

**NENA-VI/20/Report**



**Food and Agriculture  
Organization of the  
United Nations**



# **Report of the Sixth meeting of the Near East and North Africa (NENA) Soil Partnership**

Online meeting, 18-19 November 2020

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FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

Rome, 2020

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## 1. Introduction

The sixth meeting of the Near East and North Africa (NENA) Soil Partnership took place on 18 and 19 November 2020 (see agenda in Annex I). Due to the COVID-19 situation, the meeting was held virtually on the online platform Zoom. Thirty-three participants from 14 countries attended the meeting (see Annex II), including representatives from FAO country and regional offices. The meeting aimed to (i) update national focal points on Global Soil Partnership's 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.

The meeting was opened by Ms. Iman Sahib Salman (Chair of the NENA Soil Partnership) and by Mr. Ronald Vargas (GSP Secretary). Ms. Salman recalled the achievements of the partnership in 2020 and thanked the NENA Chairs of the five GSP Pillars for their hard work. She also thanked all NENA countries for their contribution to GSP activities such as the writing of the Soil Atlas of Asia, the preparation of the Global Soil Salinity Map (GSSmap), the participation in the International Network of Salt-Affected Soils (INSAS), and the establishment of the Near East and North Africa Soil Laboratory Network (NENALAB). Mr. Ronald Vargas stressed the importance of soils in NENA, recalling that this is a region where soil and water cannot be treated separately. In this regard, Mr. Vargas invited participants to discuss soil issues in relation to water scarcity and soil salinity. He also encouraged participants to provide sincere inputs on the main needs of their countries so that the GSP can draft ad-hoc project proposals. Ultimately, Mr. Vargas thanked all the national focal points and FAO country offices for their support in drafting of the regional TCP/RAB/3802 project; this is the first ever TCP project on soil approved in the region.

## 2. GSP developments of regional interest

Ms. Lucrezia Caon (NENA Soil Partnership coordinator at the Global Soil Partnership) updated participants on the main upcoming activities of the GSP in the region.

- **Pillar 1: promote sustainable management of soil resources for soil protection, conservation and sustainable productivity**
  - **Implementation of the Sustainable Soil Management Protocol:** the protocol serves to assess whether a management practice is sustainable according to the definition of sustainable soil management in the Voluntary Guidelines for Sustainable Soil Management. The assessment is based on the use of a set of chemical, physical and biological indicators.

The protocol was endorsed by a special session of the GSP Plenary Assembly in September 2020 and the GSP is currently finalizing the Annexes on field and laboratory soil analysis. The final document will be published by the end of 2020.

Countries were invited to inform Ms. Carolina Olivera ([Carolina.oliverasanchez@fao.org](mailto:Carolina.oliverasanchez@fao.org)) on any ongoing projects they would like to have evaluated through the protocol.
  - **Implementation of the International Code of Conduct for the Sustainable Use and Management of Fertilizers:** the Fertilizer Code was written in response to (i) COAG 25's recommendation for FAO to intensify its food safety work and technical support to smallholders at the local level on the sound use of fertilizers and pesticides, (ii) the achievement of the Sustainable Development Goals, and (iii) the UNEA 3 Resolution on managing soil pollution to achieve

sustainable development. Ultimately, the Fertilizer Code was endorsed by the 41<sup>st</sup> session of FAO Conference in 2019 and officially launched through a webinar on 19 May 2020.

Looking at its implementation, the GSP is currently:

- Launching the International Network on Fertilizer Analysis (INFA) on 8 and 9 December 2020. INFA will operate within the framework of the Global Soil Laboratory Network (GLOSOLAN). All participants are welcome and encouraged to attend the launch meeting of the network and contribute to the implementation of its activities.
- Preparing a short survey to prioritize the activities to be implemented in each region. The survey will be sent to all national focal points as soon as possible.

- **Pillar 2: encourage investment, technical cooperation, policy, education, awareness and extension in soil**

- Celebration of the **World Soil Day 2020 “Keep soil alive, protect soil biodiversity”**. Ms. Caon reminded participants to register the WSD celebrations they are organizing on the WSD website and to address all their questions to [world-soil-day@fao.org](mailto:world-soil-day@fao.org)
- **SoiLEX**, the newest GSP tool on soil governance. SoiLEX is an online global database specifically on soil protection and soil degradation prevention legal instruments. It aims to facilitate access to information on the existing legal instruments in force and bridge the gap between the various stakeholders. More specifically, it aims to:
  - Support the development of adequate soil legislation as a contribution to sustainable soil management;
  - Enhance the capacity of national, regional, local authorities and other stakeholders in soil legislation;
  - Develop new knowledge, documenting existing good practices, identifying and adapting tools in relevance to soil threats;
  - Empower civil society by giving them access to legislative materials.

SoiLEX will be ready in December 2020. The official launch of the platform is scheduled in January 2021.

Participants were kindly asked to:

- Respond to a questionnaire on national soil legislations available at <http://www.fao.org/global-soil-partnership/resources/highlights/detail/en/c/1274929/>
  - Support the update and growth of SoiLEX;
  - Promote this tool at the country-level.
  - Join the working group on SoiLEX, noting that this is mainly composed of experts in legislation (not soil scientists). In this regard, participants were kindly invited to involve other national experts in soil legislation that might be interested to join the working group. The concept note and preliminary work plan of the working group was sent to all participants by email.
- **Implementation of the [Global Soil Doctors Programme](#)**: the programme was launched on 5 October 2020 and consists of a farmer-to-farmer training initiative to be implemented by local promoters, with GSP support, on a volunteer basis. Interested farmers in the community will

receive general training, while those selected to serve as Soil Doctors will receive higher-level training. Soil Doctors are provided with a toolbox comprising an implementation manual, a soil testing methods manual and some educational material.

The GSP is currently testing the soil kits to be given to the Soil Doctors, implementing the programme in a few pilot countries and preparing a short survey to collect the names of those interested in implementing the programme. The survey will be sent to all national focal points by the end of November 2020. All those who respond to the survey will be contacted by the GSP for the development of country-specific implementation plans.

- **Pillar 3: Promote targeted soil research and development focusing on identified gaps, priorities and synergies with related productive, environmental and social development actions**

- **International Network on Salt-Affected Soils (INSAS):** it was launched in November 2019 during the Global Forum on Innovations for Marginal Environments organized by the International Center for Biosaline Agriculture (ICBA). INSAS was established to promote cooperation and join efforts to face the challenge of sustainably managed salt-affected soils especially in NENA and Eurasian countries. More specifically, it aims to (i) provide a platform for countries with salt-affected soils to discuss common issues related to the conservation and sustainable management of salt-affected soils, (ii) foster collaboration among these countries towards promoting the sustainable use and management of salt-affected soils and identify relevant research gaps, and (iii) serve as a platform for knowledge sharing and technical cooperation on salt-affected soils management.

The GSP will organize the first INSAS meeting in January or February 2021 to define its work plan and governance. Additional information on the meeting will soon be sent to all national focal points.

If not done yet, all countries and organizations wishing to join and contribute to the work of INSAS should send an email to Mr. Filippo Benedetti at [Filippo.benedetti@fao.org](mailto:Filippo.benedetti@fao.org).

Although a clear work plan has yet to be developed, some activities on salt-affected soils are already ongoing:

- The development of the Global Soil Salinity Map (to be launched in 2021);
  - The writing of the Global status of salt-affected soils (to be published in 2021);
  - The organization of the Global symposium on salt-affected soils (September 2021, Uzbekistan).
- **Soil Atlas of Asia:** this activity started in March 2018 and is of interest to countries in the Near East (see Figure 1). National focal points of the interested countries were kindly asked to nominate their representatives in the Editorial Board, to work on the preparation of their WRB soil classification maps and to review their country profiles. In this regard, they were reminded that the 4<sup>th</sup> Editorial Board meeting will take place from 24 to 27 November 2020 on the online platform Zoom.

The expected publication date of the Atlas is December 2021.

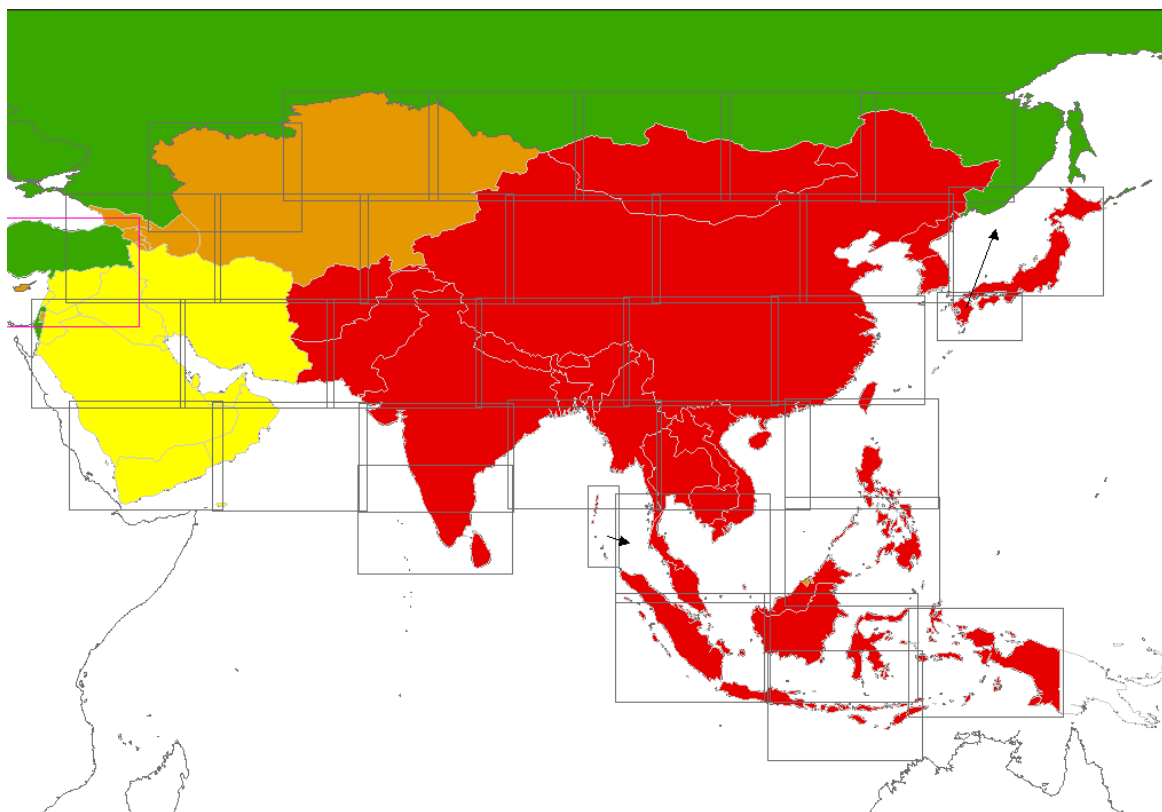


Figure 1. Geographic coverage of the Soil Atlas of Asia

- **Pillar 4: Information and data**

- **Global Soil Salinity Map (GSS Map):** the GSP has already implemented the following activities for the preparation of the GSS Map:
  - Guidelines and Technical Specifications
  - Technical Manual and training materials
  - Capacity development: a training on digital soil salinity mapping for the NENA Soil Partnership was organized in December 2019 in Tunis, Tunisia. Countries that did not participate to the training on digital soil salinity mapping (Saudi Arabia, Bahrain, Egypt, Qatar, Kuwait and United Arab Emirates) were invited to contact Mr. Christian Omuto ([Christian.Omuto@fao.org](mailto:Christian.Omuto@fao.org)). The GSP can organize a special training session for them and for all countries that still have to submit their map as needed.

The preparation of national maps and the writing of the report on the global status of salt-affected soils are ongoing, while the compilation of the final map and the GSSPmap technical report are pending. In this regard, all countries have been kindly invited to submit their national soil salinity maps as soon as possible. Please note that the original deadline for submission of the national maps was August 2020. Figure 2 reports the status of submission of national soil salinity maps.





Figure 2. Status of submission of national soil salinity maps

All countries were also invited to send their chapter for the Global Status of Salt-Affected Soils book by 15 December. In this regard, it was pointed out that each country is allocated a chapter and that the book should be published together with the GSS Map. The book chapters should be sent to Mr. Filippo Benedetti ([Filippo.Benedetti@fao.org](mailto:Filippo.Benedetti@fao.org)) and to Mr. Christian Omuto ([Christian.Omuto@fao.org](mailto:Christian.Omuto@fao.org)).

Regarding soil salinity, Ms. Caon informed participants that the GSP was looking for an expert on the topic to be hired to look after INSAS and the implementation of soil salinity activities.

- **Global Soil Organic Carbon Sequestration Potential Map (GSOCseq. Map):** this map is needed to fill a big gap, to simulate soil organic carbon stocks over a 20–year period in agricultural lands and quantify the soil organic carbon sequestration potential under different sustainable soil management and business as usual (BAU) scenarios at national scale. This will eventually give us a global perspective and understanding of the critical role of soils in major global issues.

Looking at the development process of this map, the GSP has already implemented the planning and technical development phases that culminated in the publication of the Technical specifications and country guidelines for Global Soil Organic Carbon Sequestration Potential Map. This document contains information on product specifications, procedures, data requirements, data sources, quality assurance and quality check, data policy and delivery process. It was developed through an extensive research and consultation process, involving scientists, policy makers, FAO members, and international and intergovernmental panels, providing background, product specifications and deliverables.

In terms of capacity development and production, the GSP is currently organizing a 30-hour course divided into 2 modules for each region. The training for the NENA Soil Partnership – Module I will take place from 7 to 11 December 2020. All participants will receive an email with all the required information and training material. Please note that the countries in red in Figure 3 have yet to nominate their experts to work on the GSOCseq. map.



Figure 3. Status of nomination of national experts to work on the GSOcseq. Map

- **International Network of Soil Information Institutions (INSII):** INSII is composed by nationally mandated institutions and GSP partners developing the Global Soil Information System (GLOSIS). These institutions are also active members of the Regional Soil Partnerships. INSII members are the main implementing institutions of the Pillar 4 Implementation plan.

These institutions have the technical ability to develop and share selected national soil information and data. All institutions, whether sub-national or national, regional or global, can join the INSII network to collect and distribute information on the status of the soil resource. For more information contact [Yusuf.Yigini@fao.org](mailto:Yusuf.Yigini@fao.org)

Countries yet to nominate their experts to INSII are Egypt, Kuwait, Libya, Qatar, Saudi Arabia and United Arab Emirates. National focal points are kindly asked to nominate their experts to serve in INSII at the following link: <https://forms.gle/u3EuzDWvtnbc2VLp9>

- **Pillar 5: Harmonization of methods, measurements and indicator for the sustainable management and protection of soil resources**
  - **Global Soil Laboratory Network (GLOSOLAN):** GLOSOLAN was established in November 2017 to build and strengthen the capacity of laboratories in soil analysis and to respond to the need for harmonizing soil analytical methods and data. The network has three major areas of work: standard operating procedures, quality assurance and quality control, and laboratory equipment, which includes soil spectroscopy.

At present, almost 600 laboratories registered in GLOSOLAN, of which 61 are from NENA. The Near East and North African Soil Laboratory Network (NENALAB) was established in June 2020 and has the following governance:

- Chair: Mr. Abdelmjid Zouahri (Morocco)
- Vice-Chair for the Near East: Mr. Alaa Khallouf (Syria)
- Vice-Chair for North Africa: Ms. Hana Nabil (Morocco)

GLOSOLAN is currently giving much attention to the establishment of National Soil Laboratory Networks (NASOLANs), which are a responsibility of the National Reference Laboratories. It

should be noted that the National Reference Laboratories are appointed by the GSP national focal points. In this regard, Ms. Caon kindly asked participants to:

- Spread the voice on GLOSOLAN and NENALAB, and motivate laboratories to register to the network by sending an email to [lucrezia.caon@fao.org](mailto:lucrezia.caon@fao.org) (GLOSOLAN coordinator);
- Nominate their National Reference Laboratories (if not done already). This request is particularly relevant for Egypt, Kuwait, Libya, Qatar and the United Arab Emirates. National Reference Laboratories should be identified based on the criteria in the Terms of Reference available at <http://www.fao.org/3/ca7509en/ca7509en.pdf>
- Please support politically and if possible financially the GLOSOLAN registered laboratories in your country and your National Reference Laboratory especially.

### 3. National updates on soil

National focal points were kindly invited to share information on national activities on soil in 2020. The link with the five GSP Pillars of action and with World Soil Day was maintained as much as possible.

#### Egypt

Mr. Alaa El-Bably used two case studies to present sustainable soil management practices in Egypt. The first case study showed how irrigation systems and cropping patterns have been adapted in the Nile Delta, according to the soil type and soil thermic regime in the different zones (delta apex and pro delta). The outcomes of this practice include the prevention of soil salinity by protecting soil water reservoir from sea water intrusions. The second case study focused on agro-ecosystem protection strategies in the Siwa Oasis (North-West of Egypt), an important area due to the interactions between the indigenous people and the natural environment, affected by land degradation. The presentation of Mr. El-Bably is available [here](#).

#### Iran

Mr. Jahanbakhsh Mirzavand reported on the work done since the establishment of Iranian Soil Partnership, stressing the attention on two main achievements: (i) the creation of a General Directorate Office for Soil Affairs and Soil Conservation and (ii) the authoring of the National Soil Protection and Preservation Act by creating an expert team and by obtaining the endorsement of the national parliament. Moreover, great efforts were made in awareness raising at different levels: young generations through the preparation of a school textbook, experts through the promotion of the Voluntary Guidelines of Soil Sustainable Management (VGSSM), and policy makers through the development of guidelines for the Soil Protection Act, which was approved by the national parliament. Many meetings and trainings have been organized under Pillars 1 and 3 to encourage discussion on the different topics and to enlarge the list of experts involved. Regarding Pillar 4, the National Soil Information System was completed, and the national soil salinity map is currently in progress. A national network of soil laboratories has been created to better downscale and implement locally the activities of the Global Soil Laboratory Network (GLOSOLAN). The presentation of Mr. Mirzavand is available [here](#).

#### Iraq

Ms. Iman Sahib Salman listed all the successful initiatives promoted in the country in the framework of the GSP pillars of actions, especially on awareness raising (via articles, broadcasting interviews and social media) and on soil salinity (INSAS and GSS map). Institutions in the country also contributed to the Soil Atlas of Asia by providing the soil map of Iraq. Ms. Salman reported the trainings and fields activities aimed to highlight to farmers the potential asset of adopting soil conservation practices and integrated management strategies for

irrigation and fertilization. Soil laboratories in Iraq joined the Proficiency Test (PT) organized by GLOSOLAN in 2019 and attended many workshops and meetings on the application of spectroscopy to soil analysis. Moreover, a list of inputs from the country's experts to the Protocol for the assessment of sustainable soil management, implemented by GSP, was displayed. The presentation of Ms. Salman is available [here](#).

## Jordan

Mr. Mahmoud Hasan Alfraihat described the progress made in the country under all pillars, emphasizing the application of new technologies and tools in soil surveying and mapping, and, above all, in the adoption of sustainable land and water resources management in different contexts (farms, rangelands, forests). Through improved communication between farmers and institutions, it has been possible, despite the COVID-19 pandemic, for Jordanian institutions to provide the national government with an experienced soil mapping service and to technically support national and international organizations in their activities related to soil management within the country. In this regard, an important step forward in soil legislation in the country has been achieved through a series of laws on soil protection. The presentation of Mr. Alfraihat is available [here](#).

## Kuwait

Dr. Hana'a Burezq explained how the country's accomplishments have served as a strong base to develop the work plan for the upcoming years under the GSP pillars of actions, targeting a large-scale revegetation plan to restore terrestrial ecosystem (2021-2025), a five-year plan for integrated soil fertility management (2020-2025) and the Kuwait Biochar Initiative (KBI). The latter aims to achieve re-carbonization of soils and thus improve soil health, and has been registered with the International Biochar Initiative as a Sustaining Member in 2019. Kuwait's soil institutions have also been working on a project (currently waiting approval) on salinity mapping of crops and vegetables farms and joined INSAS. Moreover, the Kuwait Soil Taxonomy and the national soil information system (KSI) were presented. The latter includes a comprehensive database and a range of thematic maps and reports, to be used as a tool for land use planning and national development. The national soil map was shared as part of the Soil Atlas of Asia. The presentation of Mr. Burezq is available [here](#).

## Lebanon

Mrs. Fatima Beydoun, Mr. Ralph Zoghaib and Mr. Talal Darwish presented the five-year strategic plan (2020-2025) developed by the Ministry of Agriculture to: restore farmers' productive capacities and increase agriculture production (pillar 1); strengthen the capacity building and interaction with national players (pillar 2); Enhance the efficiency and competitiveness of agri-food value chains; and Improve climate change adaptation and sustainable management of agri-food systems and natural resources (pillar 3). The achievements and goals for pillar 4 and 5 were described as well, focusing on the updating of the national soil database, the contribution to the GSS map and the participation of the Lebanese soil laboratories in GLOSOLAN. Moreover, the main challenges presented were related to the maintenance of soil fertility through the need of a sound fertilization programme and a study on the actual soil fertility and carbon stock status. Mrs. Beydoun also informed about FAO's sustainable land management programmes currently being implemented in Lebanon, which focus on land reclamation, reduction of the side effects on soil pollution related to the use of pesticides and fertilizers, and improvement of agricultural education for the younger generations. The presentation of Mrs. Beydoun, Mr. Zoghaib and Mr. Darwish is available [here](#).

## Morocco

Mr. Rachid Moussadek outlined the activities implemented to promote the use of the soil fertility maps and the VGSSM, and to encourage conservation agriculture among farmers. Coordination among different partners in the country plays a key role in this process. The project to map soil fertility in the oasis area of Morocco was described, as well as the commitment of Moroccan soil laboratories in GLOSOLAN activities. The presentation of Mr. Moussadek is available [here](#).

## Oman

Mr. Hamad Al-Thuhli verbally reported on Oman's work on soils in 2020, stressing the attention given to the preparation of the national soil organic carbon and soil salinity maps. Mr. Al-Thuhli recalled that the government of Oman has a long cooperation history with FAO and has already prepared several soil property maps. Still, they are involved in the implementation of several projects on soil. In 2012, the government worked with ICBA on the development of a soil salinity strategy. They are looking forward to work with the GSP especially on capacity building.

## Palestine

Mr. Imad Ghanma detailed the projects on land management and the work done with farmers and landowners to raise awareness (also via technical training) on soil conservation practices to deal with the major soil threats affecting the different regions of the country. Other projects on soil erosion maps and land suitability assessment were also described as well, with a particular emphasis on the soil survey process. Finally, Mr. Ghanma reported on the commitment of both public and private laboratories in GLOSOLAN. The presentation of Mr. Ghanma is available [here](#).

## Sudan

In presenting the work done in the framework of the GSP pillars, Mr. Abdelmagid Ali Elmobarak stressed the attention on the activities to promote sustainable natural management, combat desertification and land degradation (Great Green Wall project) and promote food security and climate adaptation in Sudanese agriculture. These projects are strongly linked to the GSP activities in Pillar 4, such as the Sudan Soil Information System, the Digital Soil Map of Sudan, the Soil Atlas of Sudan and the Sudan Soil Catalogue, and the role of soil laboratories in the country (which have joined GLOSOLAN). Mr. Elmobarak concluded by informing the partnership of his upcoming retirement. Ms. Caon and national focal points greeted him and thanked him for all the work he has done over the years. The presentation of Mr. Elmobarak is available [here](#).

## Syria

Mr. Muhammad Manhal Alzoubi described the main achievements under all pillars of actions, with a particular focus on the work done under Pillar 1 by modulating the fertilizer recommendation for the country's most strategic crops. Moreover, Mr. Alzoubi highlighted the efforts conducted in awareness raising by stressing the importance of soil for the country's society and economy in broadcast interviews, producing informative materials (books, brochures), organizing workshops and trainings, developing policy briefs and translating GSP materials in the local language. Syria's contributions to GSP initiatives were also mentioned. These include: the Soil Atlas of Asia, the GSS map, the Global Report on Soil Pollution and the activities related to Pillar 5, such as the harmonization of soil analysis following GLOSOLAN Standard Operating Procedures. The presentation of Mr. Alzoubi is available [here](#).

## Tunisia

Ms. Leila Ben Daya informed how the tools and methods of the monitoring systems have been used to promote sustainable soil management practices among farmers in different environments (oasis, forest, pasture and arable land). Ms. Daya presented some projects aimed at limiting the use of mineral fertilizers by establishing composting stations in farms (leading to potential improvements for local business and young entrepreneurs) and by testing the reuse sewage sludge and waste materials from the olive oil industries (an important sector in the country) as soil amendments. Moreover, some partnerships have been established with national research centers to develop innovative tools to map soil resource and improve the implementation of sustainable soil management. The main projects under Pillar 4 concern the finalization of maps on soil salinity and salinization risk, the implementation of the Tunisian National Soil Information System (NSIST) and the launch of a database to monitor indicators of soil salinity in irrigated areas (SISOLs). Mrs. Daya mentioned also the participation of the Tunisian laboratories in GLOSOLAN. The presentation of Mr. Ben Daya is available [here](#).

## United Arab Emirates

Mrs. Bayan Mahmoud Athamneh reported that Pillar 1 activities were particularly focused on soil salinity, mentioning the establishment of the Soil Salinity Management Plan and the Abu Dhabi Soil Archiving Facility. Efforts under Pillar 2 aimed to strengthen soil protection regulation and policies at country level and to raise public awareness by spreading the word via social media and participating in fairs. Pillar 3 activities focused on the application of new technologies in remote sensing and soil quality monitoring. Mrs. Athamneh described the online information system (EAD Enviro Portal), which displays all maps resulting from field surveys, providing also a comprehensive database (Pillar 4). Pillar 5 activities included the implementation of a PT programme (joined by 17 laboratories) and a continuous quality monitoring system. The presentation of Mrs. Athamneh is available [here](#).

## Yemen

Mr. Mohammed Hezam Al-Mashreki notified the efforts made in the country to implement the activities under all pillars. Some suggestions were provided to the Ministry of Agriculture and Irrigation to update the soil legislation in the country where needed. Moreover, technical cooperation has been established among institutions to conduct activities with farmers, researchers and technicians on the selection of more resistant plant varieties and to promote the application of more sustainable manure to raise soil fertility. Activities related to Pillar 4 included: participation in the Soil Atlas of Asia, contribution to the Global Soil Organic Carbon (GSOC) map and GSS map, and development of a national soil map (provided to the national government as well). As per Pillar 5 work plan, soil laboratories from Yemen joined the GLOSOLAN PT in 2019. The presentation of Mr. Al-Mashreki is available [here](#).

## 4. Current initiatives, new proposals and next steps on the GSP Pillars of actions

Ms. Caon invited NENA Pillar Chairs to present their proposals for the year 2021.

- **Pillar 1:** Ms. Attia Rafla presented her proposal for a project on sustainable soil management that aims to prevent and reduce soil degradation, and to rehabilitate degraded soils. The project was initially thought for the Maghreb region but it can be extended to the whole NENA region if the work is organized by similar agro-ecosystems. During the discussion, it was recalled that the NENA region contributes to climate change by emitting 4.6 percent of the world's greenhouse gases. In this regard, the project should be linked to the monitoring and control of greenhouse gases emissions, and to adaptation rather than mitigation of climate change. Thus, great attention should be given to soil organic carbon sequestration. The private sector should be involved. Possible donors could be the UNCCD and the European Commission through its H2020 projects.
- **Pillar 2:** Mr. Manhal Alzoubi proposed to focus Pillar 2 activities on writing policy briefs, translating FAO and GSP material into Arabic, and implementing the Global Soil Doctors programme by training Soil Doctors and producing reagents for soil testing kits. In this regard, Pillar 2 activities will be linked to Pillar 5.
- **Pillar 3:** Mr. Bahram Taheri focused attention on two project priorities:
  1. **Development of soil and soil nexus research database**

During the discussion, it was proposed to include the development of this database in the project proposal suggested by Ms. Attia and to link it to GIS. Thus, to integrate GIS tools and systems into the database in order to give more information to farmers and users.

2. **Climate change and soil carbon, potential to define regional adaptation and mitigation co-benefit projects (three phases of MRV of soil carbon emissions/sequestration, MRV of mitigation and adaptation, MRV of support)**

Mr. Taheri recalled that a climate change task force aiming at drafting project proposals on the topic was established at the fifth NENA Soil Partnership meeting in 2019. It is now important to activate this task force to design an emission-mitigation-sequestration-adaptation-support MRV system related to soil and soil nexus. In this regard, the GSP MRV concept should be expanded in order not to focus only on emissions. The MRV should also include an economic assessment of soil resources that takes into account adaptation costs and social aspects. As per the database, this activity can be included in the project proposal of Ms. Attia.

During the discussion, the short duration of the research activities in the projects was point out as a constraint for monitoring long-term impact. It was suggested that project proposals should be written to include research and activities with immediate impact. This would allow for projects to have multiple phases. Phase I of the project would allow to launch the research activities, the following phases would allow the monitoring of the research activities.

- **Pillar 4:** Mr. Rachid Moussadek updated participants on the work of INSII and on the GSP work on mapping, complementing the information previously provided by Ms. Caon on the topic (see section 2). During the discussion, the proposal to develop soil health and soil investment maps was made. However, it was noted that these maps are derived and that countries need to work on indicators first. What can be done in the immediate future is to develop case studies on the creation of these maps in countries that already have a national soil information system. Colleagues from Pillar 3 can help on this work too.
- **Pillar 5:** Mr. Abdelmjid Zouahri, NENALAB Chair, informed participants that NENALAB was officially launched through a virtual meeting on 9-11 June 2020. The meeting was attended by 82 laboratory staff members from 44 laboratories in the region. The meeting was successful in introducing participants to GLOSOLAN, collecting information on regional needs and capacities in soil laboratories, and training participants on internal and external quality control, health and safety. NENALAB members actively participated to the training sessions by reporting on:
  - the experience in internal and external quality control;
  - their experience on health and safety.

Mr. Zouahri listed the SOPs that NENA would like GLOSOLAN to harmonize in 2020-2021:

- Soil chemical parameters:
  - Total heavy metals – digestion using aqua regia method
  - CEC by ammonium acetate
  - Exchangeable bases (calcium and magnesium) - titration by EDTA
  - Exchangeable bases (Sodium and potassium) by flame photometer and AAS
  - Available micronutrients (Fe Zn Cu Mn Mo) – extraction using DTPA
- Soil physical parameters:
  - Texture and coarse fraction (pipette and hydrometer methods);
  - Dry bulk density

Although the majority of participants at the 1<sup>st</sup> NENALAB meeting stated they were not familiar with this publication, those who were familiar with the FAO Soil Bulletin 74 “Guidelines for quality management in soil and plant laboratories” expressed the need to update it.

During the launch meeting, the governance of NENALAB was defined as following:

- NENALAB Chair: Mr. Abdelmjid Zouahri from the Laboratory of Soil, Water and Plant Analyses (Lab-URECRN) INRA (Morocco);
- NENALAB vice-Chair for the Near East: Mr. Alaa Khallouf from the Damascus and Qunietrah Labs (ANRR-lab9) (Syria);
- NENALAB vice-Chair for North Africa: Ms. Hana Nabil from the Laboratoire de Pédologie ENFI (Morocco).

NENALAB members expressed the preference to always organize their annual meeting virtually.

## 5. Launch of the TCP/RAB/3802 project

Mr. Abdel Hamied Hamid, Leading Technical Officer of the TCP/RAB/3802 project at FAO RNE, thanked the national focal points and the FAO country offices for submitting the letters of support and obtaining the endorsement of the project by FAORNE. Thereafter, he briefly introduced the project and opened the floor to questions.

The project was formulated to address the need to raise awareness on the importance of soils in the region and to conserve and manage them sustainably. Soil degradation is a growing threat in NENA, as recalled by the Arab Ministers of Agriculture and Water who called for “establishing a sustainable regional mechanism to build individual and institutional capacities necessary to plan, design, and implement water and land management programs efficiently”.

The project involves 12 countries in NENA: Egypt, Jordan, Iran, Iraq, Morocco, Lebanon, Sudan, Tunisia, Yemen, Palestine, Oman and Syria, and officially started on 21 October 2020. The project has a duration of approximately 2 years (end date 20 May 2022) and a budget of USD 400 000.

**Project impact:** to improve environmental and human wellbeing through sustainable management of soil resources

**Project outcome:** regional and national knowledge on soil conditions and management is shared and capacity of stakeholders on sustainable soil management practices and use of related tools is enhanced.

Expected project results:

- Output 1: Understanding soil characteristics/challenges and management practices is enhanced
  - Activity 1.1. National assessment of soil conditions
  - Activity 1.2. Regional assessment and compilation of data
  - Activity 1.3. Regional workshop to raise awareness on the status of soils in NENA and the tools available to preserve and manage them sustainably
- Output 2: National capacities for the implementation of normative tools on sustainable soil management are strengthened
  - Activity 2.1. Regional webinars on soil salinity and soil erosion assessment and management



Activity 2.2. Regional laboratory workshops in the framework of GLOSOLAN

Activity 2.3. Build capacity of national reference laboratories

- Output 3: Regional and inter-regional collaboration on SSM strengthened

Activity 3.1. Hold the 6th and 7th meetings of the NENA Soil Partnership

Activity 3.2. Participate in the 9th Global Soil Partnership Plenary Assembly

Implementation partners are the Ministries of Agriculture (MoA) in the 12 beneficiary countries and other entities designated/identified by the MoA as partners.

With regard to the sustainability of the project results, the project will enhance food, and nutrition and water security by addressing soil salinity and soil physical degradation. Gender balance will be used as a criteria for participation in training events and development of relevant products with gender-sensitive analytical tools. Project activities must not adversely affect indigenous people's rights, lands, natural resources, territories, livelihoods, knowledge, traditions, governance systems, and culture or heritage. The project spires to achieve two paradigm shifts:

1. The disseminated technology incorporates sustainable agricultural techniques and local knowledge;
2. Institutional frameworks establish multi-stakeholder and multi-sectoral mechanisms to produce wide spread change and provide a model of integration and collaboration for countries and the region.

During the discussion and Q&A sessions, it was decided that FAO country offices will send the project document to the Ministries of Agriculture who will forward it to the GSP national focal points. In this regard, Ms. Caon will provide the name of the GSP national focal point to the FAO country offices as soon as they have confirmed the name of their expert working on the project.

Synergy between institutions was recognized as critical for the implementation of the project, which should also be in line with what countries are already doing. In order to avoid duplication of efforts, the decision to establish a committee to coordinate activities was taken. The committee should also take into consideration the work done under the SIDA project. Another important point to keep in mind when implementing the project is that the link between soil, food security, water scarcity and water storage, and food production should be stressed. Awareness raising should be one of the main outcomes and goals of the project because of its potential to mobilize additional financial resources at the national and regional level.

## 6. NENA Soil Partnership governance 2021-2023

Ms. Caon reminded participants that the mandate of the NENA Soil Partnership Chair and vice-Chairs, and the Pillar Chairs is coming to an end. In this regard, she thanked the following national focal points for their work and commitment to the GSP in 2018-2020:

- NENA Soil Partnership Chair : Ms. Iman Sahib Salman, national focal point for Iraq
- Vice-Chair for the Near East: Mr. Mahmoud Hasan Alfraihat, national focal point for Jordan
- Vice-Chair for North Africa: Mr. Rachid Moussadek, national focal point for Morocco
- Chair for Pillar 1: Mme Rafla Attia from Tunisia Dierctrice des Ressources en sols
- Chair for Pillar 2: Mr. Muhammad Manhal Alzoubi from Syria Director of Natural Resources Research Administration
- Chair for Pillar 3: Mr. Bahram Taheri from Iran Advisor of the Deputy Minister for Land and Water Ministry of Jihad-e-agriculture (MOJA)
- Chair for Pillar 4: Mr. Rachid Moussadek from Morocco) Head of Environmental & Natural Resources Department Institut National de la Recherche Agronomique

- Chair for Pillar 5: Mr. Imad Ghanma from Palestine Director of Soil and land classification department

Ultimately, it was decided that the election of the new representatives of the NENA Soil Partnership should be done by email. All national focal points interested in a governing role for the period 2021-2023 were invited to send an expression of interest to Ms. Caon by 10 December. The online voting closed on 8 January 2021.

As per the decision of the national focal points, in 2021-2023 the NENA Soil Partnership will be represented by:

**NENA Soil Partnership Chair:** Mr. Rachid Moussadek, Morocco

**NENA Soil Partnership vice-Chair for the Near East:** Mr. Hamed Al Thuhli, Oman

**NENA Soil Partnership vice-Chair for North Africa:** Mr. Abdelmjid Zouahri (chair of NENALab), Morocco

**Pillar 1 Chair:** Ms. Rafla Attia, Tunisia

**Pillar 2 Chair:** Ms. Leila ben Dhiab ben Daya, Tunisia

**Pillar 3 Chair:** Mr. Bahram Taheri, Iran

**Pillar 4 Chair:** Mr. Rachid Moussadek, Morocco

**Pillar 5 Chair:** Mr. Imad Ghanma, Palestine

It should be noted that during the online voting, the idea of identifying Pillar vice-Chairs was raised. This idea will be discussed at the next NENA Soil Partnership meeting.

## 7. Conclusions and way forward

Ms. Caon and Ms. Salman thanked all participants for their contribution to the meeting. The seventh meeting of the NENA Soil Partnership will be organized online or in person in November or December 2021. If necessary, the meeting date will be brought forward.

## Annex I. Agenda



Food and Agriculture  
Organization of the  
United Nations



# ***Sixth NENA Soil Partnership Meeting***

***18 and 19 November 2020***

*from 10AM to 12 PM CET (Rome time)*

***Virtual meeting***

<b>18 November 2020</b>	
10:00 – 10:10	<p><b>Welcome and Opening Remarks</b></p> <p>Ms. Iman Sahib Salman, NENA Chair</p> <p>Mr. Ronald Vargas, Secretary, GSP/FAO</p>
10:10 – 10:15	<p><b>Approval of the agenda and group picture</b></p> <p><i>Ms. Lucrezia Caon, GSP Secretariat</i></p>
10:15 - 10:30	<p><b>Item 1. GSP developments of regional interest</b></p> <p><i>Ms. Lucrezia Caon, GSP Secretariat</i></p>
<b>National updates on soil</b>	
10:30 – 12:00	<p><b>Item 2. National updates on soil</b></p> <ul style="list-style-type: none"> <li>• Algeria, Mr. Medjahed Saddek (<i>Excused</i>)</li> <li>• Bahrain, Mr. Rasha Ahmed Al Sherooqi (<i>Excused</i>)</li> <li>• Egypt, Mr. Alaa El-Bably</li> <li>• Iran, Mr. Jahanbakhsh Mirzavand</li> <li>• Iraq, Ms. Iman Sahib Salman</li> <li>• Jordan, Mr. Mahmoud Hasan Alfraihat</li> <li>• Kuwait, Mr. Shabbir A Shahid (acting national focal point)</li> <li>• Lebanon, <i>Mrs. Fatima Beydoun, Mr. Ralph Zoghaib and Mr. Talal Darwish</i></li> <li>• Morocco, Mr. Rachid Moussadek</li> <li>• Oman, Mr. Hamad Al-Thuhli</li> <li>• Palestine, Mr. Imad Ghanma</li> <li>• Saudi Arabia, Mr. Hussain Fahad Al Ajmi (<i>Excused</i>)</li> <li>• Sudan, Mr. Abdelmagid Ali Elmobarak</li> <li>• Syria, Mr. Muhammad Manhal Alzoubi</li> <li>• Tunisia, Ms. Leila Ben Daya</li> <li>• United Arab Emirates, Mrs. Bayan Mahmoud Athamneh (acting national focal point)</li> <li>• Yemen, Mr. Mohammed Hezam Al-Mashreki</li> </ul>
12:00	<b>Closure of the day</b>

19 November 2020

**GSP Pillars**

10:00 – 11:00

**Item 3: Current initiatives, new proposals and next steps**

- **Pillar 1. Implementation of soil rehabilitation programs including SSM/SLM practices and scaling out to areas at high risk of soil degradation**  
*Mrs. Rafla Attia, Pillar 1 Chair, Tunisia*
  
- **Pillar 2. Future activities**  
*Mr. Muhammad Manhal Alzoubi, Pillar 2 Chair, Syria*
  
- **Pillar 3: Two project priorities**
  - 1- Development of Soil and Soil Nexus Research Database
  - 2- Climate Change and Soil Carbon, Potential for defining Regional Adaptation/Mitigation Co-benefit Projects (Three phases of MRV of Soil Carbon Emissions/Sequestration, MRV of Mitigation and Adaptation, MRV of Support)*Mr. Bahram Taheri, Pillar 3 Chair, Iran*
  
- **Pillar 4. Current situation and perspectives of Soil Information System in NENA**  
*Mr. Rachid Moussadek, Pillar 4 Chair, Morocco*
  
- **Pillar 5. NENALAB updates**  
*Mr. Abdelmjid Zouahri, NENALAB Chair*

**Launch of the TCP/RAB/3802 project**

11:00 – 11:15

**Item 4: Presentation of the project**

- **Main objectives and activities**
- **Recruitment of consultants**
- **other**

*Mr. Abdel Hamied Hamid, Leading Technical Officer*

11:15 -12:00

**Item 5. Questions and answer**

12:00

**Closure of the meeting**

## Annex II. List of participants

Mr. Ronald Vargas, Global Soil Partnership, FAO

Ms. Lucrezia Caon, Global Soil Partnership, FAO

Mr. Filippo Benedetti, Global Soil Partnership, FAO

Mr. Abdel Hamied Hamid, FAO RNE

Mr. Maki Abdourahman, FAO SNE

Mr. Mohamed Abdel Monem, FAO RNE

Ms. Arbia Labidi, FAO Tunisia

Mr. AlHudhud Husam, FAO Palestine

Mr. Saud Al Farsi, FAO Oman

Mr. Azzam Saleh, FAO Palestine

Country	Institution	Name and Last Name
Egypt	Director of Soils, Water and Environment Res. Inst.	Alaa Elbably
Iran	Min. of Jihad-e Agriculture, Amirkabir Univ. Nexus Center	Bahram Taheri
Iran	Soil office Deputy of Water and Soil	Jahanbakhsh Mirzavand
Iran	Soil and Water Research Institution	Hadi Asadi Rahmani
Iran	Deputy of Water and Soil	Bahram Taheri
Iran	University of Tehran Agricultural Campus, Karaj	Manoochehr Gorji
Iran	Soil Conservation and Watershed Management Research Institute	Parviz Garshasbi
Iran	Deputy of Water and Soil	Alireza Esmaili Falak
Iraq	Ministry of Agriculture	Iman Sahib Salman
Jordan	MOA	Mahmoud Alfraihat
Kuwait	Kuwait Institute for Scientific Research	Shabbir Shahid
Lebanon	MOA	Mrs Fatmerh Beydoun
Lebanon	MOA	Mr Ralph Zoghaib
Lebanon	MOA	Talal Darwish
Morocco	INRA - NENALAB Chair	Abdelmjid Zouahri
Morocco	INRA/ICARDA	Moussadek Rachid
Morocco	INRA	Hamza Iaaich
Oman	Ministry of Agriculture, Fisheries & Water Resources	Hamed Al Duhli
Oman	Ministry of Agriculture, Fisheries & Water Resources	Muneer Al Yahya'e
Palestine	MoA	Imad Ghanma

Sudan	Land and Water Res.Centre, Agric. Res. Corp.	Abdelmagid Ali Elmobarak
Sudan	Land and Water Res.Centre, Agric. Res. Corp.	Nuha Abdalla Mohamed Khamis
Syria	GCSAR-Damascus	Manhal Alzoubi
Syria	GCSAR-Damascus	Feras Alghamaz
Syria	GCSAR-Damascus	Alaa Khallouf
Syria	GCSAR-Latakia	Solaf Hallowm
Syria	GCSAR-Alsweda	Reham Zahlan
Syria	GCSAR-Tartous	Mais Deeb
Tunisia	DG ACTA/DRS	Rafla Attia
Tunisia	LCAS	Ben Daya Leila
Tunisia	LCAS	Dridi Sana
United Arab Emirates	Environment Agency-Abu Dhabi	Bayan Athamneh
Yemen	Renewable Natural Resources Research Center (RNRRC) in the Agricultural Research & Extension Authority	Mohammed Hezam Al-Mashreki