

*Fact Sheet for researchers*

# Research Infrastructures to support Agroecology Transition

## Summary

- Agroecology transition requires a deeper understanding of agroecosystems.
- Agroecology Research Infrastructures can contribute to this transition by providing innovative services to the research community.
- Researchers by approaching agroecology research infrastructures can benefit from their services and boost their research project.



## Problem

In order to facilitate the agroecology transition, knowledge about ecological processes at relevant spatial and time scales is needed. Moreover, evidence of the economic and environmental performance of innovative ecological approaches in specific real-life conditions and farming systems is key. Yet, up to date knowledge gaps still exist hindering the necessary transition.

## Solution

Agroecology Research Infrastructures are facilities that aim to increase knowledge on agroecology and provide a wider understanding of the functioning of sustainable agroecosystems in the long-term, contributing to the EU Green Deal and UN Sustainable Development Goals.

## Benefits

Agroecology Research Infrastructures provide resources and services for research communities on a long-term basis that can contribute to gain a deeper understanding of agroecosystems. Specifically, they can provide access to innovative services enabling interdisciplinary research for agroecology (e.g. virtual labs, experimental farms, ecotron). Moreover, they can contribute to the transition providing harmonised mechanisms for sharing data, practices, tools and methodologies to quantify ecological and socio-economic impacts of agroecological practices at different scales. All these services are complemented with outreach and training activities for the community of stakeholders, beyond researchers, to enable them in the best use of the research facilities and services offered by the research infrastructures.

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*Research Infrastructures  
will contribute to  
agroecology transition by  
providing services that  
foster both breakthrough  
knowledge and incremental  
innovation*

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## Research Infrastructures in ALL-Ready

Agroecology Research Infrastructures make available a wide and broadly distributed range of services on plant, animal, soil, food and human health at different scales, from the molecular to the ecosystem level. The EU funded ALL-Ready project has launched a Pilot Network of Agroecology Living Labs and Research Infrastructures across Europe. The pilot network allows real-life experimentation on the structuring and functioning of a future European network based on co-creative and participatory methods. The lessons learnt can directly inform the setting-up of the future network. The Research Infrastructures in the ALL-Ready Pilot Network offer physical, remote

or virtual services in the form of experimental sites and physical labs or virtual research environments that allow to store, exchange, consult, analyse and model available data on agroecosystems.

## Practical recommendations

We recommend the research community to approach the existing European Research Infrastructures in order to identify the specific services that can help them to boost their projects and research activities by making use of state-of-the-art services and facilities. The European Strategy Forum on Research Infrastructures (ESFRI) provides a detailed landscape of current European Research Infrastructures. Additionally, other Research Infrastructure can also work at National or regional level. In the coming years, a Network of Research Infrastructures will be launched as part of the EU Partnership “Accelerating farming systems transition: agroecology living labs and research infrastructures” that will provide a catalogue of services for agroecology transition.

### Further information

#### ALL-READY DELIVERABLES

- The ALL-Ready project deliverables can be found here: <https://www.all-ready-project.eu/communication/deliverables.html> (after the embargo period)

#### WEBLINKS

- ALL-Ready Pilot Network members <https://www.all-ready-project.eu/all-ri/pilot-network.html>
- European Strategy Forum on Research Infrastructures <https://www.esfri.eu/>
- European Partnership under Horizon Europe Accelerating farming systems transition: agroecology living labs and research infrastructures [https://ec.europa.eu/info/research-and-innovation/research-area/agriculture-forestry-and-rural-areas/ecological-approaches-and-organic-farming/partnership-agroecology\\_en](https://ec.europa.eu/info/research-and-innovation/research-area/agriculture-forestry-and-rural-areas/ecological-approaches-and-organic-farming/partnership-agroecology_en)

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**About ALL-Ready:** ALL-Ready is a Coordination and Support Action (CSA) funded by the European Commission (EC) with the aim of preparing a framework for a future European network of Living Labs (LL) and Research Infrastructures (RI) that will enable the transition towards agroecology throughout Europe. Based on the premise that agroecology can strengthen the sustainability and resilience of farming systems, the project will contribute to addressing the multiple challenges that they are facing today including climate change, loss of biodiversity, dwindling resources, degradation of soil and water quality.

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