

#### Soil issues at EU

#### Recent context

Recent high-level reports (IPCC, IPBES) have highlighted the need to address land degradation, which disrupts the capacity of soils to provide critical ecosystem services.

Left unchecked, land degradation will aggravate many challenges facing the EU; with the risk that SDG targets are not met.

**Green Deal is explicit** of the need **for the EU** to **address land degradation** and for healthy functional **soils** to address the challenges of **climate change** mitigation, protection of **biodiversity**, the reduction of **pollution** and human **health**.



# Horizon Europe Missions (post 2021)

High **ambition**, high profile **initiatives** that aim to deliver a **transformative impact for society**, economy, environment, in relation to challenges faced by European citizens.

Inspiration Apollo Moon Mission!

Centered on research and innovation but more...

Communication and engagement critical!

Soil Health and Food Mission

- Adaptation to climate change
- Cancer
- Healthy oceans, seas, costal and inland water
- Climate neutral and Smart Cities





# **Policy developments**

European Court of Auditors reported that a coherent approach on **desertification** and land degradation in the EU was lacking. Due to the increased threat of climate change, they called for the **establishment of soil protection policies** to avoid, reduce and reverse land degradation.

Post-2020 **Common Agriculture Policy** – soil impact indicators, farm nutrient tool, but...

**LULUCF Regulation** 

CBD COP 15 (China, 2020) & Post-2020 EU Biodiversity Strategy

Mapping and Assessment of Ecosystem Services

Joint Research Centre

### SOIL @ JRC



- CAP/EU SDG Core Indicators on Soil Erosion and Soil Organic Carbon
- Integrated assessments of soil biodiversity (metagenomics) and soil pollution (pesticides, antibiotics, microplastics) and implications for soil ecosystem services land use.
- SOFR 2020
- 2021 State of Soil in Europe Report (JRC/ENV/EEA/EIONET) > SWSR25s
- ESDAC EU Soil Dashboard & new Danube Soil database
- LUCAS 2022 LUCAS x Africa (2020+)
- Economics of land degradation soil in natural capital accounting
- Soil Atlas: Asia (2021?), Global Biodiversity Chinese (2020) & Spanish, Europe v2 (2020?)

#### Coming?

- Land degradation neutrality targets,
- Pollution and health
- soil and green infrastructure

