities and the establishment of strong supportive networks of experts in each region;
- welcome the two new sub-regional soil partnerships: in the Alpine and Pyrenean areas; and
- consider the establishment of an ad hoc Steering Committee of the Global Soil Partnership, as explained above.

8.1 African Soil Partnership (AfSP)

1. The Fourth Meeting of the African Soil partnership was held virtually on 29 September 2020. However, there was low participation so that another one was held in June 2021, with prime focus on reviewing the Regional Implementation Plan.
2. Some countries (Nigeria, Senegal and South Africa) held substantial events to celebrate World Soil Day 2020. Both indoor and outdoor events were organised to celebrate the day under the theme ‘keep soil alive, protect soil biodiversity’.
3. Some countries participated in training (Module I) of national experts in the preparation of the Global Soil Organic Carbon Sequestration (GSOCseq) map in December 2020. Countries that missed it took part in a second session in February 2021.
4. Some countries also took part in Module II training on the GSOCseq map based on case-by-case requests from countries needing assistance to finalise their maps.
5. The project “Capacity development on Sustainable Soil Management through soil laboratory development, soil testing and formula fertilization for Africa” was launched in January 2021 involving two countries: Rwanda and Uganda.
6. The Secretariat of the AfSP was represented at panel discussions during the first Soil Health and Root Forum organised by Syngenta in collaboration with the Forum for Agricultural Research in Africa (FARA) and other partners to enable clear understanding of the need for healthy soils for sustainable food production and safe environment.
7. A draft brochure highlighting key AfSP achievements and plans is currently under review. The aim is to showcase what has been done and use the brochure as an advocacy tool for resource mobilisation.
8. There was good participation from AfSP countries, individuals and institutions during the Global Symposium on Soil Biodiversity (GSOBI21).
9. The Secretariat of the AfSP is collaborating with the GSP Secretariat to mobilise resources through the AfriSoils programme and other initiatives to promote sustainable soil management activities in the region.
10. The AfSP Secretariat is also interacting with the GSP Secretariat to implement some activities under the Soil Doctor programme with interested institutions and partners.

11. The AfSP is supporting the dissemination of the Fertilizer Code within the region and supporting implementation of activities related to it.
12. The Fifth AfSP plenary meeting was virtually organized on 6-7 July 2021 where the status of this regional partnership and the work plan were reviewed.
13. The AfSP Secretariat is working together with the African Union in order to organize the Second Abuja Conference. Furthermore, discussions are under way to use the work of the AfSP as the basis for a Soils Initiative for Africa.

8.2 Asian Soil Partnership (ASP)

14. The Sixth Asian Soil Partnership (ASP) meeting was held virtually in February 2021 to: (i) update the national focal points on GSP activities of regional interest, (ii) inform each other on national activities on soil, (iii) brainstorm on which activities under the five GSP pillars of action to be implemented in the region in 2021, and (iv) discuss the participation of countries in the activities of the Centre of Excellence on Soil Research in Asia (CESRA). Mr. Pablo M. Montalla (Director of the Bureau of Soils and Water Management - Philippines) was elected as new Chair of the ASP.
15. A policy brief on the multi-faceted role of soils in Asia is under preparation, under the coordination of the ASP Pillar 2 Chair, Mr. Munir Zia (Pakistan) and the participation of countries representatives.
16. ASP representatives agreed not to implement the Global Soil Doctors programme in all countries in the same way. National success stories should be shared in ASP meetings to find a common ground for implementation across Asia, if feasible. Successful stories should be made available in local languages.
17. A regional database on research and development was developed, thanks to the support of the Pillar 2 former Chair, Mr. Kazuyuki Yagi (Japan). The database compiles information on leading/core soil science research and development institutions, major soil science research and development projects, and research priorities. The database was shared with the Centre of Excellence for Soil Research in Asia (CESRA) to be hosted on its website and will be uploaded on the ASP webpage as well.
18. Soil Atlas of Asia: this activity started in March 2018 and is of interest to countries in the Near East and Central Asia. The expected publication date of the Atlas is December 2021.
19. Around 115 soil laboratories from 20 countries in the region joined the Global Soil Laboratory Network (GLOSOLAN) and the Asian Soil Laboratory Network (SEALNET). The regional network organized its fourth annual meeting in July 2020 to revise its work plan and position in GLOSOLAN. The current SEALNET Chair is Dr Gina P. Nilo (Philippines), while Mr. Sunjay Srivastava (India) is acting as Vice-Chair. Many Asian countries downscaled GLOSOLAN activities by establishing national soil laboratory networks (NASOLAN) and by organizing proficiency tests (PTs) at national level (e.g. China, Indonesia, Thailand, India and the Philippines).
20. After the good contribution to the soil organic map, the region is advancing in the salinity and the carbon sequestration potential maps. Efforts are currently made also to progress in the realization of the Black Soil map.

8.3 Near East and North African Soil Partnership (NENA)

21. The Sixth meeting of the Near East and North Africa (NENA) Soil Partnership took place online on 18 and 19 November 2020, aiming to (i) update national focal points on GSP activities of regional interest, (ii) inform each other on national activities on soil, (iii) brainstorm on upcoming regional activities and project proposal ideas, and (iv) introduce participants to the regional TCP/RAB/3802 project.
22. A project proposal on sustainable soil management that aims to prevent and reduce soil degradation and to rehabilitate degraded soils is being developed. The project was initially designed for the Maghreb sub-region but it can be extended to the whole NENA region if the work is organized by similar agro-ecosystems.
23. Under Pillar 2, the NENA Soil Partnership is currently developing five policy briefs on: (i) life and soil biodiversity, (ii) soil pollution in the NENA countries, (iii) soil fertility and implementation of sustainable soil management (SSM) to boost soil productivity, (iv) best practices to prevent soil erosion (including water harvesting), and (v) conservation agriculture and carbon sequestration. Once finalized, these policy briefs will be used for raising awareness and mobilizing financial resources.
24. A regional TCP project was formulated and submitted. It aims to raise awareness on the importance of soils in the region and to conserve and manage them sustainably. The project involves 11 FAO Member Countries (Egypt, Iran, Iraq, Jordan, Lebanon, Morocco, Oman, Sudan, Syria, Tunisia, and Yemen) and Palestine.
25. Many GSP publications are being translated into Arabic, especially from the Global Soil Laboratory Network (GLOSOLAN) and the Global Soil Doctors programme.
26. The region is making progress in the preparation of the Global Soil Salinity Map (GSS map) and the GSOCseq map. A 30-hour capacity development course was organized by selected experts to support the preparation of the GSOCseq map.
27. Soil Atlas of Asia: this activity started in March 2018 as it is of interest to some countries in the Near East. The expected publication date of the Atlas is December 2021.
28. Around 70 soil laboratories from 17 countries in the region joined the GLOSOLAN and the Near East and North African Soil Laboratory Network (NENALAB), since their establishment in 2020. The current NENALAB Chair is Mr. Abdelmjid Zouahri (Morocco), who is supported by a Vice-Chair for the Near East sub-region (Mr. Riham Zahalan - Syria), and a Vice-Chair for North Africa (Ms. Hana Nabil - Morocco).
29. The new NENA Partnership governance is made up by Mr. Rachid Moussadek, Chair from Morocco, Mr. Hamed Al Thuhli (Oman) as Vice-Chair for the Near East, and Mr. Abdelmjid Zouahri (Morocco) as Vice-Chair for North Africa.

8.4 European Soil Partnership (ESP)

30. ESP governance: Mr Rainer Baritz, European Environment Agency was elected as the new Chair. . Germany (Thuener Institute) will provide the ESP Secretariat. The composition of the steering committee has been expanded with a representative of country focal points (nomination and selection procedure not in place yet) and a representative of the new subregional Pyrenean Soil Partnership. Where necessary and available, co-Chairs for Pillars

are appointed. A revision of the ESP Terms of Reference is foreseen. The 7th ESP Plenary Meeting was held 10th September 2020, and the 8th on 24 June 2021.

31. Implementation, general situation: The ESP Implementation Plan has been initially scheduled to end in 2020, while its revision is currently pending general GSP stock taking and expected effects on the GSP Pillars. In general, implementation until now has prioritized inputs to global GSP products (indicator maps, SoiLEX, Global Assessment of Soil Pollution), so that many envisioned more specific ESP products were not pursued. ESP work currently exclusively depends on in-kind support.
32. Current actions (highlights): Specific tasks of interest are currently implemented via different projects and institutions: relationship and implications of the Global Soil Information System (GloSIS) and the European data exchange standard INSPIRE (EJP Soil project); effect of the Common Agricultural Policy on soil quality (European Commission contract study), soil indicators and thresholds (EEA), creation of the European Soil Observatory and extension of the European LUCAS Soil monitoring programme (JRC), the BonaRes Soil Research Service Portal (UFZ, Germany), future research programming (Mission Board on Soil Health and Food), and EUROSOLIL research conference 23-27 August 2021.
33. Future actions: For the upcoming implementation period 2021/2022, the ESP Pillars have announced a series of workshops and activities: Pillar 1: Follow up to the finalized compilation of EU soil projects related to SSM (conducted by partner Wageningen University). Pillar 2: (a) World Soil Day celebration (likely to be held in Brussels), (b) new ESP web site; Pillar 3: meeting of chairs of European research consortia, Pillar 4: exchange of experiences of national indicator maps; Pillar 5: joint workshop between EJP Soil (research infrastructure) and EUROSOLAN.
34. Subregional soil partnerships:
 - a. Eurasian Subregional Soil Partnership: key activities: Pillar 1: SSM in the Eurasian Region (book); Pillar 2: www.eurasian-soil-portal.info; Webinar “Sustainable Soil Management. Climate Change and Agriculture in the Eurasian Region: Threats, Challenges or New Opportunities” (24 February 2021); Pillar 4: Regional training on National Soil Information Systems (1-15 September 2020).
 - b. Pyrenean Subregional Soil Partnership (founded 2021); primary topics of interest: standardized, homogeneous soil information, tackle soil erosion, soil organic carbon stocks and storage potential, soil protection. Working Groups: Soil Information, Soil Awareness, Soil Degradation.
 - c. Alpine Subregional Soil Partnership: key activities: Pillar 1: translation of the FAO Voluntary Guidelines for Sustainable Soil Management to Slovenian and German; Pillar 2: newsletter (200 Alpine Soil Partners); preparation of a portable soil monolith, Course on mountain soils for professionals (July 2021); Alpine SOILutions (Congress, November 2021); www.alpinesoils.eu.

8.5 Latin American and the Caribbean Soil Partnership (ASLAC)

35. The [Second Annual Meeting of ASLAC](#) was organized in July 2021, giving greater dynamism to the actions of the RIP that was enhanced with a preparatory meeting held in November 2020. ASLAC framed its actions both in relation to the Pillars of the GSP, as well as to

thematic areas, defining four working groups: 1- Sustainable Soil Management 2- International Code of Conduct for the Use and Management of Fertilizers, 3- Soil Doctors, and 4 - RECSOIL. A new governance of the partnership was also set. The new Chair is Ms Sol Ortiz (Mexico).

36. SSM Working Group: the activities were addressed through the regional TCP Project "Actions for the climate management of agricultural ecosystems with emphasis on water and soil", launched on 25 November 2020. It was also presented at a meeting to all FAO Representations in the region. Its purpose is to improve capacities for the adoption of sustainable soil practices, conducting regional training, gathering information, and establishing pilots for the validation of the Protocol for the assessment of Sustainable Soil Management. In particular, surveys were completed to create a database on soil management practices applied in the countries and in FAO projects in the region.
37. Working Group on the International Code of Conduct for the Use and Management of Fertilizers: implementation work is being carried out in an articulated manner among all the regional partners that expressed their interest. The following lines of action were identified: the strengthening of the national fertilizer registry systems, the development and strengthening of capacities at the institutional and farmer levels (biological and organic products specifically), workshops and training sessions, among others.
38. Soil Doctors Working Group: design of actions takes account of regional specificities and their link with pre-existing projects or programs in different countries. All the posters were translated into Spanish and progress was made in the search for the soil kits and the promoters of the program.
39. RECSOIL Working Group: ASLAC already have examples, as is the case in Costa Rica, Colombia and Mexico.
40. The Latin American Soil Laboratory Network (LATSOLAN) and GLOSOLAN: participation of 23 countries and 150 laboratories in the ring test.
41. Pillar 4: the region is advancing firmly in the salinity and the carbon sequestration potential maps. Efforts are also made in the realization of the black soil map.
42. Technical and financial tools to assess the productive and environmental potential of soils in Latin America and the Caribbean: a webinar was held in order to present GSP initiatives, programs and tools to support the activities of the countries in compliance with the 2030 Agenda. The webinar was held in three days, with the main focus on the RECSOIL program, and the other 2 days dedicated to sustainable soil management (e.g. via TCP) and the soil doctors' program.
43. All ASLAC activities are being closely coordinated with the FAO Regional Office for Latin America and the Caribbean, in order to establish synergies with other FAO Projects and reach each country more effectively.

8.6 Pacific Soil Partnership (PSP)

44. Many collaborative activities across the Pacific Region have been hampered by the travel restrictions imposed due to the COVID-19 pandemic. As direct interaction with the GSP Secretariat and other countries at meetings of the GSP working groups has not been possible,

sub-regional country representatives sought to engage where possible with the GSP and the working groups through video conferencing.

45. As a contribution to Pillar 1, the PSP has supported the Koronivia Joint Work in Agriculture (KJWA) in developing a series of webinars on different topics related to sustainable soil management and in developing a project proposal for Pacific Islands.
46. Under Pillar 2, training on diagnostic skills and soil testing for Tonga key stakeholder staff were organised that concluded with the decision of developing national soil management guidelines.
47. The updated Pacific Soil Portal was publicly launched to coincide with World Soil Day 2020. A Governance group has been established and made a number of decisions, including a mandate to Manaaki Whenua Landcare Research (MWLR), New Zealand and the Pacific Community (SPC) to explore several hosting options. Further work has taken place to extract soil profile data from legacy reports with the resulting soils data harmonised. The data will be made available through the Pacific Soils Portal.
48. An important development for soil governance in the region is the adoption of Australia's new National Soil Strategy launched in June 2021. It will assess, manage and improve Australian soil over the next 20 years. The strategy highlights three broad objectives: prioritising soil health, enhancing soil innovation and management, and strengthening soil knowledge and capacity.
49. As part of Pillar 3, the PSP members actively participated in the Global Symposium on Soil Biodiversity and a regional soil biodiversity workshop was organised on 12 May 2021. The session was jointly organized by FAO, SPC and the Secretariat of the Pacific Regional Environment Programme (SPREP) in preparation for the forthcoming meetings of the Convention on Biological Diversity, CBD COP15.
50. The Commonwealth Scientific and Industrial Research Organisation (CSIRO) provided financial sponsorship for 11 Pacific island participants at the upcoming Australia and New Zealand joint Soil Science Society Conference, held in Cairns, Australia from 27 June to 2 July.
51. The PSP has been particularly active on Pillar 4 activities, although contributions to the latest GLOSIS data products GSSmap and GSOCseq map are not yet completed for the region. PSP members have contributed to the development of the new Pillar 4 Implementation Plan. Staff from MWLR (New Zealand) have continued to provide technical advice to the World Soil Data Centre regarding the development of GLOSIS. Australia continues to play a leadership role across the Pacific region with key Australian Centre for International Agricultural Research (ACIAR) funded soil projects approved across the Pacific islands and with Papua New Guinea, aimed at developing and improving country and regional soil information systems, data and knowledge. CSIRO is active in the trial of CountrySIS packages developed by the GSP and the International Soil Reference and Information Centre (ISRIC) for potential use and deployment across the region.
52. MWLR has also been contributing to various soil ontology initiatives: the Earth Science Information Partners (ESIP) soil ontology working group and with the Centre for eResearch and Innovation at Federation University with respect to Australian Soil Standard controlled vocabs. Learnings from this work is feeding into technical feedback regarding the development on a GLOSIS ontology.

53. Under Pillar 5, PSP is contributing to GLOSOLAN spectroscopy activities. Soil samples in the National Soil Archive are being scanned to provide data for spectral model development.

8.7 North American Soil Partnership (NSP)

54. Under Pillar 1, the North America Soil Partnership has been highly involved in the Black Soils initiative, completing the mapping exercise and writing a chapter for the GSP Black soils publication.
55. The NSP distributed the request to provide inputs to the Protocol for the assessment of sustainable soil management practices among regional experts and provided the feedback from 45 experts.
56. The NSP also contributed to the Technical Manual of Recommended Management Practices for Soil Recarbonization and provided case studies on Soil Carbon Management on Biochar, Zonal Tillage, Wind Breaks, Biomass Production, etc.
57. Canada recently announced the Agricultural Climate Solutions (ACS) program, which is a 10-year investment to establish a strong, Canada-wide network of regional collaborations led by farmers and including scientists and other stakeholders. ACS will aim to develop regional collaboration hubs, also known as "Living Labs" in every province in Canada, oriented to develop and share farming practices that best store carbon, reduce greenhouse gas emissions, and mitigate climate change. The ultimate goal is to have the agriculture sector working together to support Canada's Strengthened Climate Plan to reduce greenhouse gas emissions by 30 percent below 2005 levels by 2030, and towards net-zero emissions by 2050. This work will also help protect biodiversity, improve water and soil quality, and strengthen farmers' bottom lines.
58. In addition, the Earth Day Panel Discussion was sponsored by Prairie View A&M University and focused on the theme "Earth Restoration under Uncertainty: Accomplishments and Future Outlooks". Over 60 PVA&MU students, faculty and staff attended the virtual panel discussion.
59. In the framework of Pillar 2 and for the celebration of World Soil Day, the [Soil Health Research Forum - Behaviour Change, Baseline Data and Best Management Practices](#) was organised. FAO's Liaison Office for North America participated in 2020 World Soil Day Webinar "Keep soil alive, protect soil biodiversity"
60. Virtual technical assistance and training were organised (in view of the COVID-19 pandemic situation), covering digital soil mapping, soil survey or dynamic soil properties, among other topics.
61. As regards Pillar 3, NSP contributed to the 2020 FAO Report: State of Knowledge of Soil Biodiversity, detailing the importance of fungal, invertebrate, and bacterial biodiversity in North American soils. Regional experts also took part in the Global Symposium on Soil Biodiversity in April 2021.
62. Both countries are supporting targeted research on soil, particularly focused on greenhouse gas emissions from agriculture, soil biodiversity and quantification of soil health.
63. Regarding Pillar 4, NSP is actively contributing to the International Network of Soil Information Institutions (INSII) and GLOSIS activities. NSP has contributed to the preparation of the GSS map, having submitted the national maps for both Canada and the

United States of America and related reports on salt-affected soils. Both countries are also participating in the preparation of the Global Soil Organic Carbon Sequestration Potential map.

64. A national project has been funded in Canada to fulfil the GSP criteria for soil data at 1 x 1 km scale but also include an effort at 250m x 250 m scale for Canada's cropland and grazing land areas.
65. The United States of America is particularly active in implementing the workplan of GLOSOLAN under Pillar 5, including the attendance to the 4th GLOSOLAN meeting and the development of standard operating procedures. NSP partner, Kellogg Soil Survey Laboratory, KSSL, is co-leading the GLOSOLAN activities on soil infrared spectrometry. The KSSL was tasked to provide the SOPs for sample preparation and mid-infrared spectral data collection.