LAUNCH OF THE INTERNATIONAL NETWORK ON SOIL POLLUTION (INSOP)

22 APRIL 2022
12:00 to 13:30 CEST
VIRTUAL FORMAT (ZOOM)

Mr Ronald Vargas,
FAO Global Soil Partnership Secretary
**Why FAO works on Soil Pollution?**

2015 report on the status of soils worldwide

Soil pollution is one of the major threats to soil functioning

There was a significant lack of information compared to the information available for other threats

<table>
<thead>
<tr>
<th>Region</th>
<th>Soil pollution</th>
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<tbody>
<tr>
<td>Sub-Saharan Africa</td>
<td>Good</td>
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<tr>
<td>Asia</td>
<td>Poor</td>
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<tr>
<td>Europe and Eurasia</td>
<td>Poor</td>
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<tr>
<td>Latin America and the Caribbean</td>
<td>Fair</td>
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<tr>
<td>Near East and North Africa</td>
<td>Very Poor</td>
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<tr>
<td>North America</td>
<td>Good</td>
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<tr>
<td>Southwest Pacific</td>
<td>Good</td>
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Why FAO works on Soil Pollution?

Exponential growth of information, but not yet a complete picture

Source: Scopus, 2021
(soil pollution, soil contamination, contaminated soil, polluted soil)
There is strong evidence that soil pollution poses a major threat to the provision of ecosystem services by soils...
Soil pollution jeopardizes the achievement of most of the SDGs

The prevention, control, and remediation of soil pollution are fundamental if we want to implement the 2030 Agenda for Sustainable Development.

1.1. About 10 per cent of people living in extreme poverty have limited access to land and depend heavily on soil for their livelihoods. Soil pollution reduces crop yields and quality, leading to reduced incomes for rural populations.

2.4. Soil pollution affects food security by compromising crop yields, hampering the quality and safety of the food produced.

3.2. Soil contamination by heavy metals and other toxic substances can reduce food safety and contribute to soil biodiversity loss.

4.3. Soil and water pollution caused by agricultural activities contribute to the loss of ecosystem services and biodiversity.

5.5. Around 45 per cent of the world’s women work in vulnerable agricultural areas, or shifting cultivation systems, where they bear the burden of soil degradation and the risks associated with soil pollution.

6.3. Soil pollution affects groundwater quality and contributes to the contamination of surface water bodies, posing serious threats to human health.

7.2. About six percent of the world’s energy production comes from the conversion of fossil fuels (oil, coal, and gas), which are major sources of environmental contaminants.

10.1. Soil pollution disproportionately affects the poorest and most vulnerable populations, causing serious health impacts and reducing their ability to improve their economic circumstances.

12.2, 12.4, and 12.5. The world produces more than 1.7 billion tonnes of solid waste per year, exacerbated by modern production and consumption patterns based on poor product design, resource depletion, and rapid production of raw materials. Industrial, agricultural, mining and unsustainable waste management represent the main sources of soil pollution in some countries, especially in the Global South.

13.3. Soil pollution contributes to climate change. The release of nitrogen fertilizers in agriculture contributes to the greenhouse effect, which increases the temperature of the atmosphere, a potent greenhouse gas, leading to emissions of 700 million CO2 equivalents.

14.1. About 80 percent of marine pollution comes from land-based activities, with soil and sewage pollutants passing into the food chain, affecting the health of fish and other marine organisms.

15.3. Soil pollution causes a chain reaction of degradation of biotical ecosystems. Contaminants released by plants and insects are transformed into other pollutants and organic chemicals, which then contaminate the soil and the surrounding areas.

16.4, 16.5, and 16.7. Environmental injustice is experienced by those who are most affected by soil pollution, both developing and developed countries, and are affected by a lack of information and lack of control over the condition of the environment, which limits the ability of affected populations to react, adapt, and overcome.
International recognition of soil pollution as a global threat
GSP agenda for action: 4 key actions

Fill knowledge gaps
Improved soil pollution information and monitoring as part of the Global Soil Information System and Global Soil Health and Biodiversity Observatory

Improve awareness and communication
Promote pollution-free options and incentivise 4R approach

Strengthen legal frameworks
Global commitment towards preventing, halting and remediating soil pollution in the framework of Zero Pollution/Towards a Pollution Free Planet ambitions

Foster international cooperation
Advocate for technology transfer and cross-capacity building for the whole cycle of soil pollution, from prevention to detection, monitoring, management, and remediation
Why an International Network on Soil Pollution?

Policymakers

Academia

Land users and private sector

Civil society
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Thank you and Welcome to the INSOP!