

Food and Agriculture Organization of the United Nations



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INSOP approach in creating a global database of soil pollutant threshold values

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Management strategies to soil pollution

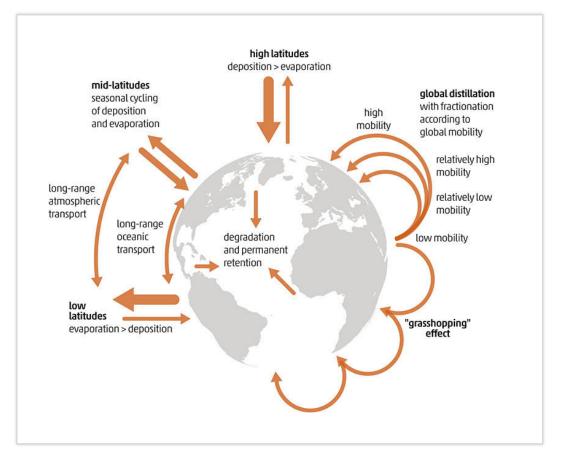
- Importance of globally management to soil pollution
 - Ecological balance maintenance
 - Food safety and security

SUSTAINABLE

GOALS

- Protection of water resources
- Human health maintenance

Soil pollution is not a local problem, and nor is it limited by administrative boundaries. We need to solve the problem of soil pollution on a global scale.







Source: FAO and UNEP. 2021. Global assessment of soil pollution: Report. Rome.

Management strategies to soil pollution

- Soil quality thresholds vary from country to country
- Soil monitoring systems need standardization / references

Table 1 international soil environmental standard values of cadmium

Country	Scope of application	Expression
Finland	Nationwide	threshold values
Germany	Nationwide	action levels、trigger levels、 precautionary levels
Poland	Nationwide	permissible concentrations in soil
Netherlands	Nationwide	intervention values target values
U.K.	England, Wales	soil guidelinevalues、ecological soil screening levels
Canada	Nationwide	soil quality guidelines
Australia	Nationwide	soil investigation levels
USA	Nationwide	soil screening levels、ecological soil screening levels



Reasons for different threshold values

- land use classification
- Model
- legal frameworks
- expression and meaning
- Political Factors



Food and Agriculture Organization of the United Nations GOALS *Source*: (Finland Ministry of the Environment, 2007) (German Federal Ministry of the Environment, 1999) (Ministry of Environment of the Republic of Poland, 2002) (Netherlands Ministry of Infrastructure and the Environment, 2009) (CCMC,1999) (Australia National Environment Protection Counci, 2013) (USEPA, 2002)

International Network on Soil Pollution (INSOP)

Goal of INSOP

- Providing an international forum for development of knowledge on soil pollution;
- Promoting and exchanging good ideas for managing polluted
- Establishing interdisciplinary cooperative links between organizations
- Strengthening technical and technological capacities through coordination among existing networks.

Mission of Assessment working group

- Advocate for the development of global harmonized methods, including standard operating procedures (SOPs) to identify and measure soil pollutants
- Advocate for creating a global database on soil pollutant threshold values in agricultural soils and other land uses









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

LONG TERM

Number of countries are working towards the adoption of threshold values for soil contaminants within national regulation

SHORT TO MEDIUM TERM

At least 50 percent of the countries are involved in the discussions on the establishment of threshold values for soil pollutants.





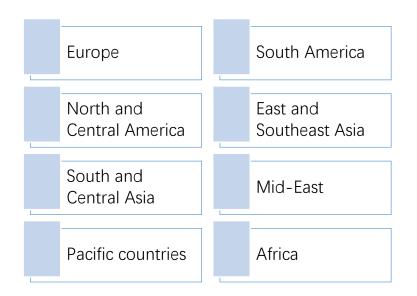
Step 1:Preliminary data collection

- Focus on the most common & toxic heavy metals and pesticides
- Identify ~10 experts around the world who have regional influence and connections

Notes:

- Collect as many national soil pollutant threshold values as possible
- These experts will be key members of the assessment working group



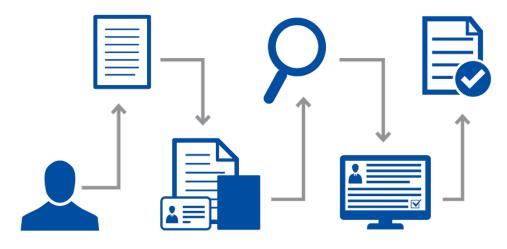






Step 2: INSOP Member Survey

- MELWORK ON SCHOOL STORE
- Review and confirm the threshold values collected in step 1 by INSOP members
- Call for help among INSOP members from countries with missing values



INSOP members are concerned about soil pollution from different countries and are able to provide threshold values from different countries to check and supplement data.



Step 3:Values verification and supplement based on FAO



- Contact FAO's national focal point for countries with missing threshold values
- If necessary, use FAO's focal point to further verify the values already collected

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National focal points (include 176 countries)

They are crucial for coordinating and facilitating the preparation of country reports, the implementation of the Commission's action plans and decisions and for monitoring the implementation and reporting back to the Commission.





