



European Commission

Soil Monitoring

Tools to help soil resilience

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#EUGreenDeal



Soil is a **crucial, living natural resource, essential for our environment, economy and society.**



Soil is a **non-renewable natural resource**: it takes 500 years to create a few centimetres of topsoil. **Hundreds of thousands of species** — from moles, earthworms and insects to microbes and fungi — interact and work together, in such a complex way that even science cannot even fully explain.

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Soils deliver a **wealth of ecosystem services** on which we depend to prevent disasters, mitigate climate change, ensure food security. They regulate the planet's complex **water, carbon and nutrient cycles** and provide us **food, feed, timber and other raw materials.**



But soils are **under strong pressure**. Over **60% of European soils are unhealthy** and getting worse. They suffer from erosion, compaction, salinization, sealing, pollution, desertification and loss of organic carbon, nutrients, water and biodiversity.



Costs of soil degradation in the EU have been estimated to exceed €50 billion per year.



We need better data to **protect and regenerate our soils and bring them back to healthy status**

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The proposal:

- ▶ provides a clear common **definition of soil health**
- ▶ puts in place **a solid and coherent monitoring framework**
- ▶ will make **sustainable soil management** the norm
- ▶ requires Member States to identify and **investigate potentially contaminated sites** and address unacceptable risks for human health and the environment



Benefits of better data on soils:

- ▶ support innovation, technological and organisational solutions, notably in farming practices, which in turn will increase soil fertility and yields, while minimising water and nutrient consumption. This will contribute to food security in Europe
- ▶ improve our understanding of trends on droughts, water retention and erosion, strengthening disaster prevention and management
- ▶ can provide additional income opportunities for farmers and land managers

Soil health directly affects EU food security:



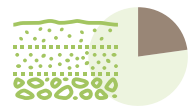
95% of our food is directly or indirectly produced on soils



Soil erosion causes a **yearly agricultural productivity loss of €1.25 billion** in the EU



83% of EU soils contain **pesticide residues**



More than **23%** of agricultural land suffers from **compaction**, reducing productivity

Benefits of new data and tools provided by the Soil Monitoring Law



For farmers

improved fertility, productivity and yields over the long-term, while **reducing costs**. This will benefit especially the **young farmers**, who now often have to start their business on unhealthy soil.



For companies

new **business, innovation and job opportunities**, such as environmental consultancy, soil testing, and more.



For cities

opportunities to **build new infrastructure without consuming new land**, applying a circular approach to this limited resource.



For science

improve knowledge and data on soils since **soil health will be monitored** everywhere in Europe.

