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

Addressing barriers of agro-ecological transitions in European farming systems: Lessons and experiences from multi-actor engagement in 15 case studies

Gerald Schwarz et al., Thünen Institute of Farm Economics
(For a list of contributors, please see slide 14)

AAG Annual Meeting 2021
Agroecological transitions in different geographic contexts 2: Governance and sustainability
Online, 10/04/2021

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

• UNISECO project
  • To strengthen the sustainability of European farming systems, through co-construction of improved strategies and incentives for agro-ecological approaches.
  • To improve the knowledge base of agro-ecological transitions in the EU to inform future policies at European, national and regional levels

• WP3
  • Analyse barriers and drivers of agro-ecological transitions and co-construct strategies with local actors to address these

• Transition
  • Continuum from conventional to agro-ecological (food) systems
How to produce environmentally sustainable and be profitable at the same time?

→ UNISECO project approached this key dilemma with a focus on *agro-ecological approaches* in the 15 case studies

- Improving the understanding of barriers and drivers of implementation – *focus on socio-economic and policy factors*
- Perspective of *various farm production types and different socio-economic and policy contexts* across Europe
• What are key barriers and drivers hindering or facilitating agro-ecological transitions that need to be addressed?
• What governance changes are needed considering a multi-actor perspective?
  • Which actions to address the barriers can be done by whom, with whom and for whom?
  • How can these actors cooperate to facilitate the implementation of agro-ecological practices?
  • Which changes in market institutions and external policy related rules address the barriers and drivers?
Methodological approach

• Social-ecological systems (SES) framework
• Semi-structured interviews and 4 sets of workshops in each case study to co-construct strategies in local contexts
• Types of actors: Farmers, AKIS, value chain, authority and administration, rural community, NGOs
• Classification and scope of barriers and drivers:
  - Human
    - Knowledge
    - Technological
    - Economical
  - Natural
    - Physical
    - Ecological
  - Social
    - Cognitive
    - Normative
    - Institutional
  - Policy related

Adapted based Jones and Boyd (2011) and Gruere and Wreford (2017)
• Identified more than 100 key barriers across seven main types of barriers
• Focus on socio-economic and policy factors, which local actors can address
• Three main themes of barriers and drivers and proposed actions emerged:
  1) Knowledge and social capital
  2) Value added, processing and markets
  3) Policy design
Barriers

- Lack of specific knowledge on agro-ecological practices and market opportunities
- Attitudes towards agro-ecological farming and strong tradition in conventional practices
- Limited willingness to cooperate
- Farmers fatigue (especially small farmers)

Drivers

- Sharing of experience and information between farmers in some cases.
### Governance changes proposed in strategies

#### Internal to social-ecological system studied – initiated by SES actors

- Creation of formal and informal networks for knowledge transfer and sharing
- Farmers agree on hiring advisors, attracting research/education actors (e.g. for open days and strategic discussions)
- Cooperation of actors to create digital hub for knowledge exchange.
- Piloting new technologies on demonstration farms.
- Cooperation of advanced farmers with educational institutions

#### External to social-ecological system studied

- Local authorities coordinating education and raising awareness of landowners.
- Policy support for creation of networks and capacity building in cooperation
- Support for better targeted advisory service (e.g. to facilitating cooperation, lacking knowledge transfer, using demonstration farms, platforms).
- Support to farmers for better access to advisory services to address knowledge gaps.
- Pilot testing instruments to foster farmer and non-farmer actors cooperation.
Value added, processing and markets

Barriers

• Cost-price squeeze, market saturation and sales uncertainty
• Investments needs – difficult to afford technology.
• Access to land
• Low awareness of consumers
• Markets not mature
• Lack of storing and processing facilities

Drivers

• Similar initiatives to learn from, slow demand growth
Governance changes proposed in strategies

**Internal to social-ecological system studied – initiated by SES actors**

- Collective processing, marketing, storage, machinery use and similar activities.
- Initiate cooperation with all key value chain actors outside SES (e.g. processors).
- Develop regional fairs as platforms and markets for niche products.
- Create procurement platform for organic matter exchange and composting centre.
- Creation of rural land associations to match supply and demand for land.

**External to social-ecological system studied**

- Support for collective initiatives (e.g. marketing, processing).
- Creation of cooperation platforms for different value chain actors including short value chains and supermarkets with secure and stable growing contracts.
- Green public procurement implementation – for agro-ecologically produced goods.
- Support promotional campaigns and advertisements, regional labels/certification.
- Support farm investment related to transition to agro-ecological farming.
Barriers

• Bureaucracy of policy support and unclear definitions and requirements of support
• Low differentiation of Pillar II support
• Milk cooperatives not allowed to sell to traders
• Low promotion of agro-ecological practices in protected areas

Drivers

• Increasing knowledge and experience with innovative contract design (e.g. cooperative, result-based, rental agreements).
### Governance changes proposed in strategies

#### Internal to social-ecological system studied – initiated by SES actors

- Bottom up initiatives to better understand the needs of government staff.
- Get involved as trusted peers (farmers) in monitoring and controlling policy measures.
- Actively participate on consultation on the CAP strategic plans design.

#### External to social-ecological system studied

- Implement measures allowing trusted farmers to participate on monitoring and controlling policy measures (e.g. result-based AEMs).
- Implement new AECM promoting agro-ecological practices (e.g. mating disruption in orchards, biodiversity support).
- Removal of administrative barriers behind policy instruments.
- Inviting all stakeholders to the CAP debates.
- Promotion of diversification, innovation, consumers awareness, benefits of AEFS products and added value.
Key lessons

• Improving farmer **knowledge** on the benefits of agro-ecological practices and economic opportunities is a key aspect for successful transition strategies.

• Important role of education - focus on **young generation and school programmes**

• Horizontal and vertical **collaboration in the value chain** are of crucial importance to address key barriers.

• Tailored policy support to increase the capacity of local actors to create **agro-ecological networks**

• Transformational change requires several interlinked strategic pathways addressing the **whole food system**
Thank you for your attention.

Contact and information:

Gerald Schwarz: gerald.schwarz@thuenen.de
Website: https://uniseco-project.eu/
Zenodo: https://zenodo.org/communities/uniseco-h2020/?page=1&size=20