

## 7<sup>th</sup> Meeting of the **Asian Soil Laboratory Network** (SEALNET)

19-20 September 2023

# A-M3h

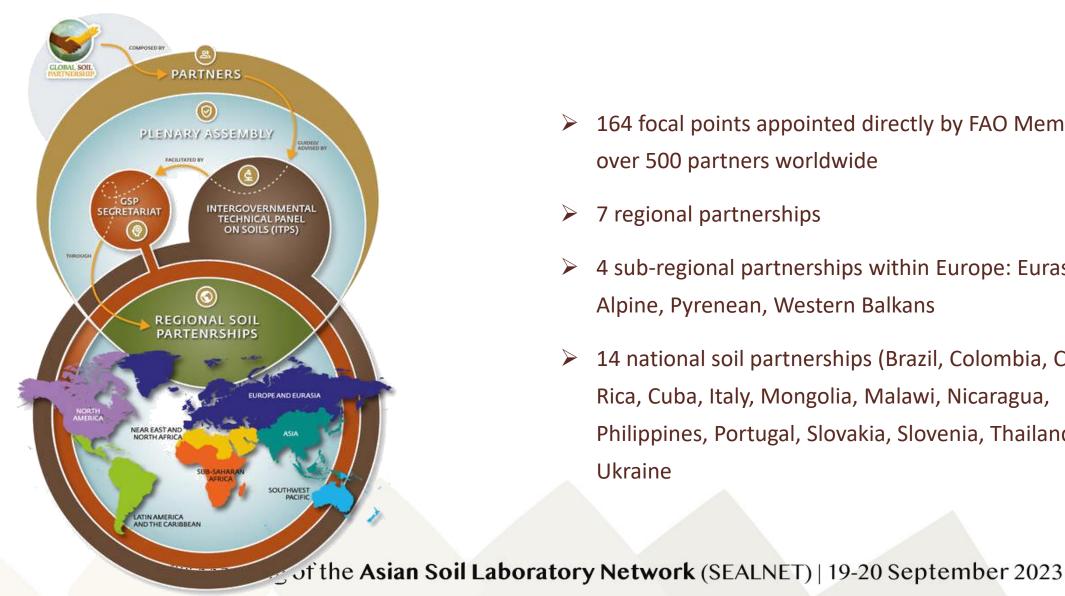
## SEALNET ASIAN SOIL LABORATORY NETWORK

## GLOSOLAN and other Global Soil Partnership activities 2023-2024

Yuxin Tong Filippo Benedetti Global Soil Partnership

FAO





- 164 focal points appointed directly by FAO Members and over 500 partners worldwide
- 7 regional partnerships
- 4 sub-regional partnerships within Europe: Eurasia, Alpine, Pyrenean, Western Balkans
- 14 national soil partnerships (Brazil, Colombia, Costa Rica, Cuba, Italy, Mongolia, Malawi, Nicaragua, Philippines, Portugal, Slovakia, Slovenia, Thailand, and Ukraine



**Biodiversity loss** 

Food insecurity and malnutrition **Pollution** 

Water scarcity

Solution

### THE HALTING OF SOIL SOIL HEALTH AND DEGRADATION

Implemented

**Focal points** 

Manage sustainably

and restore soils

for the provision of

ecosystem services

SSM practices

SSM Protocol

Intergovernmental

Technical Panel

on Soils

(ITPS)

· RECSOIL

**Partners** 

Regional Soil Partnerships



**National Soil Partnerships** 

GSP Secretariat through the Healthy Soils Facility

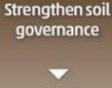
Achieved through 6 action areas

Concrete actions, initiatives and programmes

> Base on sound scientific knowledge provided by







- · SOILEX
- · Rev-WSC
- VGSSM
- · Fertilizer Code

Thematic

soil symposia

## Promote knowledge and literacy on soils

- Global Soil Doctors Programme
- EduSOILS
- Capacity building initiatives

Global

assessment

reports

Promote awareness raising and advocacy on soil health

- · World Soil Day
- · Social Media & websites
- GSP Newsletter
- Thematicglobal soil symposia

Status of the world's soil resources report

Assess, map, and monitor soil health in a harmonized way

- International Network of Soil Information Institutions (INSII)
- GloSIS and SOILSTAT
- Global Soil Laboratory Network (GLOSOLAN)

ITPS Soil Letters

Foster technical cooperation (including gender and youth)

- International Network of Black Soils (INBS)
- International Network on Salt-affected Soils (INSAS)
- · International Network on Fertilizer Analysis (INFA)
- International Network on Soil Biodiversity (NETSOB)
- International Network on Soil Pollution (INSOP)
- . Other networks as needed



SOCloss



pollution



erosion



Soil biodiversity



Salinization/ sodification



Nutrient imbalance



Acidification



Waterlogging



compaction



sealing

## Assess, map, and monitor soil health in a harmonized way

- International Network of Soil Information Institutions (INSII)
- GloSIS and SOILSTAT
- Global Soil Laboratory Network (GLOSOLAN)









When adopting Sustainable Soil Management Practices, we provide multiple benefits including: reducing GHG emissions, maintaining and enhancing carbon sinks and building resilience.









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## Foster technical cooperation (including gender and youth)



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- International Network on Salt-affected Soils (INSAS)
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INSII
International Network
of Soil Information
Institutions



## NETSOB International Network on Soil Biodiversity

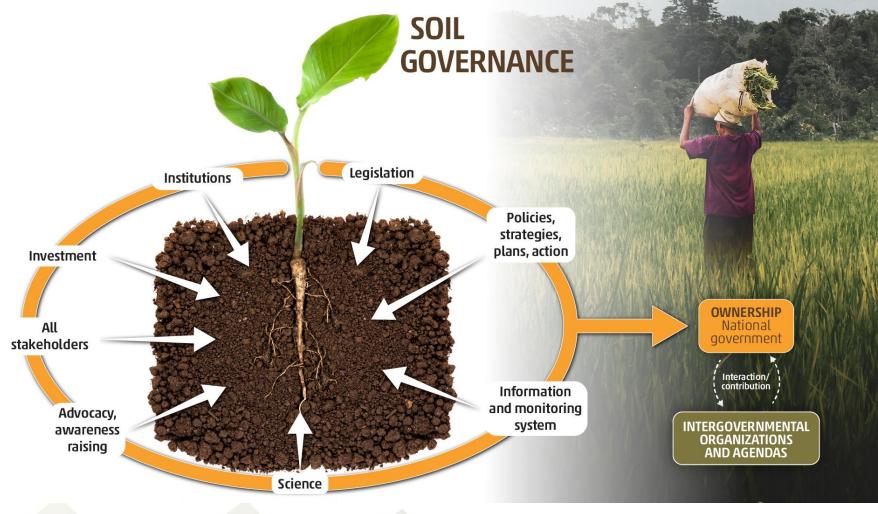


### INSOP International Network On Soil Pollution















+ articles in the main world newspapers

FAO, la mappatura dei nutrienti del suolo in America Centrale e nell'Africa sub-sahariana, per un uso più efficiente dei fertilizzanti



**ALARABIYA** 





By DANIEL ESSIET - On Jul 27, 2022 United **UN News** FAO warns 90 per cent of Earth's topsoil at risk by 2050

Soils, where food begins

entro il 2050 potrebbe essere a rischio il 90% del suolo fertile della Terra (VIDEO)

ondo viene eroso suolo fertile per l'equivalente di un campo da calcio.

@FAO - Follow #DYK that 9 5 % of our food comes from Learn more about the relationship between healthy soils and healthy food 6 bit.ly/3POzXsQ survives only thanks to a few cm of healthy soil that grows 95% of our food ♥ 81 Q Reply 1 Share

nation relevant to soil analysis.

al Khaleej Today

90% of Earth's topsoil at risk by 2050,

**FAO** to boost soil nutrient mapping

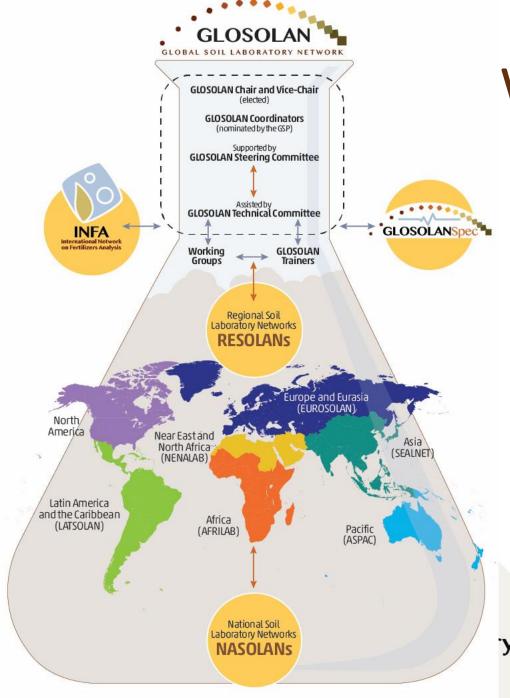
7th Meeting of the Asian Soil Laboratory Network (SEALNET) | 19-20 September 2023



- Assess, map, and monitor soil health in a harmonized way
- 2. Foster technical cooperation
- 3. Manage sustainably and restore soils for the provision of ecosystem service
- 4. Promote knowledge and literacy on soils
- 5. Strengthen soil governance
- 6. Promote awareness raising and advocacy on soil health.







## We operate at all levels...





## What are we working on?

- 1) Harmonization of Standard Operating Procedures (SOPs)
- 2) Provision of trainings and prepare awareness raising material on different topics
- 3) Organization of inter-laboratory proficiency tests (PTs)
- 4) Collaboration with other networks (INFA, NETSOB, INSAS, INSOP, INBS)
- 5) Collection of soil import regulations worldwide (SIMPLE Database)
- 6) Share laboratory capacities and needs with the scientific communities, including details on data quality



## GLOSOLAN initiative on soil spectroscopy (GLOSOLAN-Spec) Next activities



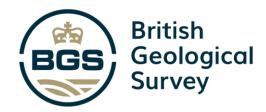
- Soil spectral hub (GSP/FAO)
- Guides to available soil spectral resources
   (existing open-source soil spectral libraries and soil spectral estimation services)
- Publishing of Standard Operating Procedures for soil spectroscopy using NIR and MIR
- Expand capacity building- webinars, and technical document in additional languages. Additional guides in the style of the primer
- Continue webinar series with spotlight on state-of-art, research and discussion



## Thanks to the kind support of































Thank you very much for your attention!

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