



UNISECO

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

# Exploring The Governance Networks Towards The Agroecological Transition: Evidence From 15 European Case Studies

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### UNderstanding and Improving the Sustainability of agroECOlogical farming systems in the EU (H2020)

- Current challenges of agricultural systems:
  - Increasing the **sustainability** of **food** production
  - Improving **nutritional** aspects
  - Protecting **climate** and the environment
  - Keeping **economic viability**
- UNISECO: *How to **produce public goods** whilst having **viable production of private goods** and securing **economic and social sustainability** at the farm level?*



- How can transitioning towards AE help?:
  - Combining **scientific evidence, agriculture-society relationships**, improvement of **agricultural practices** (Wezel *et al.*, 2009)
  - Increasing positive and **reducing negative externalities** on the environment
  - Developing **context-specific** and more **resilient** agricultural and food systems (Altieri *et al.*, 2017)
  - Addressing complex social, environmental, and farming problems **locally**
  - Adopting a **territorial** and **biodiversity-based** view of agriculture (Wezel *et al.*, 2016)



- Partnerships, cooperation and responsible governance are key to **maximise** the **synergies** between natural and human systems
- **Transparent, accountable and inclusive governance** mechanisms are needed to support the AE redesign (FAO, 2018).
- New models of **participatory** governance are needed:
  - Based on **collaborative** networks
  - Involving **multidisciplinary** actors
  - Fostering **collective learning**, by spreading different types **knowledge** and **competences** (Newig et al., 2010)
- **Social Network Analysis**: growing research interest for identifying **social structures** and **governance processes**, based on network **configuration**, in terms of its items (nodes, links)



- Identifying and analysing the **governance networks** characteristic of **different transition patterns**
  - **15** case studies across Europe
  - **Arable, perennial** and **livestock** farming systems
- Understanding specific **rules, regulations** and **decision-making processes** linked to the AE transition, vi by
  - **Institutional settings** where actors interact via negotiations and (non-hierarchical) coordination
  - **Missing actors** for future inclusion in the network
  - Institutional **rules** and **regulations**
  - **Informal decision-making** processes

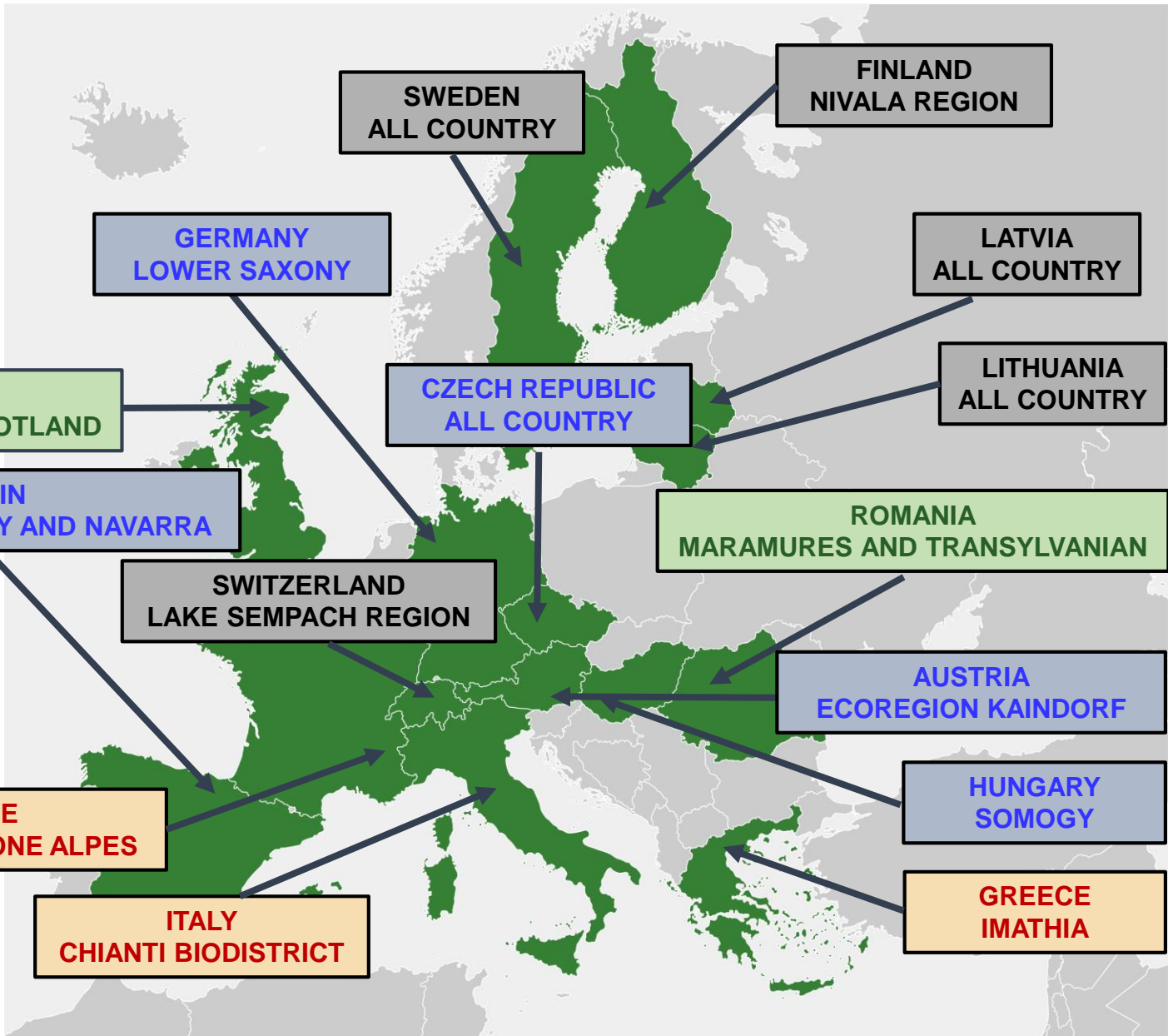


MIXED FARMING

PERMANENT CROPS

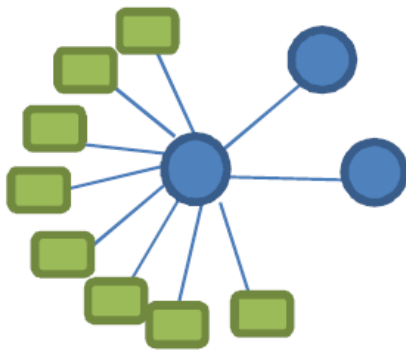
ARABLE

LIVESTOCK

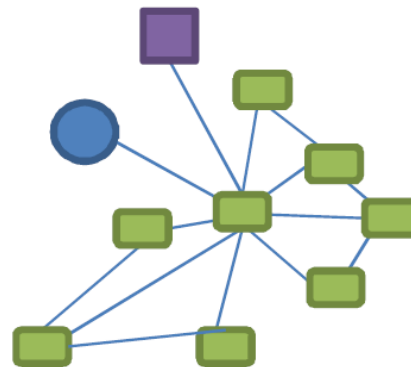


- **Cohesion** → density & connectedness
  - **Quicker innovation adoption**
  - **Prevents incoming** flows/actors from outside the network
  - 3 network types

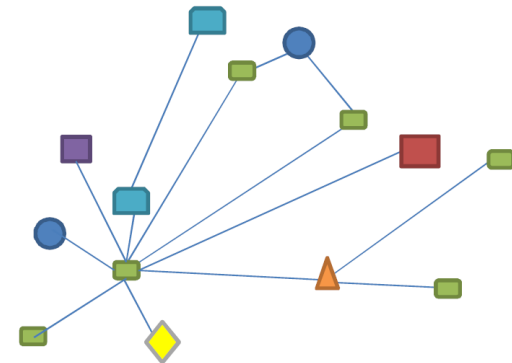
Centralised



Decentralised



Distributed



-

cohesion

+



## RANKING

- **Broker** → betweenness centrality & boundary spanner



- **Gatekeeper, multiple flows, intercategory links**

- **Influent actor** → influence (observed) & outdegree centrality



- **Opinion leader, important for AE transition**

- **Key actor** → influential & broker



- Actor voices used for final decision about ranking



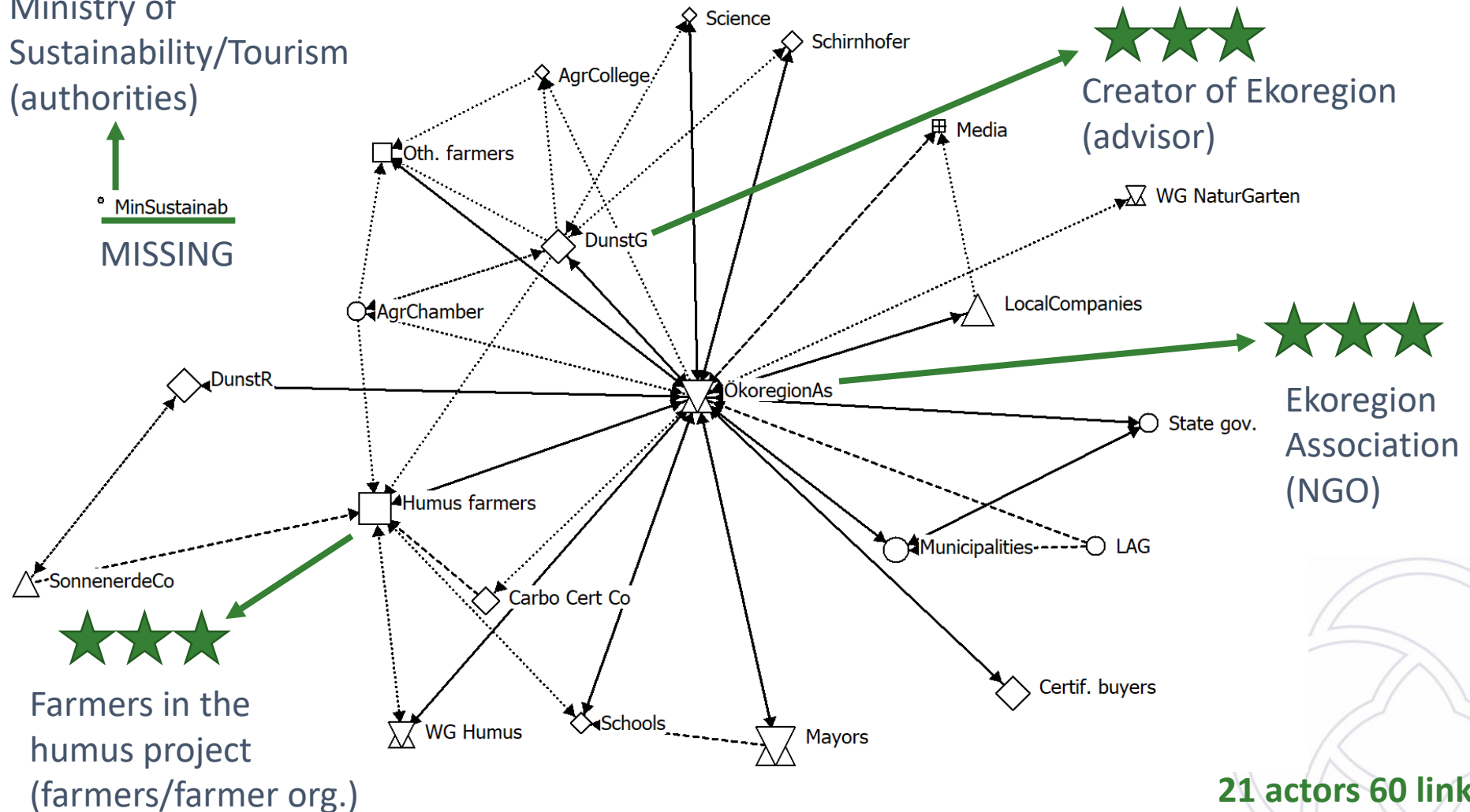




- Austria – Ekoregion Kaindorf (humus project) - Arable

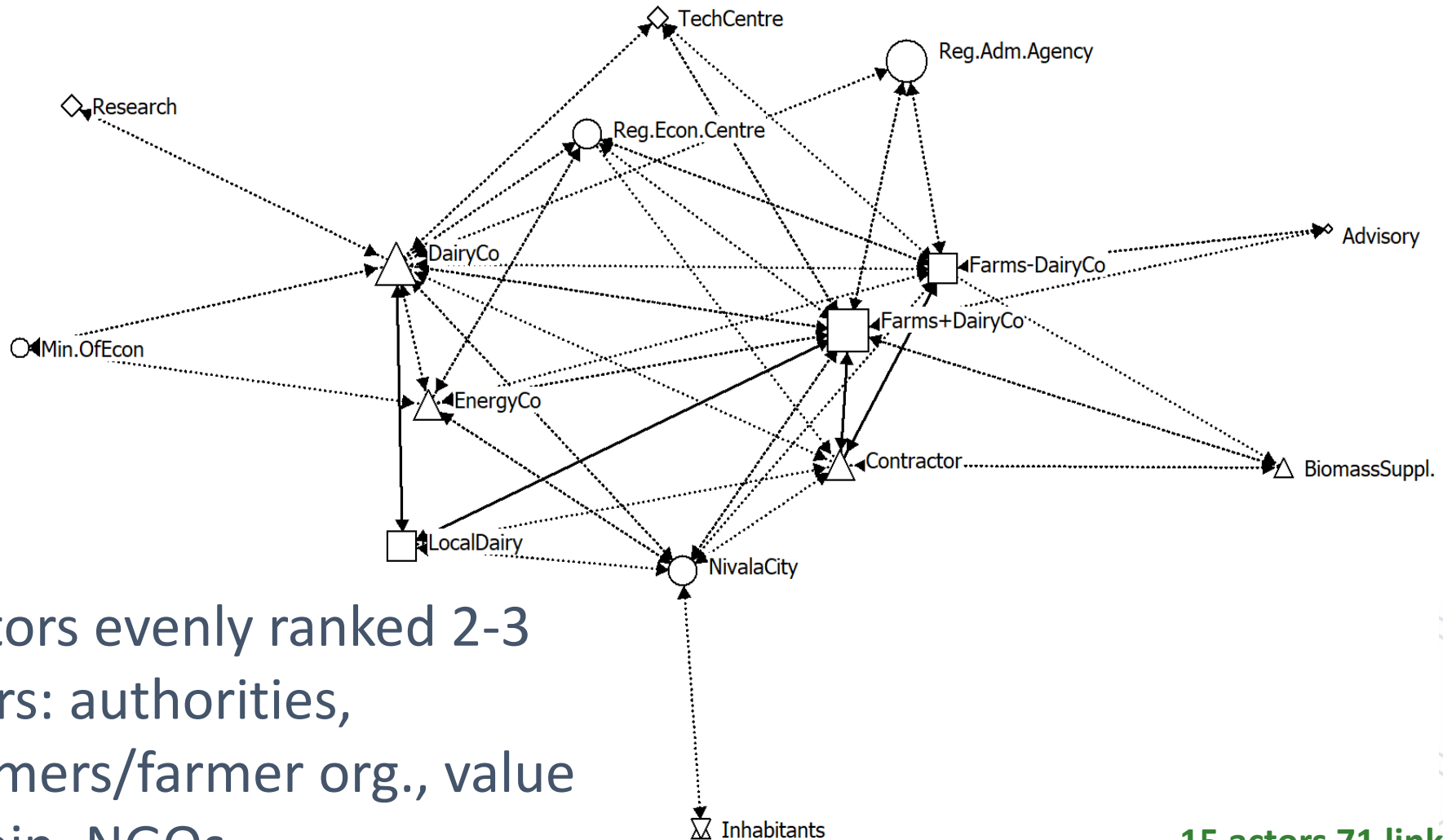
Ministry of Sustainability/Tourism (authorities)

° MinSustainab  
**MISSING**





- Finland – Nivala biogas plant (circular economy) - Dairy



- Different network structures are associated with **different governance models**
  - **Decentralised** n.: greater stability; core n. items existing for longer; more advanced transition stage towards AE
  - **Centralised** n.: lower stability; governance structured towards a single actor; relatively recent creation of connections among n. items; transition linked to charismatic actor
  - **Distributed** n.: medium structural stability; n. items are connecting quickly (interest in the innovation); risk of closure; lying the basis for the transition



- Increasing **stability** is key to develop **trusted** and **long-lasting** governance models
- **Few but influent** sources of knowledge and tangible goods, which **span multiple relations with different actors** and **open** to newcomers and external inputs
- Involving **missing actors** (and actor categories, e.g. media, consumers) may **promote** and **speed-up** farm-level **adoption** and **diffusion** at the territorial level of agroecology





# 4th Project Meeting & Stakeholder Workshop Basel, 12-15 November 2019



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# Thank you!

