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European Commission

CALL FOR EVIDENCE FOR AN IMPACT ASSESSMENT

This document aims to inform the public and stakeholders on the Commission's future legislative work so they can provide feedback on the Commission's understanding of the problem and possible solutions, and give us any relevant information that they may have, including on possible impacts of the different options.

TITLE OF THE INITIATIVE	Soil health – protecting, sustainably managing and restoring EU soils
LEAD DG (RESPONSIBLE UNIT)	DG Environment (Unit D1 Land Use & Management)
LIKELY TYPE OF INITIATIVE	Legislative
INDICATIVE TIMETABLE	Q2 2023
ADDITIONAL INFORMATION	Soil and Land – DG Environment

This document is for information purposes only. It does not prejudge the final decision of the Commission on whether this initiative will be pursued or on its final content. All elements of the initiative described, including its timing, are subject to change.

A. Political context, problem definition and subsidiarity check

Political context

As part of the European Green Deal, the EU Biodiversity Strategy for 2030 announced the update of the 2006 EU Soil Thematic Strategy to address soil and land degradation in a comprehensive way and to fulfil EU and international commitments on land degradation neutrality (cfr. UN Sustainable Development Goal 15.3). The new EU Soil Strategy for 2030 was adopted in 2021 and sets the vision to have all soils in healthy condition by 2050 and to make protection, sustainable use and restoration of soils the norm. It proposes a combination of voluntary and legislative action, and announces that the Commission will table a new legislative proposal on soil health by 2023 to help to achieve the vision and objectives of the strategy. The proposal for a soil health law answers calls from the European Parliament[1,2] and the European Committee of the Regions[3] to develop a comprehensive EU legal framework for soil protection and to grant this valuable natural resource the same level of protection as water and air. It follows the recommendations of the European Court of Auditors[4], the European Environment Agency[5], and European stakeholders' views[6] on the need to protect soil at EU level. The soil health law will be complementary to the legislative proposal for EU targets to restore degraded ecosystems, in particular those with the most potential to capture and store carbon and to prevent and reduce the impact of natural disasters.

Problem the initiative aims to tackle

Soils are the foundation for 95% of the food we eat, host more than 25% of the world's biodiversity, are the largest terrestrial carbon pool on the planet and play a key role in the circular economy and adaptation to climate change. They are also a finite and non-renewable natural resource. 60-70% of soil ecosystems in the EU are unhealthy and suffering from continuing degradation resulting in reduced provision of ecosystem services.[7] Unhealthy soils can be:

In bad physical condition:

- 12.7% of Europe is affected by moderate to high erosion.
- Between 2012 and 2018, more than 400 km² of land was taken per year in the EU for urban and artificial development on a net basis.
- More than 530 million tonnes of soil have been excavated and reported as waste.
- An estimated 30 to 50% of the most productive and fertile soils in Europe suffer from soil compaction.

In bad chemical condition:

- Europe currently exceeds its safe operating space for the nitrogen and phosphorous cycles by factors of 3.3 and 2.0 respectively.
- Diffuse and local soil contamination is widespread. 390 000 contaminated soils are expected to require remediation. By 2018, only some 65 500 sites were remediated.
- Salinisation affects 3.8 million ha in the EU, with severe soil salinity along the coastlines, particularly in the Mediterranean.

[1] European Parliament resolution of 28 April 2021 on soil protection (2021/2548(RSP))
[2] European Parliament resolution of 9 June 2021 on the EU Biodiversity Strategy for 2030: Bringing nature back into our lives (2020/2273(INI))
[3] European Committee of the Regions Opinion of 5 February 2021 on agro-ecology
[4] European Court of Auditors (2018), Special report n°33/2018: Combating desertification in the EU: a growing threat in need of more action
[5] European Environment Agency (2019), State and Outlook of the Environment Report 2020
[6] Synopsis report Open Public Consultation Soil Strategy (2021) 93.53% of the stakeholders replying to the open public consultation find protecting soil health/quality and restoration at EU level important or very important.
[7] More background information can be found in the Commission Staff Working Document accompanying the EU Soil Strategy for 2030 of 17 November 2021 SWD(2021)323 final

In bad biological condition:

- Peatland drainage across all land categories in the EU emits around 5% of total EU greenhouse gas emissions. Every year mineral soils under cropland are losing around 7.4 million tonnes of carbon.
- In recent decades, soil biodiversity such as the species richness of earthworms, springtails and mites has been reduced.
- The risk of desertification is increasing across the EU and already affecting agricultural production.

The main sectoral drivers of soil degradation in the EU are:

- land-use change
- urban sprawl, excessive and uncompensated spatial development and construction
- climate change, drought, extreme weather
- unsustainable soil management and intensification of agricultural and forestry practices
- industrial activities and emissions, unsustainable waste management and energy production, accidents and spills
- improper water management, reuse and irrigation
- overexploitation, unmitigated and uncompensated consumption of natural resources.

The problem of unhealthy soils can be traced back to the following cross-cutting underlying causes:

- **Market failures**: pricing problems because the cost of soil degradation is not fully internalised in prices, principal agent problems (e.g. conflicting interests between land owners and users), underdeveloped markets for new business models (e.g. payments for soil ecosystem services), lack of information and data on soil quality, etc.
- **Behavioural biases**: limited rationality of certain stakeholders e.g. due to the complexity of the problem, lack of awareness of the importance of soil health, focus on short-term benefits without taking account of future costs, income-related drivers, etc.
- **Technological drivers**: lack of technological solutions (e.g. for restoration), insufficient digitisation, gaps in research and innovation, etc.
- **Regulatory failures**: insufficient implementation of existing legislation, lack of EU comprehensive regulatory framework and piecemeal approach, etc.

Most of the drivers of soil degradation are not projected to change favourably as it stands, so the remaining healthy soils will come even under more pressure in the future, leading to a further reduction in the provision of ecosystem services. It has been estimated that soil degradation costs the EU around 50 billion euro per year. Halting and reversing current trends of soil degradation could generate up to EUR 1.2 trillion per year in economic benefits globally. The cost of inaction on soil degradation outweighs the cost of action by a factor of 6 in Europe, so it makes sound economic sense to tackle this problem as soon as possible.

Basis for EU action (legal basis and subsidiarity check)

Legal basis

The legal basis for the proposed soil health law is Article 192(1) of the Treaty on the Functioning of the EU (TFEU).

Practical need for EU action

EU intervention on soil is justified due to:

1) the significant transboundary drivers and impacts of soil degradation and the loss or reduction of ecosystem services;
2) the absence of a level playing field for economic operators, who are subject to very different national soil protection regimes, leading to a distortion of the internal market;
3) the risk that if soil is not properly protected, the EU and its Member States will fail to fulfil international and European commitments on the environment, sustainable development and climate;
4) the fact that soil degradation is persisting and even aggravating, despite that the EU and the Member States are sharing competence on the matter.

Soil degradation, and its drivers and impacts, know no borders. Soils play a major role in the nutrient, carbon and water cycles, and these processes are not constrained by physical and political borders. EU imports and consumption of goods can cause soil degradation outside the EU. Excavated soils are often shipped across borders, while eroded soil particles are transported by wind and water. Contaminants can become mobile via the air, surface water and groundwater and in the end pollute the soil in another country. Soil pollution can pose risks for food safety on the internal market. Land degradation and climate change are likely to force 50 to 700 million people to migrate by 2050, which will put pressure on European borders.

Land and soil degradation are addressed very unevenly in national policies and legislation: some Member States have very elaborate soil protection rules, others do not have provisions beyond those derived from soil-related EU policies.[8,9] Differences between national soil protection rules lead to very different obligations for economic operators across the EU, resulting in a distortion of the internal market, unfair competition, a lack of legal certainty, an uneven playing field and uneven protection levels for soil and land.

At international level, the EU and its Member States committed to achieve land degradation neutrality by 2030 (SDG 15.3), to keep the global rise in temperature below 1.5-2°C compared to pre-industrial levels (UNFCCC), to combat desertification and

[8] https://webgate.ec.europa.eu/fpfis/wikis/pages/viewpage.action?spaceKey=SOIL&title=Home
[9] Ecologic (2017), Updated Inventory and Assessment of Soil Protection Policy Instruments in EU Member States.

mitigate the effect of droughts (UNCCD), to conserve soil biological diversity and use its components sustainably (CBD) and to address the issue of soil pollution (e.g. UNEA-3 Resolution, Minamata and Stockholm Conventions). Healthy soils are crucial to achieve these international commitments.

B. Objectives and policy options

The intervention will contribute to the overall goals of the European Green Deal, to existing EU medium- and long-term policy objectives for 2030 and 2050, and particularly to the vision that all soil ecosystems should be in healthy condition by 2050.

The EU Soil Strategy for 2030 already indicated a number of aspects that should be considered in the impact assessment:

- indicators for soil health and their range of values;
- requirements for the sustainable use of soil so that its capacity to deliver ecosystem services is not hampered;
- monitoring and reporting on the condition of soil;
- improving the legal basis for the Land Use/Cover Area frame Survey (LUCAS);
- options to identify, register and remediate contaminated sites, and to apply the polluter pays principle;
- reporting on the progress in managing soil contamination;
- measures that can contribute to reducing nutrient losses by at least 50% without deterioration in soil fertility (resulting in the reduction of fertiliser use by at least 20%);
- definition of net land take;
- monitoring and reporting on progress towards national landtake targets and for implementing the landtake hierarchy;
- options for a soil health certificate for land transactions to provide land buyers with information on the key characteristics and health of the soils in the site they intend to purchase;
- options for a passport for excavated soil;
- adequate integration and coordination of soil and water management.

In addition to the policy options listed above, the impact assessment will also consider alternative, non-legislative policy instruments, such as self-regulation, voluntary agreements and stewardship, standardisation, financial incentives and economic instruments. The legislative and non-legislative policy options, or combinations of options, will be assessed against a 'business as usual' scenario to identify the best approach. This baseline scenario will include all relevant existing EU and national policies and measures, including implementation of the actions described in the EU Soil Strategy for 2030, without the legally binding elements related to the soil health law as identified therein.

C. Likely impacts

Likely environmental impacts

Key environmental impacts of the intervention that are likely to be screened are the impact on biodiversity, climate change mitigation and adaptation, use of resources, quality of other environmental media such as water and air, waste management, and overall environmental risks (including at international level).

Likely economic impacts

Key economic impacts of the business as usual scenario and of the policy options that are likely to be screened are the impact on competitiveness, the functioning of the internal market and competition, the impact on companies and SMEs, land owners and users (e.g. farmers), regulatory burdens, research & innovation, technological development, the impact on consumers and households, public authorities and budgets.

Likely social impacts

Key social impacts of the intervention that are likely to be screened are the impact on employment, human health, education and training, and good administration.

Likely impacts on fundamental rights and the sustainable development goals

Depending on the options chosen, the initiative could contribute to achieving a number of objectives in the Charter of Fundamental Rights of the EU, e.g. a high level of human health, environmental and consumer protection. The intervention will also contribute to achieving the Agenda for Sustainable Development, in particular SDGs 15 (life on land), 13 (climate action), 11 (sustainable cities and communities), 6 (clean water), 3 (good health and well-being) and 2 (zero hunger), but to a certain extent to almost all other SDGs.

D. Better regulation instruments

Impact assessment

An impact assessment will investigate the possible provisions of the soil health law, the alternative policy options and associated impacts to tackle soil degradation in the EU against a 'business as usual' baseline. Particular attention will be given to subsidiarity, proportionality, flexibility, operational feasibility, legislative simplicity, and the administrative costs of implementation. The soil health law will respect the competences of Member States on soil and take into account existing EU and national policy initiatives, as well as soil variability and different environmental and climatic conditions.

Consultation strategy

Consultation activities will be promoted through the 'Have your say' website and other relevant channels, and build further on the consultations that already took place to prepare the EU Soil Strategy for 2030[10]. Several methods will be used :

- This public **call for evidence** will be open for 4 weeks in 24 languages and available through the 'Have your Say' website.
- A 12-week **online public consultation** will be published in the 24 official EU languages on the 'Have your Say' website in the second quarter of 2022. The questionnaire could comprise both general questions intended for the wider public and questions seeking more specialised information from experts or specific stakeholder groups.
- **Targeted consultations**:
    - discussions with other EU institutions: the European Parliament, the Council of the EU, the European Economic and Social Committee, and the European Committee of the Regions;
    - consultation of Member States and key stakeholders through the expanded EU expert group on soil protection;
    - consultations through the EIONET national reference centre on soil, the EU Soil Observatory and the Horizon Europe mission 'A Soil Deal for Europe';
    - interviews to fill in possible information gaps, confirm factual elements or gather evidence on specific topics.
    - bilateral meetings with selected stakeholders, authorities, organisations and associations.

The results of the consultation will be made publicly available. A factual summary report will be published online within 8 weeks after closing of the public consultation. A synopsis report of all consultation activities will be annexed to the impact assessment.

Why we are consulting?

The Commission wants to ensure that the general public interest across the EU is well reflected in the impact assessment and the proposal for a soil health law by collecting feedback, ideas, information and opinions including policy briefs, studies, data on the drivers and the extent of the problem, costs and impacts, policy objectives and options.

Target audience

The Commission intends to consult the wider public and stakeholders with more in-depth knowledge. These include:

- national, regional and local authorities (e.g. environmental, climate, spatial planning, health, transport and mobility, economic and agricultural authorities);
- European, international and multilateral organisations;
- relevant economic operators (land owners and users, environmental consultants, industry, farmers, foresters, etc.);
- related interest associations, social partners, consumer and youth organisations, NGOs, civil society, research and academic institutions, think thanks and the EU public.

[10] https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12634-Healthy-soils-new-EU-soil-strategy_en