

Newsletter #01 | January 2026



TRAILS 4 SOIL



Rebuilding soil health
through Regenerative &
Conservation Agriculture



Funded by
the European Union



Schweizerische Eidgenossenschaft
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Editorial

Welcome!

Thank you for joining us in these early months of our 5-year research project. The coming years promise to be quite an adventure.

TRAILS4SOIL has a clear ambition: to rebuild soil health by advancing Regenerative and Conservation Agriculture in ways that are agronomically robust, environmentally meaningful, and economically viable for farmers.

What makes TRAILS4SOIL particularly compelling is its strong 'learning-by-doing' model. The project brings together farmers, advisors, researchers, and other stakeholders to test soil management solutions under real farming conditions in five 'Living Labs' and shed light on what works, where and why. You can learn about our Living Labs on page 7.

This network across nine European countries will encompass 100 experimentation sites, including 11 'Lighthouse' farms that showcase exemplary practice and accelerate the spread of knowledge.

So far, our priority has been to establish the foundations that will enable significant, comparable results as the project progresses. We have ensured that all our partners share the same technical and operational approach, including how they monitor the tests, collect data and learn from our experiences.

We have also been speaking with farmers and other important groups to help shape our project.



Emilio González-Sánchez
TRAILS4SOIL Coordinator

This early work is essential: we want to create credible evidence and practical guidance for land managers and policymakers. This depends on solid baselines, clear protocols, and a common understanding of what 'success' looks like across our diverse study sites.

Looking ahead to the coming year, we will move from set-up to delivery. We will begin testing Regenerative and Conservation Agricultural Practices, strengthen peer-to-peer exchange, and share early insights as they emerge.

We invite you to engage with TRAILS4SOIL through our newsletter, social media channels, and events, and to help shape the project's value for farming and the environment by sharing your feedback and experience.



www.trails4soil.eu



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TRAILS4SOIL

About TRAILS4SOIL

We are a 5-year (2025-2030) European research project. We are investigating how to restore soil health with Regenerative and Conservation Agricultural Practices that support the long-term productivity, environmental sustainability, and economic viability of farms.

In a Living Labs approach, we work closely with farmers and land managers across a network of 100 experimentation sites in nine European countries to provide large-scale evidence on the impacts of Regenerative and Conservation Agriculture.

We will develop innovative business models, training, and collaboration programmes to drive the widespread adoption of effective farming practices across Europe and support the transformation of European agriculture towards more resilient, sustainable, and climate-smart farming.

Funding

TRAILS4SOIL is funded by the EU's Horizon Europe programme (Grant agreement ID: 101218949) and the Swiss State Secretariat for Education, Research and Innovation (SERI).



Who we are

TRAILS4SOIL is a consortium of 22 research and agricultural organisations across 12 European countries, coordinated by the University of Cordoba.

Partners

- University of Cordoba - Spain
- University of Evora - Portugal
- National Scientific Center Institute of Agriculture of NAAS - Ukraine
- Bern University of Applied Sciences - Switzerland
- Boden Leben - Austria
- Countryside & Community Research Institute - UK
- European Alliance for Regenerative Agriculture - Germany
- European Conservation Agriculture Federation - Belgium
- German Association for Conservation Tillage - Germany
- Institute for European Environmental Policy - Belgium
- National Center for Research and Seeds Production - Moldova
- Research Institute of Organic Agriculture - Switzerland
- SAI Platform - Switzerland
- Slovenian Association for Conservation Agriculture - Slovenia
- South Westphalia University of Applied Sciences - Germany
- Spanish Conservation Agriculture Living Soils Association - Spain
- University of Cluj-Napoca - Romania
- University of Greenwich - UK
- University of Ljubljana - Slovenia
- University of Natural Resources and Life Sciences - Austria
- University of Teramo - Italy
- Young Farmer Association - Spain

What are Regenerative and Conservation Agricultural Practices?

Conservation Agriculture and Regenerative Agriculture are closely aligned systems that boost agricultural productivity and resilience by prioritising soil health. Their practices include:

- minimal soil disturbance
- permanent soil cover
- plant/crop diversity
- managed grazing
- agroforestry
- silvopasture

A key difference between Regenerative and Conservation Agriculture is that Regenerative Agriculture also includes livestock management.

When implemented effectively, both Conservation Agriculture and Regenerative Agriculture have been shown to enhance soil health, agricultural productivity, and environmental sustainability.

What are Living Labs and Lighthouses?

TRAILS4SOIL has 5 Living Labs and aims to set up 11 Lighthouses. But what are they exactly?

Living Lab

Unlike traditional lab settings, such as university campuses, Living Labs are in real-life environments, such as working farms. The researchers collaborate with people including community members, businesses and policymakers to develop, test, and refine innovations that address local challenges. A Living Lab can cover a number of sites that are all investigating the same issue.



Lighthouse

Lighthouses are exemplary sites for showcasing innovations. In TRAILS4SOIL, they will help train people in best practices for managing soil. Unlike a Living Lab, a Lighthouse is a single site.



How does TRAILS4SOIL support the EU Mission Soil?

TRAILS4SOIL is funded under the EU Mission 'A Soil Deal for Europe', or 'Mission Soil'. This is one of five Missions funded under the EU Research and Innovation (R&I) Programme Horizon Europe.

Mission Soil's goal is to promote sustainable land and soil management in urban and rural areas through experiments in user-centred, real-world settings ('Living Labs') and exemplary sites for showcasing innovations ('Lighthouses').

TRAILS4SOIL has established 5 Living Labs (see page 7) and aims to set up 11 Lighthouses.



Mission Soil Objectives

Through demonstrating the potential of Regenerative and Conservation Agricultural Practices, we support **6 EU Mission Soil objectives**:

✓ REDUCE LAND DEGRADATION RELATING TO DESERTIFICATION

✓ CONSERVE AND INCREASE SOIL ORGANIC CARBON STOCKS

✓ REDUCE SOIL POLLUTION AND ENHANCE RESTORATION

✓ PREVENT EROSION

✓ IMPROVE SOIL STRUCTURE TO ENHANCE HABITAT QUALITY FOR SOIL BIOTA AND CROPS

✓ INCREASE SOIL LITERACY IN SOCIETY ACROSS EU MEMBER STATES

Meet our Living Labs!

TRAILS4SOIL takes a Living Labs approach to its research.

This means our experiments take place on working farms and in close collaboration and consultation with farmers, advisors, policymakers and other key players.

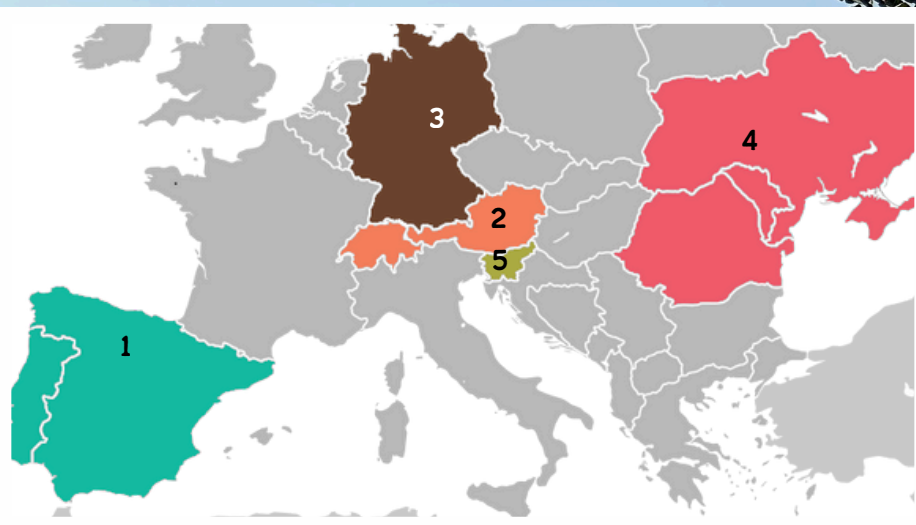
Together, we are developing, testing, and refining innovations that address local farming and environmental challenges.

Each of our 5 Living Labs encompasses a number of sites across a region of Europe and addresses a specific issue.

Building networks and reaching out

We will foster knowledge exchange among the diverse group of people involved with each Lab. We will then share our findings beyond the project horizon and Living Labs to reach farms across Europe.

 **Living lab 3**
Climate change adaptation

 **Living lab 4**
Black soil preservation

 **Living lab 1**
Permanent crops

 **Living lab 2**
Organic farming

 **Living lab 5**
Crop-livestock integration



Living Lab 1

Goal: Develop sustainable permanent cropping systems under Mediterranean climate conditions.

Where: Spain and Portugal

Crops: Olive orchards, almond orchards, vineyards, citrus orchards

Coordinators: Óscar Veroz, Spanish Conservation Agriculture Living Soils Association and Miguel Soares, University of Evora

Challenges

Permanent cropping systems, such as olive groves, vineyards, citrus, and almond orchards, are increasingly affected by soil degradation, erosion, and loss of organic matter, aggravated by intensive management and prolonged droughts.

Our approach

We will co-design and test adapted management practices, including cover crops, organic amendments, and improved residue management, to increase soil organic matter, reduce erosion, and enhance water retention while ensuring that these practices are both practical and economically viable for farmers.

Expected benefits

These include:

- increased soil organic matter and improved soil structure and biological activity
- reduced erosion and runoff, with better water infiltration and retention
- enhanced biodiversity both below and above-ground



- more efficient nutrient use and lower dependency on external inputs
- greater farmer awareness and capacity building, leading to replication of best practices beyond the pilot plots

**Learn more about this
Living Lab**





Living Lab 2

Goal: Develop Regenerative Agriculture approaches to support organic farming systems.

Where: Austria and Switzerland

Crops: Cereals, legumes, pulses, oilseeds, root and tuber crops, field vegetables, cucurbits

Coordinators: Sina Blösch, Bern University of Applied Sciences and Christian Hofstätter, BodenLeben

Challenges

There is a well-known trade-off between Conservation Agriculture and organic farming principles. Conservation Agriculture promotes minimal soil disturbance and continuous soil cover to protect soil structure and organic matter, but typically relies on herbicides for weed control. Organic farming, in contrast, avoids synthetic inputs but depends on mechanical weeding, which can damage soil structure and increase erosion.

Our approach

We will test how Regenerative and Conservation Agriculture Practices, such as reduced tillage, permanent soil cover, diverse crop rotations, and the use of organic fertilisers and biostimulants, can be adapted to organic systems. At the same time we will also look at how conservation-oriented farms can reduce herbicide dependency and adopt more regenerative, biodiversity-friendly management.



Expected benefits

This include improvements in:

- soil structure
- organic carbon content
- biological activity
- reduced erosion
- lower energy demand

These outcomes will contribute to greater resource efficiency and climate resilience in both organic and Conservation Agriculture.

**Learn more about this
Living Lab**





Living Lab 3

Goal: Develop innovations to improve soil health for climate change.

Where: Germany

Crops: Cereals, legumes, pulses, oilseeds, root and tuber crops

Coordinators: Thomas Weyer, South Westphalia University of Applied Sciences and Jana Epperlein, Institute of German Association for Conservation Tillage

Challenges

Standard agricultural practices, such as intensive tillage, limited crop diversity, lack of soil cover, and the separation of livestock from arable farming, create soils that are less capable of adapting to climate stressors, such as droughts or heavy rainfall, and leads to economically unprofitable arable farming.

Our approach

We will co-design and test Regenerative and Conservation Agricultural Practices, including ground cover, intercropping, livestock integration and alternative weed control, to restore organic matter, enhance biodiversity, and reduce reliance on intensive tillage and synthetic inputs.

Expected benefits

These include:

- mitigation and adaptation to climate change
- higher carbon sequestration rates
- higher resource use efficiency, less use of energy



- effective management of weeds, pests and diseases, less use of pesticides
- positive impact on biodiversity
- higher, stable production and profitability

Learn more about this Living Lab





Living Lab 4

Goal: Develop innovations to conserve black soil.

Where: Moldova, Romania and Ukraine

Crops: Cereals, legumes, pulses, oilseeds, root and tuber crops

Coordinators: Teodor Ruso, University of Cluj-Napoca and Anton Tkachenko, Institute of Agriculture of the National Academy of Agrarian Science

Challenges

Black soils (chernozoms, phaeozems, and other mollic soils) are some of the most fertile and productive soils in Europe and are vital for regional and global food security. However, intensive farming practices increasingly threaten them with degradation processes, such as erosion, loss of organic matter, compaction, poor water retention, progressive desertification and declining biodiversity.

Our approach

We will address these challenges through the testing of Regenerative and Conservation Agriculture Practices, focusing on minimal soil disturbance, permanent soil cover, diversified rotations, and precision management tools.

Expected benefits

These include:

- enhanced water management and reduction of erosion and nutrient losses



- increased carbon sequestration and contribution to climate change mitigation
- sustainability of natural resources, by preserving soil productivity and ecosystem functions
- optimisation of agricultural technologies, integrating monitoring (MRV) tools and data-based decision support
- economic efficiency, by reducing input costs and stabilising yields in the medium and long term

**Learn more about this
Living Lab**





Living Lab 5

Goal: Develop Conservation Agriculture solutions with crop-livestock integration to enhance soil health.

Where: Slovenia

Crops: Annual crops, forage crops, pastures, permanent grassland

Coordinators: Rok Mihelič, University of Ljubljana and Simon Ograjsek, Slovenian Association for Conservation Agriculture

Challenges

Farmers are typically highly dependent on external inputs, such as fertiliser and pesticides, and many earn a low income from primary agricultural production. Common problems caused by standard agricultural practices include reduced soil quality, soil erosion and greenhouse gas emissions connected with the use of mineral fertilisers.

Our approach

We will explore how Conservation Agriculture Practices, including minimal soil disturbance, permanent soil cover, and crop diversification, can restore soil health. By bringing livestock into the farming systems, we can also reduce reliance on external inputs and better address climate change. We are shortening supply chains, sourcing inputs from the farm itself, or at least locally.



Expected benefits

These include:

- improved existing conservation agriculture management practices in crop production
- improved efficiency of animal manure use
- improved crop rotations and integrated with feed needs of farms
- improved local production chains

**Learn more about this
Living Lab**



EVENTS

Project kicks off in Cordoba

TRAILS4SOIL began work in summer 2025. Our kick-off meeting took place in September 2025 in Córdoba, Spain, marking the start of a five-year collaboration that brings together 22 research and agricultural organisations from 12 European countries. Here are some photos of the event.



EVENTS

Spreading the word: TRAILS4SOIL presentations

We are already busy introducing the project and its ambitions to researchers, farmers and other interested groups across Europe.



Many colleagues and partner farmers attended AGRITECHNICA, Hannover, Germany, November 2025.



Paula Ioana Moraru presenting the project at USAMV Cluj, Romania, on World Soil Day, December 2025.



At eAgronom in Bălți, Moldova, October 2025.



Emilio González-Sánchez presents at a soil health and productivity event in El Bosque, Spain, September 2025.

EVENTS

Upcoming TRAILS4SOIL events

How Regenerative & Conservation Agriculture can chart a trail for healthy soils and farms

Webinar

Thursday 12th February 2026

09:30-11:00 CET (08:30-10:00 GMT)



Join us at our webinar on the 12th of February when agricultural experts from TRAILS4SOIL will guide you through:

- an overview of Regenerative & Conservation Agricultural Practices, and an introduction to TRAILS4SOIL
- challenges to implementing Regenerative & Conservation Agricultural Practices
- knowledge gaps on the impacts of Regenerative & Conservation Agricultural Practices: the role of Living Labs
- business models and policy recommendations to drive the adoption of Regenerative & Conservation Agricultural Practices

[Register](#)



Agricoltura Rigenerativa Conservativa, l'innovazione per la Salute del Suolo attraversa l'Europa

Conference (in-person, Italian language)

Fieragricola Verona

Friday 6th February 2026

11:00-13:00

Come and learn about TRAILS4SOIL, weed management, machinery and equipment, and interventions in Regenerative and Conservation Agriculture at this event in Verona.



CONVEGNO
Agricoltura Rigenerativa
Conservativa, l'innovazione
per la Salute del Suolo
attraversa l'Europa

[Register at the event](#)



Would you like to take part in TRAILS4SOIL?

Do you want to:

- learn more about how to manage farmland soil?
- share your knowledge on managing soil?
- learn, and share your thoughts on, how to encourage greater use of Regenerative and Conservation Agricultural Practices?

If the answer is 'yes' to any of these questions, and you live in one of the 9 countries in our Living Labs (see below), then we're keen to hear from you!

We'd like you to help ensure that our soil management solutions are suitable for local conditions and that our recommendations consider the needs and views of people affected by soil health and Regenerative or Conservation Agriculture.

What would you do?

As a project participant, you'll be invited to share your views on which practices should be tested, help assess the results, and comment on business models and policy recommendations.

If you're a landowner, you can also choose to trial some of the practices on your own land. **Farmers who take part in trials can receive financial support.**

Time commitments

We will invite you to up to two workshops or demonstration events each year over five years. You'll also have the option to take part in an interview to discuss these issues in more depth.

This is an excellent opportunity for you to:

- learn about soil management issues and how to make land more resilient
- learn how to create a shift towards more Regenerative and/or Conservation Agriculture
- make new contacts in your local area and across Europe
- influence and support local, national and European agricultural policies

Find out how to get involved



Who can take part?

If you can affect, or are affected by, soil health and Regenerative or Conservation Agriculture, then you are important to us as a participant!



Industry

- Agricultural land managers (farmers)
- Agricultural advisors
- Agri-businesses
- Supply chain actors, e.g., processors
- Retailers
- Technology/innovation



Researchers

- Academics
- Research institutions
- Consultancies
- Technology centres
- Think tanks



Civil society

- Citizens (public)
- Local communities
- Media/press
- Consumer associations



Natural environment

- Environmental NGOs
- Conservationists
- Regenerative/conservation farming groups
- Lobbyists
- Innovators



Government

- Public authorities
- Regulatory bodies
- Policymakers
- Local, regional, national, and international government

How to get involved?

Contact the coordinator of your local Living Lab and explain you'd like to be a TRAILS4SOIL stakeholder.



Living Lab 1

Sustainable permanent cropping systems. **Portugal and Spain.**
Contact: Óscar Veroz; overoz@agriculturadeconservacion.org



Living Lab 2

Support organic farming systems. **Austria and Switzerland**
Contact: Sina Blösch; sina.bloesch@bfh.ch



Living Lab 3

Improve soil health for climate change. **Germany.**
Contact: Thomas Weyer; weyer.thomas@fh-swf.de



Living Lab 4

Conserve black soil. **Moldova, Romania and Ukraine.**
Contact: Teodor Ruso; trusu@usamvcluj.ro



Living Lab 5

Crop-livestock integration. **Slovenia.**
Contact: Rok Mihelič; Rok.Mihelic@bf.uni-lj.si

Connect with us



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Newsletter

