



Unlocking the transition:

barriers and levers to the expansion of
agroecology in the European Union (EU)



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Summary and key message

Agroecology-TRANSECT, a Horizon Europe project co-financed by the European Commission, Switzerland and the United Kingdom, has gathered key insights about agroecological transformations by **engaging directly with on-the-ground-actors**. The findings are based on interactions with **agroecological initiatives located in 23 European countries** and covering a wide range of agronomic diversity.

Key barriers identified for the expansion of agroecology:

- Significant **awareness gaps across society**, with farmers, consumers and policymakers often lacking understanding of global challenges. **Policy shifts further weaken the visibility and credibility of agroecology**.
- **Inconsistent regulations** across EU, national and local levels generate uncertainty and **hinder farmers' capacity to invest in long-term sustainable practices**.
- **Current subsidy schemes, especially under the Common Agricultural Policy (CAP), remain unsustainable**, providing insufficient support to agroecological farms while favouring large operations; **area-based payments also indirectly disadvantage many women** who farm smaller areas.
- Financial viability is threatened by **limited adapted markets and unfair competition** from low-standard imports, which restrict the development of agroecological initiatives.
- **Weak rural attractiveness**, linked to limited services, infrastructure, local markets and access to larger towns and cities, constrains the establishment and growth of agroecological farms.
- **Labour shortages are especially acute in agroecology** where production models are more labour- and knowledge-intensive. This makes recruitment difficult, with low job attractiveness and limited entry of young farmers.
- **Technological and machinery limitations**, including lack of adapted and affordable equipment, insufficient support for second-hand machinery, and few opportunities to repair or share tools, **slow down agroecological transitions**.
- Research limitations, particularly the **lack of participatory research and co-creation of knowledge**, restrict context-specific approaches and the adoption of systemic solutions. This challenge is reinforced by **short-term funding cycles**.
- **Climatic uncertainties** increasingly affect production and experimentation, noting that **research results and practices that work today may no longer be effective in the future**. Southern Europe and Europe's tropical outermost regions are already under high climatic pressure and are among the first to experience severe impacts.

In the following we elaborate on these pressing challenges and propose recommendations on how policies can create a better enabling environment for much needed agroecological transitions in Europe.

What is Agroecology?

Agri-food systems are a primary driver of global environmental change, pushing planetary boundaries in climate, biodiversity, and freshwater use beyond their safe limits. International expert bodies such as the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) and the Intergovernmental Panel on Climate Change (IPCC) have identified agri-food systems as needing urgent transformation. Agroecology – defined as the application of ecological and social principles to the design and management of agri-food systems – is one approach funded by the EU to foster such transitions. As a **paradigm shift in food systems that aims to leverage social and ecological diversity, agroecology addresses a number of EU policy objectives**, including reversing biodiversity loss, mitigating and adapting to climate change, and fostering socio-economic resilience.



Methodology

Agroecology-TRANSECT, launched in 2022, is a four-year project seeking to provide scientific insights and support the development of agroecology in response to major global challenges, including **climate change, biodiversity decline, and farm socio-economic resilience**. A key feature of the project is its **transdisciplinary and co-creation approach**, involving a consortium of **19 diverse partners**, including research institutions, universities, SMEs, advisory bodies and civil society organisations.

To capture stakeholders' perceptions of what facilitates or hinders agroecological transitions, the project combined a survey with semi-structured interviews. **The survey** was developed based on a literature review of domains that could capture key factors of success and failure in agroecological initiatives. This survey explored diverse themes, such as the **actor diversity** within initiatives, **production types**, and **position in the value chain**. Ultimately, we collected **89 responses** (Delhove, 2025) from agroecological initiatives across 23 countries (see figure 1), covering various European contexts.

To complement these insights, a second approach focused on **semi-structured interviews** (Cassart et al., 2025), engaging **22 agroecological initiatives** in 15 countries (see figure 1) among the 89 respondents to the survey. These include **11 Innovation Hubs** – agricultural initiatives engaged in the project at different stages of agroecological

transition (Agroecology-TRANSECT, 2025) – and 11 additional initiatives outside the project to help broaden the diversity of contexts, bioclimatic areas and farming systems across Europe. Interviews were conducted with **farmers, researchers, advisors, SME workers**, capturing a variety of perspectives. These qualitative insights enriched the survey findings by providing a deeper understanding of the challenges and opportunities shaping agroecological initiatives.



Figure 1: **Map of the 89 initiatives that responded to the survey, from which 22 were selected for interviews in the second phase.**

Main results



The findings reveal multiple critical factors influencing agroecological transitions, which have been grouped in several interconnected dimensions.

A first dimension explored concerns **policy**, which stakeholders perceive as both a barrier and a potential lever for agroecological transitions. They highlight inconsistent and unsupportive EU and national regulations creating uncertainty and limiting long-term investments. Complex and time-consuming administrative procedures and short funding deadlines add further constraints, while aligned funding agendas and policy engagement offer emerging opportunities.

Economy and markets, a second dimension which is mostly perceived by stakeholders as a major barrier to agroecological transitions. Limited human and financial resources and low profitability hinder long-term stability. Farmers face limited consumer commitment and insufficient recognition of the added value of their products a lack of dedicated markets, and unfair competition from cheaper imports, although external funding can provide occasional support.

A third dimension concerns **infrastructures, technology, and access to natural ecosystems**. Stakeholders emphasise that geographical proximity can foster collaboration, while poor accessibility and time constraints often limit it. Technical challenges in the field, inadequate machinery and infrastructures, and the growing unpredictability of climate conditions further hinder production and experimentation.

Societal and cultural factors formed another key dimension shaping perceptions and behaviours toward agroecology. Initiatives stakeholders note that limited

strategic communication is a barrier to their development. More broadly for agroecology, limited visibility constrains awareness and engagement, while social acceptance and consumer demand remain uneven. Yet, motivated farmers, a younger generation open to change, and the confidence gained through involvement in initiatives, such as Innovation Hubs or Living Labs, act as important levers of transition.

A fifth dimension highlights the role of **knowledge and information** in supporting agroecological transitions. Stakeholders value learning through innovation hub activities, where research and practice align to test context-specific, long-term solutions. Yet, the lack of practical knowledge and performance references for agroecological practices, including those potentially facilitating adaptation to climate change, remains a barrier, despite researchers and advisors playing a crucial supportive role for farmers. The dependence on short-term research may also limit long-term development.

The final dimension concerns **social organisation and cooperation networks**. Stakeholders of agroecological initiatives emphasise that trust, transparent communication, and a shared long-term vision are essential to sustain collaboration. Related to previous levers, structures that bring together networks of actors, such as Innovation Hubs or Living Labs, are considered particularly effective by those stakeholders. However, differing mindsets, short-term perspectives, and uneven engagement among members often generate frustration and conflict. Building mutual understanding and recognising farmers' realities emerge as key conditions for effective cooperation.



Policy recommendations

To address the barriers identified in this study, we recommend policymakers to:

- **Raise awareness at all levels:** Efforts should be made to inform and educate policymakers, businesses, farmers and consumers about the benefits of agroecology fostering more informed decisions and stronger commitments to sustainability. This should also help **counterbalance the influence of agri-food stakeholders not aligned with agroecology.**
- **Develop consistent and long-term supportive policies for agroecology:** Create regulatory frameworks that provide stability and incentives for agroecological practices, ensuring continuity over time and alignment across national and EU levels. Policies should allow agri-food system to adapt to specific contexts, minimise inconsistencies, reduce administrative burdens and create a level playing field for agroecology-oriented farmers.
- **Improve financial support for farmers in transition:** Higher dedicated funding mechanisms are needed to help farmers navigate the economic challenges of adopting agroecology, **reduce financial risks and support the necessary investments** inherent to the transition (e.g. similar to the Just Transition Fund). Support should also address administrative burdens and short funding deadlines. Rather than merely increasing financial support, the primary consideration should be the reallocation of existing resources.
- **Develop fair and profitable markets for agroecological products:** Instruments should be added and developed further to ensure fair pricing and adequate returns for farmers engaged in agroecology. A better positioning of agroecological farmers within the value chain is essential to enhance economic sustainability of farmers' jobs. This may require more than just CAP instruments, in line with the repeated **call for a sustainable food systems' framework.** Free trade agreements, such as Mercosur (Mercado Común del Sur in South America), run counter to these efforts.
- **Enhance labour conditions and attract young generations:** Instruments are needed to improve the attractiveness of agricultural professions and rural areas by promoting better working as living conditions, education, and financial incentives especially for young entrants. Educating and informing labour forces about specificities of agroecology is also required.
- **Invest in agroecological-oriented infrastructure and technology:** Public and private investments should prioritise the development of agroecological infrastructure, including adapted machinery, collective transformation infrastructure and logistical support to facilitate transitions to sustainability. In particular, this should focus on ensuring the necessary infrastructure for short supply chains, with their specific requirements.
- **Promote participatory and transdisciplinary research with evidence-based knowledge exchange:** Strengthening collaboration between farmers, researchers, and advisors within local case studies (in our case Innovation Hubs) can generate practical, field-tested innovations, increase farmers' confidence to experiment, and produce robust scientific data on agroecological practices. This approach can help overcome misalignment between experimental research and real-life farming conditions, but needs much more support from policies.



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