



Food and Agriculture
Organization of the
United Nations

INSOP Food quality WG Meeting on farmers' training and soil pollution indicators in the Global Health Observatory

**INSOP Food quality
WG priority
meeting**

14 December 2023

INSOP Food Quality WG meeting on farmers' training and soil pollution indicators in the Global Health Observatory

The session will start in few minutes

- **Should you, at any point, lose your connection**, you will be able to re join the meeting by using the same link and password
- Kindly keep your microphone **mute**
- **To take the floor, please use the RAISE YOUR HAND function**. The moderator will take note of the order of discussion
- If you have comments or questions ,please use the CHAT function
- Please make sure that your name below the image box indicates:
YOUR COUNTRY/ORGANIZATION_YOUR NAME

Agenda

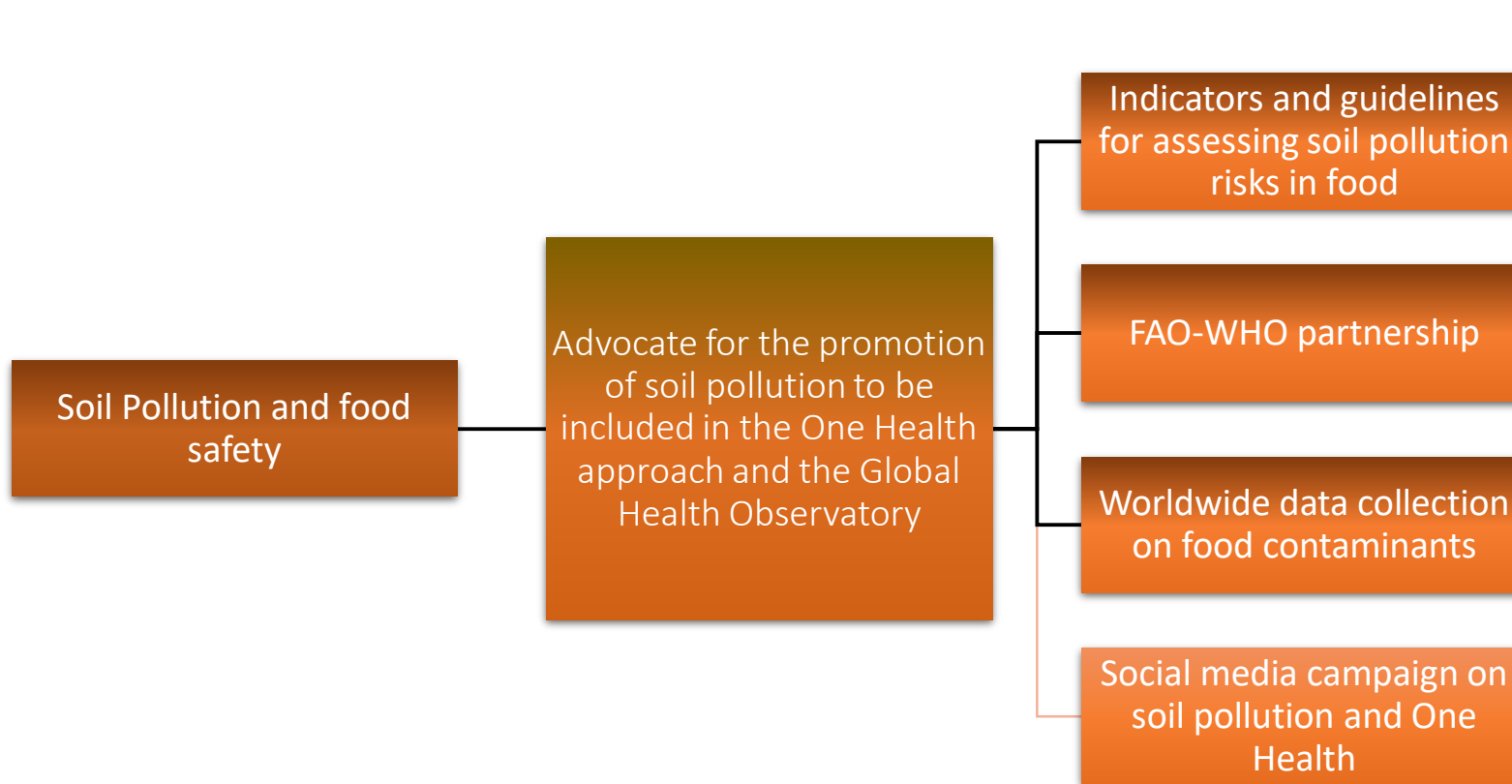
Time (CET)	Thursday, 14 December 2023	
12:00-12:05	Opening	Ravi Naidu <i>INSOP Chair</i>
12:05-12:15	INSOP Food Quality WG priorities	David O'Connor <i>INSOP WG leader</i>
Activity No 1		
12:15-12:35	FAO's Food Systems and Food Safety Division work and soil contaminants	Keya Mukherjee <i>FAO ESF</i>
12:35-13:00	Open discussion	
Activity No 2		
13:00-13:15	1. World Banana Forum project and soil contaminants of concern	Matheus Lima and Victor Prada <i>FAO EST</i>
13:15-13:35	1. Soil Doctors Programme and development of farmer-to-farmer training on soil pollution	Janet Nabwami <i>FAO GSP</i>
13:35-13:55	Open discussion	
13:55-14:00	Conclusion	Deyi Hou <i>INSOP Vice-Chair</i>

Moderated by: David O'Connor
Sergejus Ustinov

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INSOP Food Quality WG priorities 2023-2025



Food and Agriculture Organization of the United Nations

INTERNATIONAL NETWORK ON SOIL POLLUTION

ACTION PLAN

PRIORITIES OF THE FOOD QUALITY WORKING GROUP ON SOIL POLLUTION

OCTOBER 2023 VERSION

PRIORITY 1

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

	LONG TERM	SHORT TO MEDIUM TERM
KEY PERFORMANCE INDICATORS	By 2027, new soil pollution indicators will be proposed to the Global Health Observatory	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. 	

INSOP Food quality WG priority meeting 14-15 December 2023

GLOBAL SOIL MULTIPARTNERSHIP

INSOP Food Quality WG priorities 2023-2025



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

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KEY ACTIVITIES

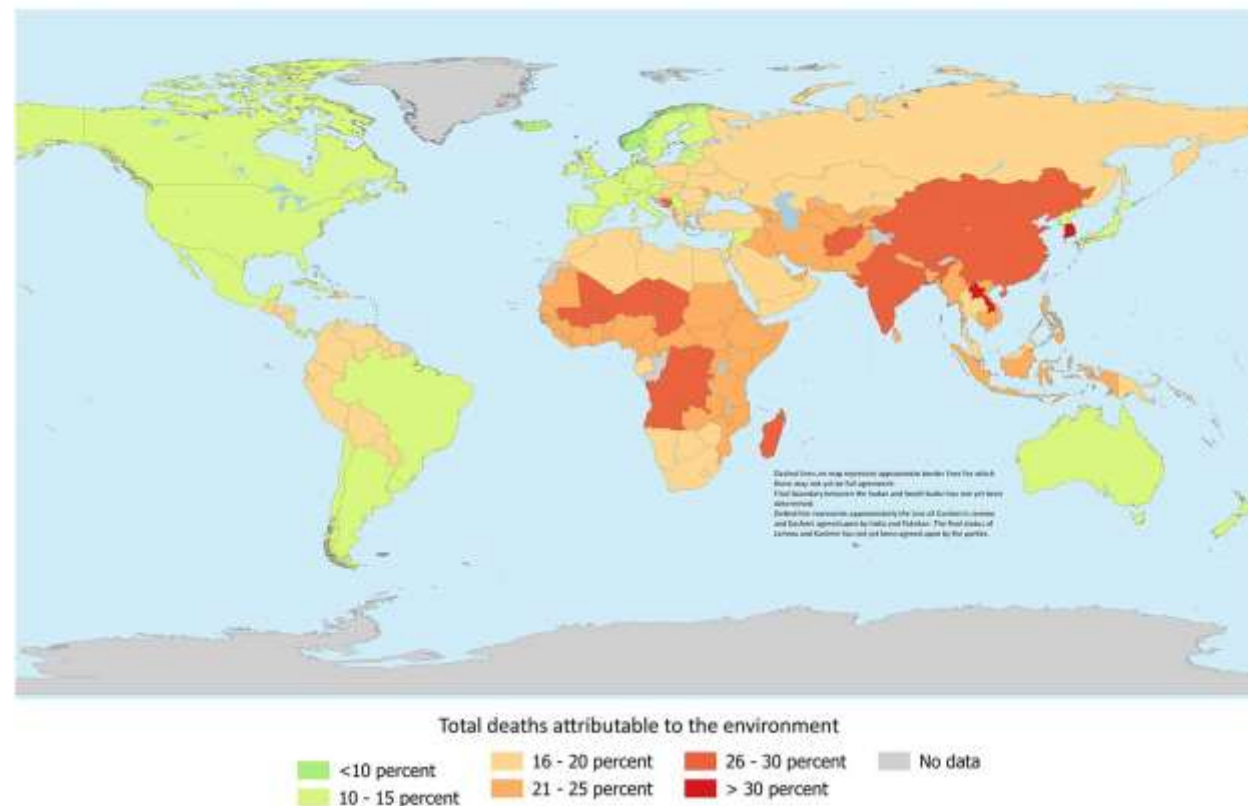
- Develop indicators and guidelines for assessing the risks of soil pollution to food safety and human health;
- Initiate contact between FAO and WHO to better understand health data on soil and food contamination via knowledge exchange dialogue;
- INSOP members help to collect and analyze health data 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.

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Chemical pollutants: a significant concern for safety

- Chemicals used safely contribute to our quality of life, health and well-being
- However, some chemicals are highly hazardous and can negatively affect human health and the environment when improperly managed
- 5 million deaths (8.3%) due to environmental exposure to selected chemicals (WHO data, 2004)
- The largest contributors include **pesticides**
- Only a limited number of chemicals or their mixtures have data available

Total global deaths attributable to the environment



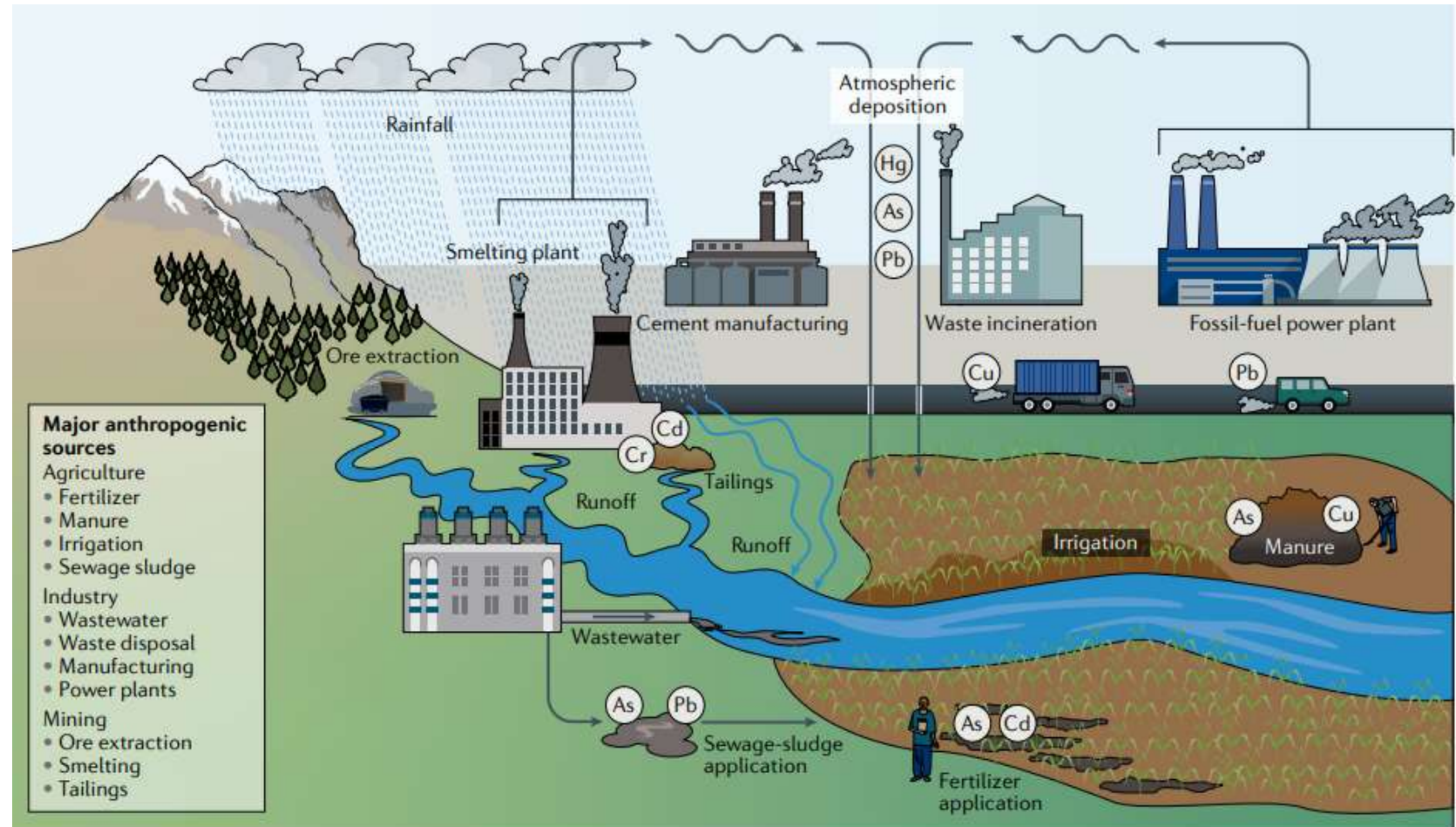
Agricultural soil pollution: a significant concern for food safety

- Agricultural soil pollution can directly impact human health through the food chain
- **Heavy metals**, such as cadmium
- **Pesticides**
- Advocate for the recognition of soil pollution as a critical component in the One Health approach, which considers the interconnected health of people, animals, plants, and their shared environment
- Collaboration between FAO and health organisations, to address soil pollution as a significant health risk

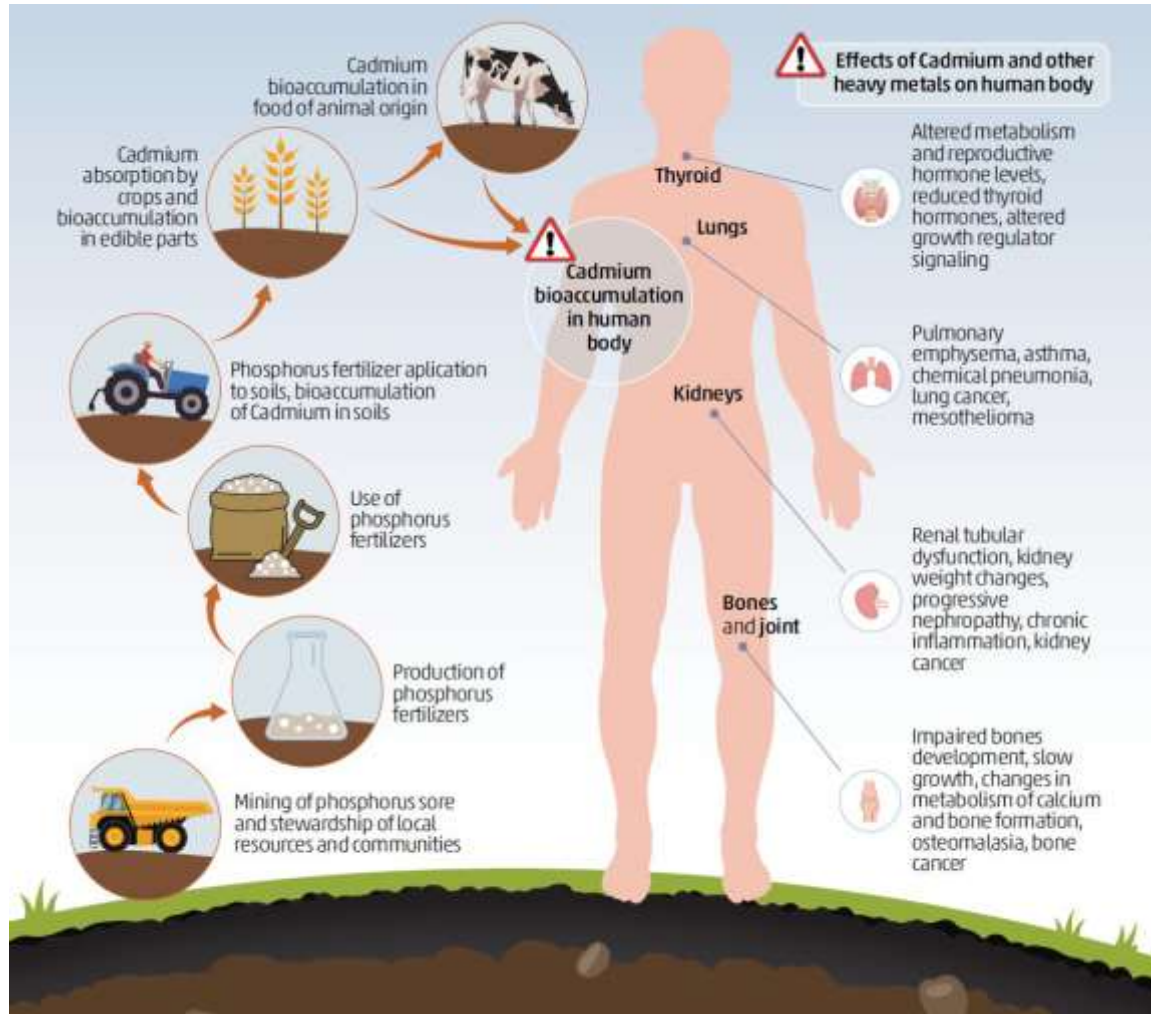
Sources of heavy metal pollution in agricultural soils

Major anthropogenic sources can be classified into three categories:

- **Agricultural**
- **Industrial**
- **Mining**



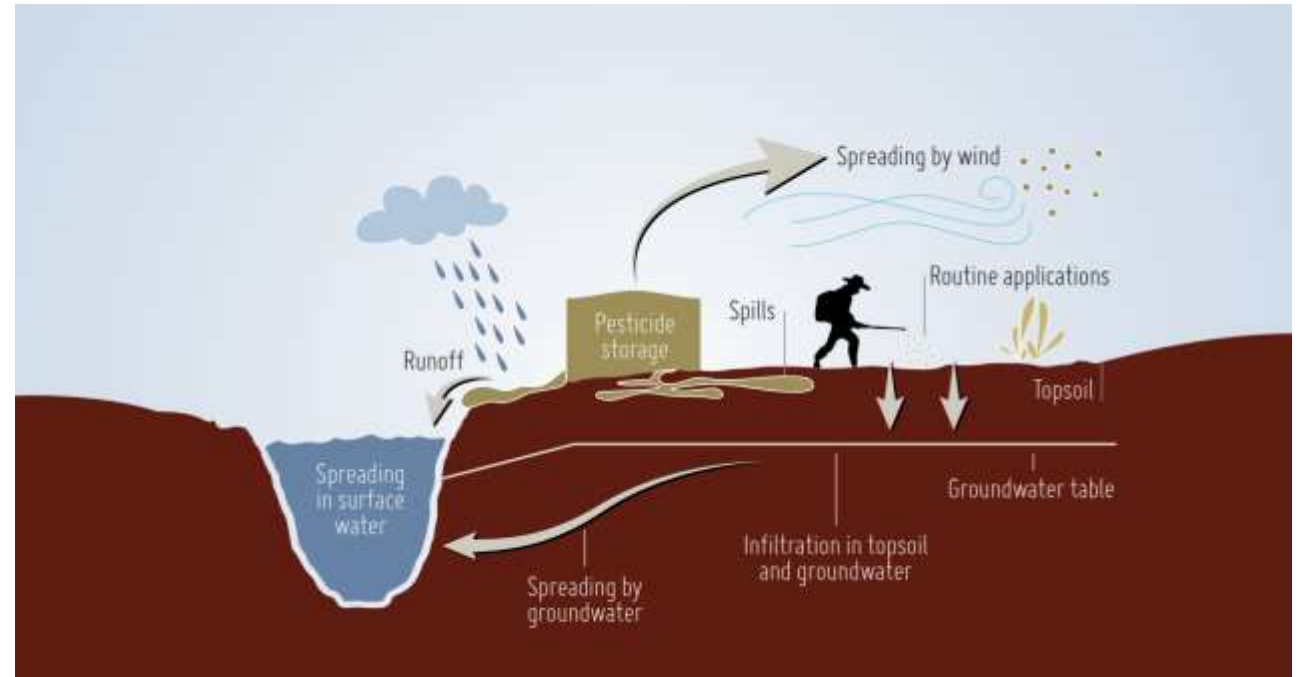
Cadmium: a significant concern for food safety



- **Bioaccumulation in the Food Chain:** Cd can accumulate in the biomass of plants and livestock, increasing in concentration up the food chain and posing a risk to human health when ingested
- **Long-term Health Effects:** Chronic exposure to heavy metals through food can lead to serious health issues. One of the main effects of cadmium poisoning is weak and brittle bones. The kidney damage inflicted by cadmium poisoning is irreversible. Cadmium exposure increases the chance of cancer.

Pesticides: a significant concern for food safety

- **Pesticides** are potentially toxic to humans and can have both acute and chronic health effects, depending on the quantity and ways in which a person is exposed.
- Pesticides are important in countries that face food shortages.
- Some older pesticides can remain for years in soil and water (POPs)
- Many of these chemicals have been banned from agricultural use (e.g., DDT) in developed countries, but they are still used in many developing countries.
- Maximum residue limits to protect food consumers.



Agricultural soil pollution: a significant concern for food safety

- **Risk Communication:** Clear and effective communication about the risks of contaminant exposure through food is crucial to raise farmer awareness and encourage safer choices
- **Global Collaboration:** International collaboration is necessary to address the transboundary nature of soil pollution

Meeting objectives

- Understand which soil pollution indicators should be integrated into the Global Health Observatory
- Raise awareness on the One Health approach, focusing on the link between soil pollutants and food safety
- Learn about the Global Soil Doctors Program and help develop training material on soil pollution for farmers' communities to use in 2024



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THANK YOU

