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COMMISSION STAFF WORKING DOCUMENT
EXECUTIVE SUMMARY OF THE IMPACT ASSESSMENT REPORT

Accompanying the document

**Directive of the European Parliament and of the Council
on Soil Monitoring and Resilience (Soil Monitoring Law)**

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Executive Summary Sheet
Impact assessment on the Directive on soil
A. Need for action
What is the problem and why is it a problem at EU level?
<p>About 60 to 70% of soils in the EU are currently in an unhealthy state.</p> <p>Soil is a vital, limited, non-renewable and irreplaceable resource. Scientific evidence indicates that soil degradation in the EU is continuing and worsening. Land and soil endure severe degradation processes due to pressures such as unsustainable land management, climate change, extreme weather events, sealing, pollution and overexploitation. Soil forms very slowly, therefore it is a non-renewable resource. However, soil health can be maintained and regenerated.</p> <p>Healthy soils provide ecosystem services that are vital to humans and the environment, such as the conditions to provide safe, nutritious and sufficient food, biomass, clean water, nutrient cycling and carbon storage. Degrading the soil reduces its capacity to provide these ecosystem services. This leads to risks for the environment, economy and society, including risks for food security, resilience against natural disasters and droughts, human health and well-being, climate and biodiversity.</p> <p>All Member States are facing soil degradation. The drivers and impacts of the problem go beyond country borders and reduce the provision of ecosystem services throughout the EU and its neighbours. Current EU policies make positive contributions to improving soil health but they will not be sufficient to regenerate all soils to a healthy state by 2050 because they do not comprehensively address all the drivers of soil degradation. Therefore, significant gaps remain.</p>
What should be achieved?
<p>The general objective is to achieve healthy soils across the EU by 2050, as set out in the EU Soil Strategy for 2030, adopted in November 2021. This will ensure that EU soils can supply multiple ecosystem services at a scale sufficient to meet environmental, societal and economic needs, and reducing soil pollution to levels no longer considered harmful to human health and the environment.</p>
What is the value added of action at the EU level (subsidiarity)?
<p>The objectives of the proposed action can be better achieved at EU level because of the scale and effects of EU-wide action. Action at EU level is also justified given the scale and transboundary nature of the problem, the impact of soil degradation across the EU and the risks for the environment, economy and society. Coordinated measures by all Member States are needed to achieve the objective for all soils to be healthy by 2050, and to secure the soil's capacity to provide ecosystem services in the long-term. Currently, soil protection and regeneration policies vary markedly from one Member State to another. Lower environmental requirements in some Member States may potentially distort the internal market and lead to unfair competition among businesses.</p>
B. Solutions
What are the options to achieve the objectives?
<p>The baseline scenario describes how the current situation is expected to evolve if no legislative action is taken at EU level. The baseline assumes that the current and planned EU, global and Member State policies relevant to soil health are implemented and remain in force. The baseline scenario covers non-legislative options, considering the measures already taken at national and EU level under the 2006 Soil Thematic Strategy. It also assumes implementation of European Green Deal policies (such as the proposed Nature Restoration Law), the Common Agricultural Policy and the actions planned under the Soil Strategy for 2030, with the exception of the Soil Law.</p> <p>The policy options are described by using five key building blocks that set out definitions and obligations as a basis for coherent legislation. The blocks are the definition of soil health and soil districts, monitoring, sustainable soil management, identification and investigation of contaminated sites and the restoration of soil health. Option 1 sets binding requirements only for monitoring but it was discarded at an early stage. Options 2, 3 and 4 are provided for each building block, by</p>

modulating the level of flexibility and harmonisation to come up with meaningful potential solutions. The options with the highest degree of flexibility for Member States are labelled as 'option 2' in each building block, those with the highest degree of harmonization are labelled as 'option 4', and 'option 3' is an intermediate combination of harmonisation and flexibility.

The preferred option combines the best options from each building block, to make sure that the objectives are reached with requirements that are both realistic and do not go beyond what is necessary. For this reason, the preferred option is based on a staged approach that gives Member States time to put in place the mechanisms to first assess the condition of soils and then decide on the regeneration measures once the conclusions are available. The objective of healthy soils for 2050 pursued by the preferred option is designed in a way that takes account of scientific limitations on the specific condition of soils and the uncertainties relating to the impacts some measures may have.

What are different stakeholders' views? Who supports which option?

The feedback on the call for evidence 'soil health – protecting, sustainably managing and restoring soil' revealed that respondents supported for a legislative initiative at EU level. All responding research organisations, NGOs and public authorities supported it, as did the majority of responding business associations and organisations. Some businesses emphasised the importance of soil monitoring and the linkages with EU water policy and favoured a risk-based approach to tackle soil contamination. Some businesses and farmers voiced concerns about the risk of double regulation and additional administrative burden. Others preferred a non-binding approach at EU level. All categories of stakeholders demanded that the Soil Law leaves enough flexibility to take into account the diversity and local conditions of the soil (no one-size-fits-all solution).

The vast majority of respondents to the online public consultation replied that at present, the causes of soil degradation are not sufficiently or not at all tackled at EU level. On the content of the Soil Health Law, respondents found it most important to include an obligation to use soil in a sustainable manner, for Member States to have an obligation to achieve healthy soils, and to use a risk-based approach when tackling contaminated soils.

C. Impacts of the preferred option

What are the benefits of the preferred option?

The preferred option is designed to take action and tackle the costs, in particular the cost of ecosystem services loss due to soil degradation. It estimates that soil degradation costs EUR 68.8 billion per year (upper value of quantified costs), excluding contaminated sites, or EUR 292.4 billion per year (upper value of quantified costs).

The highest benefits of the initiative come from the obligation it creates for Member States to take action to stop degradation and to regenerating unhealthy soils. On the cost of applying specific soil management measures, the quantifiable economic benefits for the cases studied were estimated at up to EUR 52 billion per year, which offset the economic costs, without factoring in the unquantifiable, but very significant, environmental and social benefits that the draft law would provide.

In terms of the remediation of contaminated sites, the initiative is expected to yield very significant benefits, in particular in contributing to the zero-pollution ambition, but the benefits are largely unquantifiable and outweigh the costs. A prudent estimation of those benefits is EUR 24.4 billion. It is important to note that the costs of action would generate business for the remediation industry (typically EU SMEs) that would see an estimated increase in jobs of up to 35 800 units as a result.

The preferred option therefore creates plenty of opportunities for SMEs both in terms of growth (e.g. to investigate and remediate contaminated sites, provide advisory services for soil health, soil testing labs, certification) and in terms innovation.

What are the costs of the preferred option?

The highest costs of the initiative are due to the obligation to take action to stop degradation, to apply sustainable management practices, and to regenerate healthy soils. The costs are estimated to be in the order of EUR 28 to 38 billion per year. The total cost of managing contaminated sites is highly

uncertain. It is estimated at EUR 29 billion (spread over 15 years) to identify and investigate contaminated sites and 24.9 billion (spread over 25 years) to remediate contaminated sites.

What are the impacts on SMEs and competitiveness?

The business sectors expected to be affected by the initiative include agriculture, forestry and related extension services, business activities that have contaminated the soil, business activities related to the remediation of contaminated sites, research and laboratories. Soil degradation affects their productivity and competitiveness. Action taken to tackle soil degradation is not rewarded, and this affects the level playing field. The preferred option is to create plenty of opportunities for EU SMEs (in terms both of growth and of innovation) in devising and applying sustainable soil management and regenerating measures, as well as to the investigate and remediate contaminated sites. Creating the obligations for Member States to monitor soil health would also create opportunities for research and development and business to develop parameters and soil observation capacity.

Will there be significant impacts on national budgets and administrations?

There will be costs in putting the structures in place (soil districts, monitoring mechanisms, registers, assessments), but these will be comparable with other frameworks (air, water). The highest costs will result from regeneration and remediation work. To achieve higher overall benefits than the costs, Member States are expected to help financing the transition to sustainable practices and regeneration when the on-site benefits for soil managers or landowners not expected to offset the costs. They may also use the EU funds available to achieve healthy soils.

Will there be other significant impacts?

The preferred option will deliver significant environmental benefits and improve soil health. It will have knock-on effects on water and air quality and will benefit biodiversity, the climate and our food system. The welfare and well-being of our current and future generations depends on soil health.

D. Follow up

When will the policy be reviewed?

The monitoring process provides for an evaluation of the impact of the Soil Law based on core indicators tracking factual and spatially explicit data, information on multiple measures taken and their impact. It also provides for best practices to be shared between soil management units (soil districts). Based on the monitoring and assessment at national level, complemented by the Commission-led LUCAS soil survey and by satellite data, the Commission will assess progress against the objectives set. It is important to give sufficient time to set up these monitoring frameworks, to produce results, put in place measures and then yield results.