

Food and Agriculture Organization of the United Nations

International Network of Salt-Affected Soils



HEALTH OF SALT-AFFECTED SOILS 21 November 2023 16:00 - 17:30





GSP Webinars

The concept of "Soil Health" appears to be the new paradigm for categorizing different types and status of soils, describing their capability to provide environmental services. "Soil Health" is an integrative concept that links soil biological, chemical, and physical properties and ecological processes in order to determine how well a specific soil resource is performing the critical functions needed to sustain both the environment and humankind. The Intergovernmental Technical Panel on Soils (ITPS) of FAO Global Soil Partnership defines Soil Health as "the ability of the soil to sustain the productivity, diversity, and environmental services of terrestrial ecosystems". According to FAO, Soil Health is essential for achieving climate neutrality, a clean and circular economy, and stopping desertification and land degradation.

Natural saline terrestrial or semi-terrestrial soils constitute particular environments where life has found the mechanisms to adapt to harsh conditions, contributing to global biodiversity. Salt-affected soils occupy a large area of lands at any latitude and are a significant problem in many parts of the world because secondary salinization has an enormous impact on agricultural productivity.

A webinar on the health aspects of salt-affected soils will offer an opportunity to bring together experts, researchers, and practitioners from around the world to share their knowledge and experience. It could also help raise awareness about this important issue and promote the adoption of a framework of specific indicators to describe the Health Status, Pressures and the effectivity of remediation and restoration management practices of salt-affected soils.

Panellists:

Edoardo A.C. Costantini, Italy, International Union of Soil Sciences (IUSS), President

Elke J. Noellemeyer, Argentina, International Union of Soil Sciences (IUSS), Chair of Commission 2.5 on Soil Chemical, Physical and Biological Interfacial Reactions

Wang Fei, China, World Association of Soil and Water Conservation (WASWAC), Deputy Director Miriam Ostinelli, Argentina, Global Soil Laboratory Network, Chair

Sanjay Arora, India, International Union of Soil Sciences, Vice-chair of Commission 3.6 on Salt-Affected Soils

Mohammed Hachicha, Tunisia, Institute of Agricultural Research and Higher Education

Maria Konyuskova, Food and Agriculture Organization of the United Nations, rapporteur of the round table

Jorge Batlle-Sales, Spain, International Network of Salt-Affected Soils, Chair, moderator of the round table

In a live dialogue mode, the leading experts will present their vision and discuss the relevant aspects of the salt-affected soils, taking into account, among others:

- Evolution on the **paradigm** related to soils as an environmental resource.
- The concept of **soil health** and its application to salt-affected soils.
- New combined **risks** to the health of salt-affected irrigated soils, including emerging pollutants in irrigation waters and the possibility of affecting the human health.

• Elaboration and standardization of a particular set of **indicators** to describe dynamically the salt-affected soils' health.

• **Procedures and technologies** focused to improve the health of salt-affected soils and water reuse and availability.

• The possibility of adopting the **DPSIR** (drivers, pressures, state, impact, and response) approach to the management of salt-affected soils in a sustainable way.

The registered participants can formulate questions and exchange opinions with panellists in a dual way: prior to the event, sending an email to the webinar rapporteur Maria.Konyuskova@fao.org, or during the webinar using the Q&A box.



The Global Soil Partnership (GSP) is a globally recognized mechanism established in 2012. Our mission is to position soils in the Global Agenda through collective action. Our key objectives are to promote Sustainable Soil Management (SSM) and improve soil governance to guarantee healthy and productive soils, and support the provision of essential ecosystem services towards food security and improved nutrition, climate change adaptation and mitigation, and sustainable development.



The International Network of Salt-Affected Soils (INSAS), launched in 2019 during the International Center for Biosaline Agriculture's (ICBA) first Global Forum on Innovations for Marginal Environments, is a Technical Network of the Global Soil Partnership (GSP) and follows its Rules of procedure. The Network aims to facilitate the sustainable and productive use of salt-affected soils for current and future generations.

INSAS's mission is to support and facilitate joint efforts towards the sustainable management of SAS for food security, agricultural sustainability and climate change mitigation.

