



Knowledge gaps as barriers in agroecological transitions:

Lessons learnt from UNISECO



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Session 3: Transforming education and extension services: from top-down knowledge transfer to more horizontal farmer-to-farmer approaches
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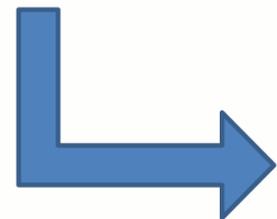
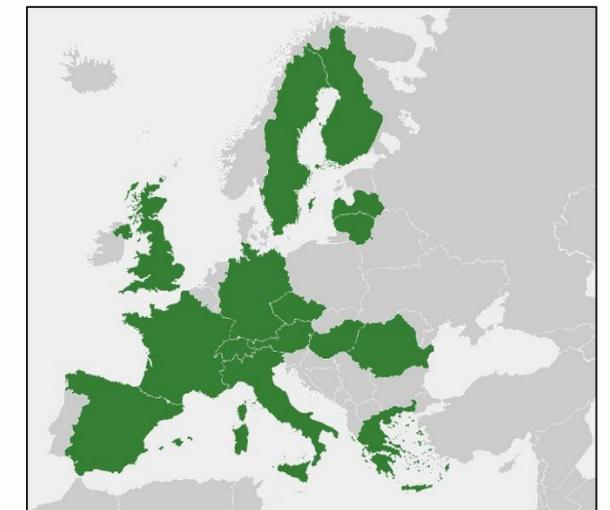
WITH THE SUPPORT OF:



UNISECO UNDERSTANDING & IMPROVING THE SUSTAINABILITY OF AGRO-ECOLOGICAL FARMING SYSTEMS IN THE EU

- UNISECO was a European research project aiming to develop innovative approaches to enhance the understanding of socio-economic and policy drivers and barriers for further development and implementation of agro-ecological practices in EU farming systems.

Project Duration:
1 May 2018 – 30 April 2021



Transdisciplinary process



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 773901.

Transdisciplinarity in UNISECO

Multi-Actor Approach within a transdisciplinary framework

- Integration of the knowledge of the partners from their different scientific backgrounds with the experiences of relevant actor groups.
- Consortium composition
- Setting-up of networking and knowledge sharing platforms
- Inclusion of participatory methods in all project phases

Knowledge gaps as barriers

- Analysis of barriers and drivers hindering or facilitating the implementation of agro-ecological practices
- We used the SES framework in order to
 - i) take in account the specific local context of each farming system
 - ii) have an improved understanding of the processes
- Our focus was on socio-economic and policy factors especially
 - i) a lack of knowledge and social capital;
 - ii) the lack of added value, processing and market access;
 - iii) ineffective policy design.

Knowledge needed to implement agro-ecological practices and understand gaps and constraints (e.g. lack of agro-ecological practice-specific knowledge and/or know-how).

Barriers	Main Category of Actors	CS
Lack of knowledge on specific agro-ecological practices and their sustainability benefits	Farmers	12
Lack of knowledge and awareness of economic and market opportunities of agro-ecological farming	Farmers	13
Lack of access to advisory services for agro-ecological practices and need for specialised knowledge in advisory services and agricultural education	Farmers, and science, innovation, advisory, capacity building	5
Limited AKIS coordination and lack of knowledge networks and practice-relevant research	Science, innovation, advisory, capacity building	7
Attitudes and beliefs towards environmental concerns and agro-ecological farming	Farmers, and science, innovation, advisory, capacity building	4
Strong tradition of conventional farming practices and of specific production systems (e.g. meat and dairy)	Farmers	6
Low capacity and willingness to cooperate due to weak social structure and individualism and rivalry	Farmers	7
Lack of trust and confidence between actors	Farmers	5
Fatigue, fear, isolation or loneliness and lack of long term prospects or visions of farming	Farmers	3

The Greek case study

4 interviews (2 farmers, 2 advisors) followed by a workshop with 6 MAP members

Type of Barrier / Driver	
Social – normative / cognitive	<ul style="list-style-type: none">• Lack of trust and confidence between the actors
Social - institutional	<ul style="list-style-type: none">• Lack of social structure and organisation that hinder the collaboration, mutual support and joint efforts between local actors
Knowledge	<ul style="list-style-type: none">• Knowledge gap in agro-ecological practices and sustainable farming in general and a lack of empirical data on innovation
Economic	<ul style="list-style-type: none">• Inadequate information on market conditions• Lack of market incentives and economic support measures• Increasing demand for food safety and quality by regulations and global market traders (driver)
Policy-related	<ul style="list-style-type: none">• Emphasis given to individual farm modernisation plans may hinder collective schemes

How to address knowledge gaps

1

- Inadequate information on market conditions
- Lack of market incentives and economic support measures
- Increasing demand for food safety and quality by regulations and global market traders (driver)

Conventional advisory

Engage value chain actors

Peers – share experiences

Consumer awareness

Empower farmers

Transdisciplinarity

- Lack of trust and confidence between the actors
- Lack of social structure and organisation that hinder the collaboration, mutual support and joint efforts between local actors

How to address knowledge gaps 2

Knowledge gap in agro-ecological practices and sustainable farming in general and a lack of empirical data on innovation

- Directed towards problem solving
- Local knowledge
- Research- Experimentation - Demonstration
- Peer to peer
- Employ Nature based solutions □ Landscape level

The role of Green Infrastructure and collaboration

Nature based Solutions demand investment on infrastructure especially

- Protection from floods
- Combat erosion
- Plant protection

As well as collaborative implementation

Knowledge Management System

Creation of a knowledge base

Supported – Maintained through policy/collective investment

Governance system in order to ensure

- Transparency
- Reliability
- Accessibility
- Operational

Targeting at farmers, practitioners (advisors) Research