Position paper

COMMENTS ON THE PROPOSAL FOR A DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL ON SOIL MONITORING AND RESILIENCE

(SOIL MONITORING LAW)
1. Introduction

Agroecology Europe (AEEU), the European association promoting agroecology as a set of practices, a science and a movement across Europe welcomes the Commission's COM(2023) 416 Proposal for a Directive on Soil Monitoring and Resilience published on the 5th of July 2023.

The Soil Monitoring Law (SML) marks a positive starting point for the move towards healthy soils throughout Europe, establishing a comprehensive and systematic monitoring framework to ensure a thorough assessment of soil health and its evolution across Europe.

However, the SML is only a first step and should be accompanied by well-defined roadmaps, ambitious and quantifiable measures outlining the actions to be implemented by Member States to restore soil health both in quality and quantity. This includes promoting beneficial agroecological practices for soil health and the implementation of binding targets and intermediate objectives for Member States to achieve by 2030 and 2040.

Furthermore, the SML should be reinforced by cohesive EU farming and food policies, such as the Integrated Nutrient Management Action Plan (INMAP), the Nature Restoration Law (NRL), the Regulation on Sustainable Use of Plant Protection Products (SUR), and the Common Agricultural Policy. For the latter, it is essential to implement mechanisms to avoid the capitalization of subsidies into land prices in the EU¹ and provide sufficient funding to set up independent farm advisory services supporting the uptake of agroecological practices.

AEEU wishes to outline that improving soil health goes hand in hand with implementing land use policies at Member States level to achieve zero net land take by 2050.

Ensuring generational renewal in the agricultural sector, and maintaining a diversified farming sector composed of small and medium-sized family farms, is an essential component of a soil health policy at the European level². We call on the EU to set up a land market control system to improve transparency of land ownership, and to encourage Member States to put in place legal tools that effectively facilitate and support long-term access to land for young farmers and new entrants.


2. Comments on specific articles

Article 1:

The scope of the Directive should be expanded to include a clear obligation for Member States to achieve healthy soils by 2050, alongside intermediate targets and milestones for 2030 and 2040 in paragraph 1.

It is fundamental that the directive also lays down measures to secure and enhance soil health and functioning for improved plant growth, particularly by managing soil organic matter and enhancing soil biological activity in paragraph 2.

Article 9:

The considerable variability in carbon sequestration, influenced by contrasting pedoclimatic conditions, soil texture and biomass types, poses significant challenges in terms of providing cost-effective, accurate, and reliable monitoring and assessment. The integration of carbon markets into land valuation may exert additional pressure on European land prices, raising concerns about increased land speculation and land grabbing, which could, in turn, impede access to land for farmers, especially newcomers and aspiring young individuals entering the agriculture sector.

Therefore, AEEU calls for the separation of soil health certificates from any carbon offsetting policy.

Article 10:

AEEU advocates to have a specific mention of agroecological practices such as those mentioned in Annex III. These sustainable soil management principles should be understood in a systemic manner and should set the base for minimum requirements for conditional support under the Common Agricultural Policy (CAP). We believe that accounting for the agricultural practices used by farmers is much easier than quantitative measures that are too difficult to interpret or relate to.

Agroecological practices including crop diversification, crop rotation, intercropping, agroforestry, the integration of crop and livestock systems, and soil management measures such as continuous soil coverage, reduced or no-tillage, and strong reduction of chemical inputs embrace the living nature of soils and
consider soils as living systems. Encouraging the use of organic matter, compost, and mulch to improve soil structure and fertility should also be promoted\(^3\).

Crop rotations should be thoughtfully designed to serve ecological purposes, including the incorporation of diverse plant families and functional groups like leguminous crops, temporary pastures, and cereals. This approach aims to deliver various ecosystem services, such as nitrogen fixation, biological pest control, and disruption of pest cycles.

AEEU welcomes the establishment of “an impartial and independent council on sustainable soil management, training activities and capacity building for soil managers, landowners, and relevant authorities”. This independent advisory service must address the sustainability of agricultural production practices in a holistic and systemic manner and should align with the establishment of independent farm advisory services, which includes agroforestry and agroecological approaches, as specified in Article 15 of the new CAP Regulation 2021/2115. The integration of independent farm advisory services and the adoption of agroecological practices must be seamlessly woven into the post-2027 Common Agricultural Policy (CAP). One of its central policy objectives should be to foster long-term food security by promoting agroecological soil management practices.

**Article 11**

AEEU welcomes the mention of land take mitigation principles, which highlights the close and inextricable link between soil health and land use, and the ecosystem services soils can provide with sustainable management practices.

3. Comments on Annexes

Annex I

Currently, there is no scientific consensus on establishing fixed, static values that could universally define the health of soils. AEEU wishes to emphasise that fixed targets and absolute values are not a feasible reference for all EU regions due to the substantial variations in pedo-climatic conditions and climates, rendering direct comparisons impractical.

However, instead we believe in the necessity of introducing relative change targets within the EU Sustainable Soil Management strategies to enhance soil health. This approach would account for the specific contextual realities and the initial soil conditions.

Our proposal is to include the following relative change targets in Annex I, enabling the measurement of progress in relative terms rather than absolute values.

<table>
<thead>
<tr>
<th>Aspects of soil degradation</th>
<th>Soil descriptor</th>
<th>Criteria for healthy soil condition</th>
<th>Extra comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss of soil organic carbon</td>
<td>Soil Organic Carbon (SOC) concentration (g per kg)</td>
<td>Relative annual increases of 0.2% to 0.5% in SOC concentration</td>
<td>Collaboration with experts, such as soil scientists and agronomists, as well as local independent agricultural extension services is requested to determine precise and realistic targets for increases in SOC and land management. Need to set higher SOC concentrations in soils susceptible to erosion to safeguard soil structure and mitigate topsoil loss, addressing the urgent need for erosion control. In regions characterised by warmer and wetter...</td>
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</tbody>
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Enhancing and complementing criteria for measuring soil biodiversity in Part C is essential for a more comprehensive assessment of soil health. Key criteria should include assessing biological activity and diversity (invertebrates, microorganisms), monitoring plant diversity and ground cover, examining microbial community diversity, observing nutrient cycling, measuring soil organic matter, evaluating erosion control, tracking soil respiration, assessing soil structure and aggregation, considering soil pH and organic matter content, and evaluating water-holding capacity. These criteria provide a holistic view of soil biodiversity and ecosystem functioning, aiding in informed land management practices.

**Annex II**

LUCAS (Land Use and Coverage Area frame Survey) stands out as the most suitable database for soil monitoring in Europe. It should be leveraged to establish a comprehensive set of reference points for assessing relative changes.

The emphasis should be on achieving a harmonised and unified EU-wide database. This would facilitate standardised data collection and analysis across the entire European Union, ensuring consistency and comparability.

An important step forward involves broadening the scope of indicators that LUCAS examines to gain a more comprehensive understanding of soil health and quality.

By implementing these recommendations, LUCAS can further bolster its role as a valuable tool for soil monitoring and contribute to improved soil management practices across the European Union.

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4. Conclusion: Soil health is a cross-cutting issue that needs coordinated action through all EU farming and food policies

AEEU highlights the need for a more action-oriented approach in the proposed Directive, as the current version heavily emphasises monitoring at the expense of tangible actions.

Soil health must be recognised as a cross-cutting issue that requires a coordinated approach across various EU policies and sectors. The EU soil strategy should be reinforced by consistent EU farming and food policies such as the Nutrient Management Action Plan (INMAP), the Nature Restoration Law (NRL), Regulation on the Sustainable Use of Plant Protection Products (SUR) and the Common Agricultural Policy (CAP) with the following recommendations:

**CAP:**
- Implement mechanisms to avoid the capitalisation of subsidies into land prices in the EU
- Provide sufficient funding to set up independent farm advisory services supporting the uptake of agroecological practices.

**INMAP:**
- Regulate and manage the use of fertilisers and manure to prevent nutrient runoff and water pollution.
- Implement nutrient management plans to ensure the efficient use of nutrients for crop production.

**NRL**
- Establish erosion control measures and buffer zones near water bodies to prevent soil erosion and sedimentation.
- Protect wetlands and riparian zones, as they play a crucial role in soil and water quality.
- Peatland restoration

**SUR**
- Regulate the use of pesticides and chemicals to minimise soil contamination.
- Promote integrated pest management and agroecological practices to reduce reliance on chemical inputs.
Soil health is crucial for the current and next generations as it ensures food security, biodiversity, water quality, climate change mitigation, resilience to environmental challenges, economic stability, reduced external input’s dependency, and preservation of cultural heritage. It is the foundation of a sustainable and livable planet.

We call on the co-legislators to improve the current proposal for a Directive with an action-driven approach, thus enabling Member States to implement coherent measures and concerted action to improve soil health within our decisive decade.

**About Agroecology Europe**

Agroecology Europe, is a non-profit European association intending to place agroecology high on the European agenda of sustainable development of farming and food systems. It wants to foster interactions between actors in sciences, practices and social movements, by facilitating knowledge sharing action. It aims at the creation of an inclusive European community of professionals, practitioners, and more generally societal stakeholders in agroecology.

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