Mixing practice and outcome-based targets in policy incentives for soil-health

Executive summary

To mitigate the environmental risks caused by climate change and soil degradation, and ensure the long-term viability of European agriculture, improving subsidies and other policy incentives that support farmers' transition towards more sustainable practices is imperative. The evidence gathered from 15 interviews with policy experts shows that to be effective, i.e., adopted and with positive impact on soil and farmers' economics, incentives should incorporate a mix of practice and outcome-based targets. In fact, while practice-based incentives may lack evidence of their environmental impact, shifting solely to outcome-based incentives poses challenges due to associated unpredictability and implementation costs. Hence, balancing practice-based and outcomes-based approaches ensures farmers are rewarded for the positive externalities they generate while managing financial exposure to soil outcomes and associated risks.

Accelerated by climate change, land and soil degradation threatens viability and sustainability of European agriculture, costing an estimated €50 billion per year. Farming practices are linked to approximately 11% of EU's total greenhouse gas emissions, and over 60% of EU soils are considered unhealthy due unsustainable land management practices.

Transitioning towards a sustainable. climate neutral agriculture is essential for mitigating these environmental risks and ensuring the long-term viability of the sector. Whilst this calls for a decisive shift in policy toward practices that restore and sustain healthy soils, the EU already laid out an ambitious framework anchored in the European Green Deal to guide both public and private stakeholders in their actions.

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Policy incentives for soil farming

The European Climate Law and the "Fit for 55" overall framework package sets the EU-wide climate achieving neutrality 2050. Within this context, the final amended Land Use, Land Use Change and Forestry (LULUCF) Regulation (Regulation 2023/839, amending Regulation (EU) 2018/841) establishes strengthened targets for carbon removals by 2030, but does not include the sectoral climate-neutrality target for Agriculture, Forestry and Other Land Uses (AFOLU) by 2035 that had been part of the initial proposal. The EU Soil Strategy for 2030 outlines initiatives such as the establishment of a network of excellence of practitioners including on regenerative and organic agriculture and the promotion of investments targeting soil health within the EU Taxonomy. Additionally, the EU Biodiversity Strategy for 2030, coupled with the adopted Nature Restoration Law (Regulation (EU)

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2024/1644), reinforces the importance biodiversity conservation of restoration efforts to which the EU has committed to dedicate 7.5% 2024, and 10 % from 2026 of annual spending under the 2021-27 Multiannual Financial Framework.

The Common Agricultural Policy (CAP) is the cornerstone of European agricultural policy, shaping the future direction of the sector. The current CAP (2023-2027), implemented at the Member State level through national CAP Strategic Plans, has strengthened the environmental requirements of the Good Agricultural and Environmental Conditions (GAEC). It has also introduced Eco-Schemes under pillar I (income support) to incentivize practices that promote, among other benefits, soil health.

On CO_2 sequestration, the EU adopted the Carbon Removal Certification Framework (CRCF), which establishes certification rules OU.A.L.ITY criteria to facilitate development of the carbon market and the scaling of carbon farming practices.

Through 15 semi-structure interviews conducted with policy professionals at the European and national level in the six SoilValues testing ground countries (Belgium, Denmark, Germany, the Netherlands, Poland, and Portugal), we assessed the effectiveness of policy incentives based on а framework including adoption, impact on soil, and economic contribution to farmers. While most (11) interviews revolved around the CAP, our findings have wider implications, leveraging inputs other agri-food value chain stakeholders.

Conclusion

Interviews indicated that rather than a lack of resources, the challenges lie how resources are directed. Repurposing existing subsidizes and incentives was debated across different climate issues, including soil health farming. Most existing incentives in this domain are practice-based, and while certain practices are detrimental to soil

health, others still lack robust evidence of delivering positive soil-health outcomes.

For example, intensive monocropping and excessive tillage are widely recognized as harmful to soil health, accelerating erosion and reducing organic matter. By contrast, cover cropping or reduced pesticide use are often incentivized as positive practices, but their evidence long-term soil-health on outcomes by region can vary implementation.

Nevertheless, shifting from practice to outcome-based incentives is not recommended either. Given that soil outcomes are long-term, difficult to predict, costly to measure, and influenced by factors beyond farmers' control, it is better to avoid purely outcome-based incentives that place all the risks on farmers.

Key recommendations

Instead of prescribing specific practices, incentives should offer a menu of options for farmers to choose from based on their experience and specific context. Empowering farmers to select and implement practices best suited to their unique conditions, with access to upfront capital, is crucial. On the other hand, it is important that these incentives do not create market distortions by promoting farming practices without verifiable impacts on soil health.

A complementary mechanism which rewards outcomes should be established, enabling farmers to access additional revenue if they achieve pre-agreed targets, thus motivating them to be impact-driven.

Balancing the trade-offs between practicebased, which are crucial in the initial stages, and outcomes-based methods ensures that farmers are rewarded for their results while their financial exposure to soil outcomes is controlled and risks partially mitigated.

"I think it should be a mix. We cannot say incentives must be fully outcome-based because it may not reflect the efforts. There are situations where you need to wait years before you start to get some tangible benefits and that's a pity if a farmer who needs a bit of support needs to wait so long before getting some help"

- Project intermediary

