



Monitoring soil health in practice: equipping stakeholders to sample, analyse, and interpret soil health indicators

HORIZON-MISS-2026-05-SOIL-01

Program:	Soil Mission
Típus:	Coordination and Support Actions
TRL szint:	-
Támogatás projektenként:	5 M EUR
Támogatott projektek száma:	1
Pályázati felület megnyílik:	2026. február 04.
Beadási határidő:	2026. szept. 23., 17:00

Felhívás linkje:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/HORIZON-MISS-2026-05-SOIL-01>

Project results are expected to contribute to all the following expected outcomes:

- enhanced reliability and accessibility of soil health data by and for laboratories, land managers, advisors and policymakers;
- improved understanding by land managers, other relevant practitioners and policymakers of the conditions, limitations and uncertainties of soil data and outputs and tools (e.g. datasets, indicators, descriptors, methodologies, pedo-transfer functions) developed by Mission Soil projects and initiatives (among others);
- increased collaboration and interaction among stakeholders, including end-users, around soil health data issues;
- support the development of standards, norms and reference frameworks as well as national and international guidelines of soil sampling and monitoring and promote best practices.

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Antimicrobial resistance and antibiotic biosynthesis in soils: developing key understanding and counteractive strategies using a One-Health approach

HORIZON-MISS-2026-05-SOIL-02

Program:	Soil Mission
Típus:	Research and Innovation Actions
TRL szint:	-
Támogatás projektenként:	7 M EUR
Támogatott projektek száma:	2
Pályázati felület megnyílik:	2026. február 04.
Beadási határidő:	2026. szept. 23., 17:00

Felhívás linkje:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/HORIZON-MISS-2026-05-SOIL-02>

Soil biodiversity plays a major role in human, animal and ecosystem health. Soil microorganisms (bacteria and fungi) have been crucial in the discovery of antibiotics used in human and veterinary medicine. However, soils can also be a hotspot for antimicrobial resistance development and can play a key role in the transfer of antimicrobial resistance genes between organisms and environmental compartments. Antibiotic use is expected to increase globally due to the rising demand for food-producing animals, which may further exacerbate the development of antimicrobial resistance in soils. According to the World Health Organization, antimicrobial resistance is one of the greatest threats to public health³⁰³. The driving forces for antimicrobial resistance development in soils are however understudied, as well as the role of soils in the exposure of humans and animals to antimicrobial resistance determinants. Moreover, our knowledge of antibiotics-related genes is currently limited, making it challenging to identify new compounds of interest. To better understand and combat antimicrobial resistance development in soils, a One-Health approach is needed.

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Enabling user-centred and open innovation initiatives to enhance soil health in Ukraine

HORIZON-MISS-2026-05-SOIL-03

Program:	Soil Mission
Típus:	Coordination and Support Actions
TRL szint:	-
Támogatás projektenként:	7 M EUR
Támogatott projektek száma:	2
Pályázati felület megnyílik:	2026. február 04.
Beadási határidő:	2026. szept. 23., 17:00

Felhívás linkje:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/HORIZON-MISS-2026-05-SOIL-03>

In Ukraine, soils are exposed to degradation due to nutrient mismanagement, acidification, erosion, compaction, salinisation, and contamination, with the war further contributing to devastation by releasing toxic elements, causing long-term damage to both ecosystems and human health. During military activities, soils are among the most heavily affected components of the environment, undergoing mechanical, chemical, and physical degradation. The war has also disrupted research and innovation activities, which further hinder the country's ability to address soil degradation issues. Particularly, as before the war, the innovation landscape in Ukraine was already in a need for more supportive political, regulatory and legislative frameworks, and more developed and improved innovation.

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Leveraging long-term field experiments and other datasets to develop AI-ready decision support systems for sustainable soil management

HORIZON-MISS-2026-05-SOIL-04

Program:	Soil Mission
Típus:	Innovation Action
TRL szint:	-
Támogatás projektenként:	9 M EUR
Támogatott projektek száma:	1
Pályázati felület megnyílik:	2026. február 04.
Beadási határidő:	2026. szeptember 23.

Felhívás linkje:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/HORIZON-MISS-2026-05-SOIL-04>

Activities under this topic will help progress towards the objectives and targets of the Mission Soil and the EU Soil Strategy for 2030. Activities should also contribute to the implementation of the Soil Monitoring and Resilience Directive after its adoption. Project results are expected to contribute to all the following expected outcomes:

- enhanced adoption of impactful sustainable soil management solutions and strategies supported by AI-powered decision support systems by land managers;
- harmonised, standard, robust, interoperable and accessible methods, protocols and logical architecture for long-term field experiments (LTEs) data collection and integration (including with other datasets) are in place;
- scientists, policymakers, and land managers gain enhanced access to comprehensive, high-quality soil data, enabling better research, informed decision-making, and effective land management practices.

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Living labs to enhance soil health in Alpine and Atlantic biogeographical regions

HORIZON-MISS-2026-05-SOIL-01-two-stage

Program:	Soil Mission
Típus:	Research and Innovation Actions
TRL szint:	-
Támogatás projektenként:	12 M EUR
Támogatott projektek száma:	2
Pályázati felület megnyílik:	2026. február 12.
Beadási határidő:	2026.04.14.; 2026.09.15.

Felhívás linkje:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/HORIZON-MISS-2026-05-SOIL-01-two-stage>

Activities under this topic respond directly to the goal of the Mission Soil to set up 100 living labs and lighthouses to lead the transition to healthy soils by 2030. They support the specific objectives of the Mission Soil313. Activities should also contribute to the Common Agricultural Policy and to meeting the European Green Deal ambitions and targets and more specifically those of the EU Biodiversity Strategy for 2030, the EU Soil Strategy for 2030 and the proposal for a Soil Monitoring and Resilience Directive, the Zero Pollution Action Plan, the Communication on Boosting Biotechnology and Biomanufacturing in the EU, as well as to Sustainable Development Goals.

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Living labs to enhance soil health in managed forests and in natural/semi-natural lands

HORIZON-MISS-2026-05-SOIL-02-two-stage

Program:	Soil Mission
Típus:	Research and Innovation Actions
TRL szint:	-
Támogatás projektenként:	12 M EUR
Támogatott projektek száma:	2
Pályázati felület megnyílik:	2026. február 12
Beadási határidő:	2026.04.14.; 2026.09.15.

Felhívás linkje:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/HORIZON-MISS-2026-05-SOIL-02-two-stage>

Project results are expected to contribute to all the following expected outcomes:

- enhanced capacities for participatory, interdisciplinary and transdisciplinary R&I to co-create, and co-implement economically viable soil health solutions tailored to managed forests or natural/semi-natural lands;
- improved soil health monitoring and increased availability of high quality, standardized soil data at local and regional levels;
- increased availability of practice-oriented knowledge for land managers and land users, leading to better adoption of effective soil health solutions in diverse contexts;
- policymakers are more informed about local needs regarding soil health, including its drivers, and can use this knowledge to design and implement more effective policies that enhance soil health, while considering the economic sustainability of solutions.

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Living labs to enhance soil health in Continental, Black Sea, Pannonian and Steppic biogeographical regions

HORIZON-MISS-2027-05-SOIL-01-two-stage

Program:	Soil Mission
Típus:	Research and Innovation Actions
TRL szint:	-
Támogatás projektenként:	12 M EUR
Támogatott projektek száma:	2
Pályázati felület megnyílik:	2027. február 04.
Beadási határidő:	2027.04.08; 2027.09.14.

Felhívás linkje:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/HORIZON-MISS-2027-05-SOIL-01-two-stage>

Activities under this topic respond directly to the goal of the Mission Soil to set up 100 living labs and lighthouses to lead the transition to healthy soils by 2030 and support its specific objectives.

Activities should also contribute to the Common Agricultural Policy and to meeting the European Green Deal ambitions and targets and more specifically those of the EU Biodiversity Strategy for 2030, the EU Soil Strategy for 2030 and the proposal for a Soil Monitoring and Resilience Directive, the Zero Pollution Action Plan, the Communication on Boosting Biotechnology and Biomanufacturing in the EU, as well as to the Sustainable Development Goals.

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Living Labs for co-creating solutions to reduce eutrophication from agriculture

HORIZON-MISS-2027-05-SOIL-02-two-stage

Program:	Soil Mission
Típus:	Research and Innovation Actions
TRL szint:	-
Támogatás projektenként:	12 M EUR
Támogatott projektek száma:	2
Pályázati felület megnyílik:	2027. február 04.
Beadási határidő:	2027.04.08; 2027.09.14.

Felhívás linkje:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/HORIZON-MISS-2027-05-SOIL-02-two-stage>

Activities under this topic respond directly to the goal of the Mission Soil to set up 100 living labs and lighthouses to lead the transition to healthy soils by 2030 and support the objectives and targets of the Mission Soil. Activities should also contribute to the Common Agricultural Policy, and to meeting the European Green Deal ambitions and targets and more specifically those of the EU Biodiversity Strategy for 2030, the EU soil strategy for 2030 and the proposal for a Soil Monitoring and Resilience Directive, as well as the EU Water Framework Directive, the European Water Resilience Strategy, the Nitrates Directive, the Zero Pollution Action Plan, the Communication on Boosting Biotechnology and Biomanufacturing in the EU, as well as to the Sustainable Development Goals.

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Agroforestry for soil health at landscape level

HORIZON-MISS-2027-05-SOIL-03-two-stage

Program:	Soil Mission
Típus:	Innovation Actions
TRL szint:	-
Támogatás projektenként:	8 M EUR
Támogatott projektek száma:	2
Pályázati felület megnyílik:	2027. február 04.
Beadási határidő:	2027.04.08; 2027.09.14.

Felhívás linkje:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/HORIZON-MISS-2027-05-SOIL-03-two-stage>

Project results are expected to contribute to all the following expected outcomes:

- increased adoption of agroforestry at landscape level in the EU and Associated Countries;
- enhanced access and uptake of agroecological solutions and practical tools that boost soil health in agroforestry by farmers, foresters, advisors and food chain operators;
- business models for agroforestry and soil health that integrate all actors along the value chain, including agritech companies, the food industry, retailers and consumers- are tested and validated;
- the benefits of agroforestry for environmental (particularly soil), social, and economic sustainability, along with the obstacles to its adoption and the mechanisms to overcome them, are more comprehensively understood and effectively disseminated.

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Participatory research on the health of communities in contact with polluted soils

HORIZON-MISS-2027-05-SOIL-04-two-stage

Program:	Soil Mission
Típus:	Research and Innovation Actions
TRL szint:	-
Támogatás projektenként:	5,5 M EUR
Támogatott projektek száma:	2
Pályázati felület megnyílik:	2027. február 04.
Beadási határidő:	2027.04.08; 2027.09.14.

Felhívás linkje:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/HORIZON-MISS-2027-05-SOIL-04-two-stage>

Project results are expected to contribute to all the following expected outcomes:

- improved citizen awareness on the connection between soil pollution and human health and how to manage, adapt to, and mitigate risks;
- increased public access to FAIR358 data and knowledge on soil pollution and the emergence of human diseases and other health outcomes;
- policymakers enforce the implementation of long-term, sustainable solutions that enhance soil health, restore the environment, and protect public health.

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Innovative biotechnologies to restore soil health and improve agricultural competitiveness and resilience

HORIZON-MISS-2027-05-SOIL-05-two-stage

Program:	Soil Mission
Típus:	Innovation Actions
TRL szint:	-
Támogatás projektenként:	6,4 M EUR
Támogatott projektek száma:	2
Pályázati felület megnyílik:	2027. február 04.
Beadási határidő:	2027.04.08; 2027.09.14.

Felhívás linkje:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/HORIZON-MISS-2027-05-SOIL-05-two-stage>

Europe faces increasing challenges due to soil degradation, loss of biodiversity, and the expanding impacts of climate change. Addressing these issues is essential to ensure food security and sustainable land use. The integration of biotechnology can play a transformative role in this regard in the varied environmental conditions and land-use types found across Europe. In addition biotechnology solutions that improve soil health (such as novel bio-based fertilizers or microbial inoculants) can significantly enhance crop productivity by restoring essential nutrients and microbial balance in the soil. Finally, biotechnology solutions can provide innovative methods to decontaminate and rehabilitate degraded soils and lands, thus boosting the ecological and economic value of underutilized areas.

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Long-term drivers and consequences of soil degradation: learning from the past to improve future soil health

HORIZON-MISS-2027-05-SOIL-06-two-stage

Program:	Soil Mission
Típus:	Research and Innovation Actions
TRL szint:	TRL SZÁM
Támogatás projektenként:	7 M EUR
Támogatott projektek száma:	1
Pályázati felület megnyílik:	2027. február 04.
Beadási határidő:	2027.04.08; 2027.09.14.

Felhívás linkje:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/HORIZON-MISS-2027-05-SOIL-06-two-stage>

Since the beginning of agriculture, human activities worldwide have contributed to soil degradation, including soil erosion, soil compaction and loss of soil organic carbon among others. This caused problems to farmers and landowners, as well as to society in general. However, our knowledge of changes in soil health over the past centuries to millennia is limited, and available datasets span only the past two or three decades. This knowledge gap hinders a thorough understanding of the long-term drivers and consequences of soil degradation, of improved future projections of soil health under different scenarios of climate and land management changes, of the long-term effects of soil management practices, as well as of how human behaviour can change to adopt measures to increase soil health. This is especially relevant in the context of future climate change.

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Joint demonstration of solutions to build soil resilience to extreme weather events and support food security

HORIZON-MISS-2026-06-CLIMA-SOIL

Program:	Soil Mission
Típus:	Innovation Actions
TRL szint:	TRL 6-8
Támogatás projektenként:	10 M EUR
Támogatott projektek száma:	2
Pályázati felület megnyílik:	2026. február 04.
Beadási határidő:	2026. szept. 23., 17:00

Felhívás linkje:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/HORIZON-MISS-2026-06-CLIMA-SOIL>

Developing and scaling practical solutions to enhance soils' resilience to extreme weather events is crucial for climate change adaptation. As extreme weather events like droughts, heavy rainfall and flooding, heatwaves and other temperature anomalies (e.g. unseasonal frosts) become more frequent, widespread and severe, they pose significant threats to soil health, agricultural productivity, and food security at large. This is due to, inter alia, soil erosion, nutrient leaching, increased salinisation, loss of soil organic carbon, reduction or loss of microbial activity, waterlogging and oxygen depletion, depending on the type of extreme weather event considered. Strengthening soils' resilience at farm and landscape levels, considering also the context, e.g., in terms of governance (rules and institutions), is vital to cope with these challenges. Creating a framework that suits different pedoclimatic conditions and regions should help ensure that the best approaches are put in place to maintain food security and promote sustainable farming practices, and that overall landscape resilience to these events is enhanced.

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