



NEWSLETTER_{#2}

1 YEAR OF SUCCESS!



On 15-16 April 2026, SUNRISE partners gathered in Iceland for the project's first General Assembly, hosted by the Agricultural University of Iceland. The two-day meeting was a great opportunity to share progress, exchange experiences and plan the next steps together.

Through interactive workshops, partners explored key topics such as strengthening Multi-Actor Teams, ensuring the long-term sustainability of Living Labs, and scaling up successful agroecological practices.



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SUNRISE CONTRIBUTES TO A NEW POLICY BRIEF!

SUNRISE has contributed to a new policy brief on transdisciplinary research, led by the German FEdA project ECO²SCAPE and developed together with several European initiatives.

The brief highlights how collaboration across disciplines and with societal actors can help address complex environmental and societal challenges. It also provides recommendations for policy makers and funding bodies, focusing on more supportive funding conditions and better career opportunities for researchers working in transdisciplinary settings.

Beteiligte Projekte



FEdA-Projekt ECO²SCAPE

This joint effort is another step towards strengthening collaborative research approaches across Europe.



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SUNRISE FIELD TRAININGS IN ESTONIA

The Estonian University of Life Sciences (EMU) organised three field-based trainings as part of the Estonian Agroecology Living Lab (AELL), bringing farmers and researchers together to explore agroecological practices in real farming environments.





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SUNRISE FIELD TRAININGS IN ESTONIA

Across the three sessions, participants explored key **SUNRISE** topics, including soil fertility, organic arable crops, biodiversity, crop diversification and cover cropping.



📍 **Obinitsa – 9 July 2025: Exploring soil fertility, crop rotation, green manures and biodiversity-friendly farming.**

📍 **Jändja – 15 July 2025: Focusing on organic arable crops, crop diversification and practical farming challenges.**

📍 **Varstu – 21 October 2025: Discovering winter cereals and cover crop systems directly in the field.**



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SCIENTIFIC ARTICLES

"AGROECOLOGICAL PRACTICES THAT PROMOTE AND SUPPORT SUSTAINABLE AGRICULTURE"

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AGROECOLOGICAL PRACTICES THAT PROMOTE AND SUPPORT SUSTAINABLE AGRICULTURE

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Abstract

In recent decades, sustainable agriculture has become essential in the joint effort of agricultural policies and all stakeholders against the backdrop of climate changes and concerns about natural resources conservation. This agricultural system focuses on practices that increase agricultural yields, while protecting the environment and ensuring resources for the future. These practices include, among others, soil and plant health through crops diversification and rotations, the use of organic fertilizers, water and soil conservation by new tillage methods, or the implementation of innovative technologies for crops growing and animal husbandry. On the other hand, agroecology is an innovative concept that aims to ensure sustainable agricultural production and is based on the collaboration between people, science and environment to find solutions to the major problems that agriculture is currently facing, such as: diminishing soil and crop health, pollution, climate changes, pests control, or to ensure the high quality of agri-food products. The agroecological practices could be the path to success towards a sustainable agri-food system, through the involvement and effort of all key actors, farmers, decision-makers, citizens, by co-creating an environment favorable to knowledge exchange, progress, adaptation to change, and dissemination of good results to all. In this context, this paper aims to provide an overview of some examples of agroecological practices that promote and support sustainable agriculture in Romania.

Key words: agroecology, agroecological practices, crops health, soil health, sustainable agriculture.

INTRODUCTION

Sustainable agriculture is an approach that seeks to minimize the negative impact of agricultural activities on the environment, while maintaining the ability to produce agri-food products in the most sustainable way possible. At the same time, according to FAO documents, agroecology involves, in an integrated approach, ecological and social concepts, principles with the aim of designing and managing agricultural and food systems in a sustainable way (FAO, 2025).

By optimizing the interactions between plants, animals, people and the environment, by including ecological, socio-cultural, technological, economic and political dimensions, from production to consumption, equitable and sustainable food systems can result that ensure food security and safety. In the realm of food security, agroecological

practices play a vital role in ensuring sustainable nourishment. By bolstering soil fertility, encouraging crop diversity, and supporting local food production, agroecology acts as a buffer against the challenges posed by a changing climate (McLennan et al., 2021; Madsen et al., 2021). Consumers are increasingly interested in food products obtained through sustainable and ecological methods. This leads to an increased demand for agroecological products, stimulating the transition to more sustainable food systems (<https://www.ecoruralis.ro/programe/agroecologie/>).

Agroecological principles such as polyculture, crop diversity, and integrated pest control help to improve food security by increasing stability and nutrition. Agroecology encourages carbon sequestration, soil health, and greenhouse gas reductions, resulting in climate-resilient farming systems (Ranjan, 2024).

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Journal:

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SCIENTIFIC ARTICLES

Advancing Soil Health in Practice: Monitoring and Awareness through Agroecological Living Labs

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Partner:

- Agroscope



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Advancing Soil Health in Practice: Monitoring and Awareness through Agroecological Living Labs

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Food production is a major contributor to environmental degradation and a key driver of soil health decline across Europe, where an estimated 89% of agricultural soils show signs of degradation (EUSO, 2025). Despite growing awareness, progress toward sustainable soil management remains limited due to uneven access to knowledge, limited capacities, insufficient incentives for land managers and fragmented action across the food system. Policymakers, administrations, advisors, retailers, and consumers often operate in isolation, while soil monitoring remains complex and poorly adapted to real-world farming conditions.

Although many scientific solutions for sustainable soil management already exist, conventional research often addresses isolated system components. In contrast, food systems are highly complex, shaped by strong interactions between ecological, social, economic, and political dimensions. Solutions that work in practice therefore require collaborative spaces where science and stakeholders jointly develop, test, and adapt innovations under real-life conditions. Living Labs provide such spaces.

Living Labs are collaborative, real-world experimental hubs where researchers, farmers, and other stakeholders co-create innovations toward shared objectives. Through co-creation and co-learning, they enhance soil knowledge, improve understanding of soil processes, and motivate food system actors to actively contribute to soil health improvements. By embedding experimentation in operational contexts, Living Labs can support agroecological transitions and support tangible impacts on soil health and governance.

Within this context, the SUNRISE project establishes agroecological Living Labs across ten European countries, engaging multi-actor teams of farmers, advisors, value-chain actors, NGOs, consumer organizations, policymakers, and researchers. A central innovation is an integrated soil health monitoring framework combining a citizen science smartphone app for soil-health assessments, laboratory soil analyses and an agroecological management questionnaire. Together, these tools capture complementary physical, chemical, biological, social, ecological, and economic dimensions of soil health in real-life farming settings and allow monitoring the effects of agroecological innovations across sustainability dimensions.

Applied across 75 farms and 150 plots, this harmonized monitoring approach enables farmers to assess management changes relative to control plots, strengthens soil literacy, and translates



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WANT TO LEARN MORE ABOUT SUNRISE? MEET SUNRISE COORDINATOR!

What does the future of agroecology in Europe
look like?



I'm Paolo Barberi.

In our latest video,
SUNRISE Project
Coordinator Paolo
Barberi introduces the
project's vision,
mission and ambitions,
and explains how
SUNRISE is supporting
the agroecological
transition



through collaboration, innovation and Agroecological
Living Labs.



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