



Food and Agriculture
Organization of the
United Nations

19th Working Session of the Intergovernmental Technical Panel on Soils (ITPS)

Soil pollution activities

13-15 November 2023
Online meeting

Ravi Naidu

crcCARE and The University of Newcastle & INSOP Chair

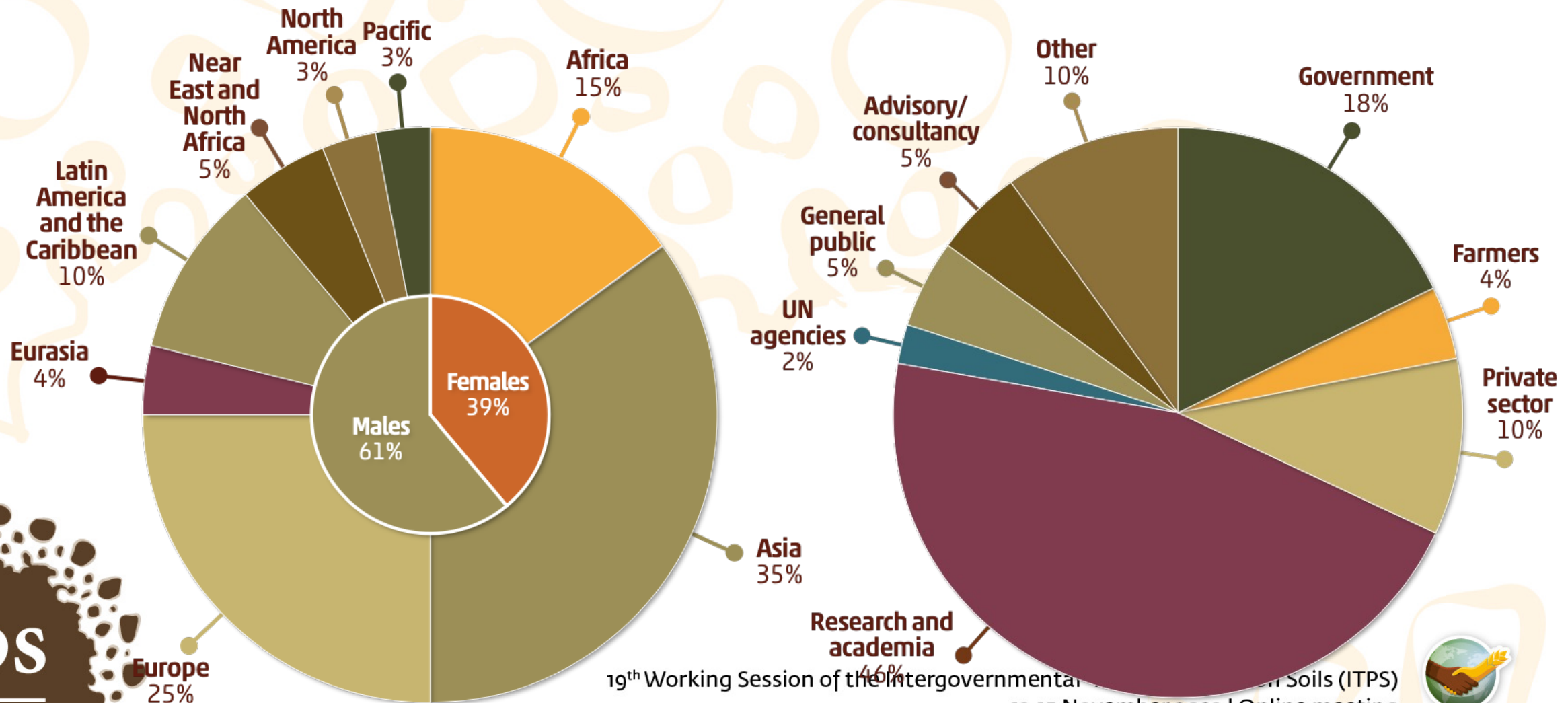
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INTERGOVERNMENTAL
TECHNICAL PANEL ON SOILS



INSOP has 900 members from 130 countries



19th Working Session of the Intergovernmental Technical Panel on Soils (ITPS)
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INSOP annual meeting 2023 (13-15 June)

- 190 participants from 92 countries
- 5 distinguished speakers addressing:
 - One Health approach
 - PFAS in Europe
 - Remediation in Africa
 - Soil pollution and food security
 - Pb and Hg
- INSOP priority activities endorsed for 2023-2025

<https://www.fao.org/3/cc7785en/cc7785en.pdf>

INSOP-I/23/Report



**Report of the first annual meeting of
the International Network on Soil
Pollution (INSOP)**

Virtual meeting, 13–15 June 2023

INSOP-I/23/Report

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INSOP priorities 2023-2025

Assessment of soil pollution

- Advocate for the development of global harmonized methods, including SOPs to identify and measure soil pollutants



PRIORITY 1

Advocate for the development of global harmonized methods, including standard operating procedures (SOPs) to identify and measure soil pollutants

OUTCOME

Soil laboratories are well-informed about the harmonized SOPs for soil pollutants and their usage

LONG TERM	SHORT TO MEDIUM TERM
By 2025, 80% of soil laboratories working with the GSP will be aware of how to use the harmonized SOPs for measuring soil pollutants in the laboratory	At least one soil laboratory working with the GSP from each region is involved in the development of harmonized SOPs

KEY ACTIVITIES

- Liaise and work in partnership with the GLOSOLAN;
- Analyze the available protocols for soil pollutants;
- Develop SOPs for pollutants of concern, such as bioavailable heavy metals, obsolete pesticides and Highly Hazardous Pesticides (HHP); and
- Facilitate cooperation among soil laboratories in the use and implementation of soil pollutants SOPs through webinars and workshops on in-person training.

Assessment of soil pollution

- Advocate for creating a global database on soil pollutant threshold values in agricultural soils and other land uses focusing

PRIORITY 2

Advocate for creating a global database on soil pollutant threshold values in agricultural soils and other land uses focusing on heavy metals and pesticides

OUTCOME

(1) Foster a deeper understanding of existing soil pollutant threshold values worldwide; and (2) Countries making informed decisions based on the data and information of soil pollutant threshold values

	LONG TERM	SHORT TO MEDIUM TERM
KEY PERFORMANCE INDICATORS	Number of countries are working towards the adoption of threshold values for soil contaminants within national regulation	At least 50% of the countries are involved in the discussions on the establishment of threshold values for soil pollutants
KEY ACTIVITIES	<ul style="list-style-type: none"> • In support of SoilEX, launch a survey among INSOP members and GSP focal points to better understand the existence of soil pollutants threshold values and identify gaps; • INSOP members help to analyze and interpret the generated data from the survey for the preparation of the INSOP global threshold values database on soil pollutants; and • INSOP members help to develop the INSOP threshold values database on soil pollutants and disseminate its findings to the government, policymakers, private sector and civil society worldwide. 	

INSOP priorities 2023-2025

Monitoring of soil pollution

- Advocate for a better understanding of national legal instruments on the prevention, monitoring and/or remediation of soil pollution

Food and Agriculture Organization of the United Nations

INTERNATIONAL NETWORK ON SOIL POLLUTION

ACTION PLAN

PRIORITIES OF THE MONITORING WORKING GROUP (WG) ON SOIL POLLUTION

OCTOBER 2023 VERSION

PRIORITY 1

Advocate for a better understanding of national legal instruments on the prevention, monitoring and/or remediation of soil pollution

OUTCOME

A global INSOP database is developed and utilized by the countries to learn about the existing legal instruments of soil pollution prevention, monitoring and/or remediation

KEY PERFORMANCE INDICATORS

LONG TERM	SHORT TO MEDIUM TERM
Proposal of an international instrument that positions soil pollution as a major global challenge and monitors its impacts	Number of countries are advocating for the development of soil pollution legal instrument

KEY ACTIVITIES

- In support of SoilEX, INSOP members help to analyze national soil legislation and identify minimum principles for addressing soil pollution;
- In support of SoilEX, INSOP members prepare a policy brief on the current legislation and existing gaps in monitoring soil pollution;
- Assist countries willing to develop soil pollution policies;
- In partnership with INSOLFER, spread awareness and identify countries willing to monitor the concentration of heavy metals on fertilizer labels; and
- In support of SoilEX, launch a series of webinars aiming to explain soil pollution legal instruments currently in place.

GLOBAL SOIL PARTNERSHIP

Remediation of soil pollution

- Advocate for the development of national capacities and strengthen technology transfer for remediation and sustainable management of polluted soils

Food and Agriculture Organization of the United Nations

INTERNATIONAL NETWORK ON SOIL POLLUTION

ACTION PLAN

PRIORITIES OF THE REMEDIATION WORKING GROUP ON SOIL POLLUTION

OCTOBER 2023 VERSION

PRIORITY 1

Advocate for the development of national capacities and strengthen technology transfer for remediation and sustainable management of polluted soils

OUTCOME

(1) INSOP remediation database is widely recognized; and (2) Sustainable practices are disseminated among countries for remediating polluted soil, maximizing environmental, social, and economic benefits

KEY PERFORMANCE INDICATORS

LONG TERM	SHORT TO MEDIUM TERM
An international database of sustainable soil pollution remediation practices is available for global use	At least 60% of countries are represented through case studies in the global database

KEY ACTIVITIES

- Agree on the definition of what is sustainable remediation and develop criteria to assess remediation technologies;
- Develop the remediation action plan checklist;
- Launch a survey among INSOP members and GSP focal points to identify successful case studies and barriers in using sustainable remediation technologies; and
- INSOP members contribute to the development of a global database for the sustainable remediation of polluted soils to assess remediation technologies.

GLOBAL SOIL PARTNERSHIP

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INSOP priorities 2023-2025

Food quality and soil pollution

- Advocate for the promotion of soil pollution to be included in the One Health approach and the Global Health Observatory



PRIORITY 1	Advocate for the promotion of soil pollution to be included in the One Health approach and the Global Health Observatory
OUTCOME	Increased dedication and global awareness in including soil pollution indicators in the Global Health Observatory
KEY PERFORMANCE INDICATORS	LONG TERM By 2027, new soil pollution indicators will be proposed to the Global Health Observatory
	SHORT TO MEDIUM TERM At least 60% of INSOP members are involved in the analysis of soil indicators
KEY ACTIVITIES	<ul style="list-style-type: none"> • Develop indicators and guidelines for assessing the risks of soil pollution to food safety and human health; • Initiate contact between FAO and WHO to better understand health data on soil and food contamination via knowledge exchange dialogue; • INSOP members help to collect and analyze health data related to soil and food contamination, promoting the One Health approach; • Advocate for social media campaigns emphasizing the relationship between soil pollution and the One Health approach; and • Advocate for the inclusion of soil pollution indicators in the Global Health Observatory under the Environment and Health theme based on analyzed health data.

Food quality and soil pollution

- Support the inclusion of soil pollution risk assessment and minimization measures in the Global Soil Doctors Programme in supporting land users to avoid soil pollution

PRIORITY 2	Support the inclusion of soil pollution risk assessment and minimization measures in the Global Soil Doctors Programme in supporting land users to avoid soil pollution
OUTCOME	Farmers are aware of soil pollution risk to food produce and minimize the impact using the Global Soil Doctors Programme
KEY PERFORMANCE INDICATORS	LONG TERM By 2027, farmers' communities in at least 6 developing countries will be utilizing the provided training and exercises to prevent soil pollution (depending on funding)
	SHORT TO MEDIUM TERM By 2025, farmers' communities in at least 3 developing countries will be utilizing the provided training and exercises to prevent soil pollution
KEY ACTIVITIES	<ul style="list-style-type: none"> • Soil Doctors' posters on what is soil pollution revised and approved for training purposes; • Soil Doctors' field exercises on identifying soil pollution revised and approved for training purposes; • Tailored modules and exercises for soil pollution prevention and adoption are developed to meet specific community needs for training purposes; and • Advocate for involving farmers' associations in knowledge exchange dialogue on pollution prevention and best practices of sustainable soil management through workshops and social media campaigns

Deliverable 1

SOP for phosphate fertilizers in soil

1. Decide which SOP to harmonize (parameter + method)
2. Establishment of the working group (experts from all regions)
3. Developing of the matrix
4. Share the matrix with soil labs worldwide
5. Harmonization of the information collected on regional basis
6. Harmonization of the regional matrix into a global matrix
7. Transform the matrix into a text
8. Review
9. Publication of the SOP
10. Translation of the SOP in multiple languages
11. Publication of the information on the sustainability of method

Heavy Metals determination in phosphate fertilizer materials

Contents

1. Introduction to Heavy Metals	2
2. Scope and field of application	2
3. Principle	2
4. Apparatus	3
5. Materials.....	3
6. Health and Safety	3
7. Sample Preparation (Wesley Feldmann)	4
8. Procedure.....	4
9. Calculation	8
10. Quality Assurance	8
11. References	8
Appendix 1: Acknowledgements	9
Appendix 2: List of Authors.....	9
Appendix 3: Contributing Laboratories.....	9
Appendix 4: AAS Operating Conditions for heavy metals	11

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Deliverable 2

Technical Guidelines on soil pollution

No.	Chapter	2022	2023
1.	Introduction	Completed	Completed
2.	Building a Conceptual Model	Ongoing	Completed
3.	Sampling	Completed	Completed
4.	Environmental risk assessment	Ongoing	Ongoing
5.	Mapping	Ongoing	Completed
6.	Mixed pollution on site	Completed	Completed
7.	Monitoring soil pollution	Ongoing	Completed
8.	Communication and reporting soil pollution	Ongoing	Ongoing

INSOP Steering Committee



GSP

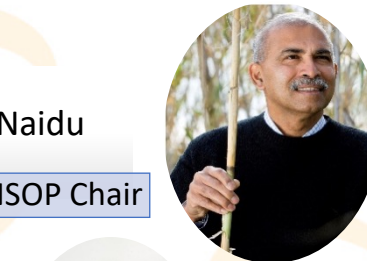
Global Soil Partnership, FAO

GLOBAL SOIL
PARTNERSHIP



Deyi Hou

INSOP Vice-Chair

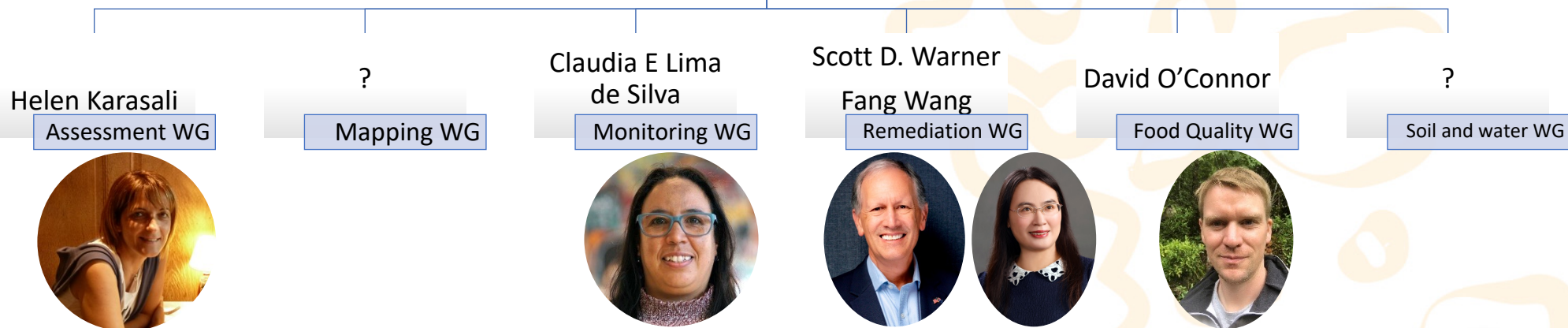


Ravi Naidu

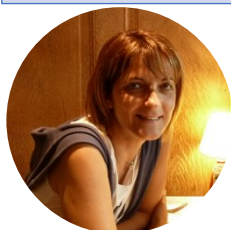
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Food Quality WG



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Soil and water WG





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Thank you

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