Sustainable innovation for sustainable farmers: strategies, network and policies

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AIEAA
ASSOCIAZIONE ITALIANA DI ECONOMIA AGRARIA E APPLICATA

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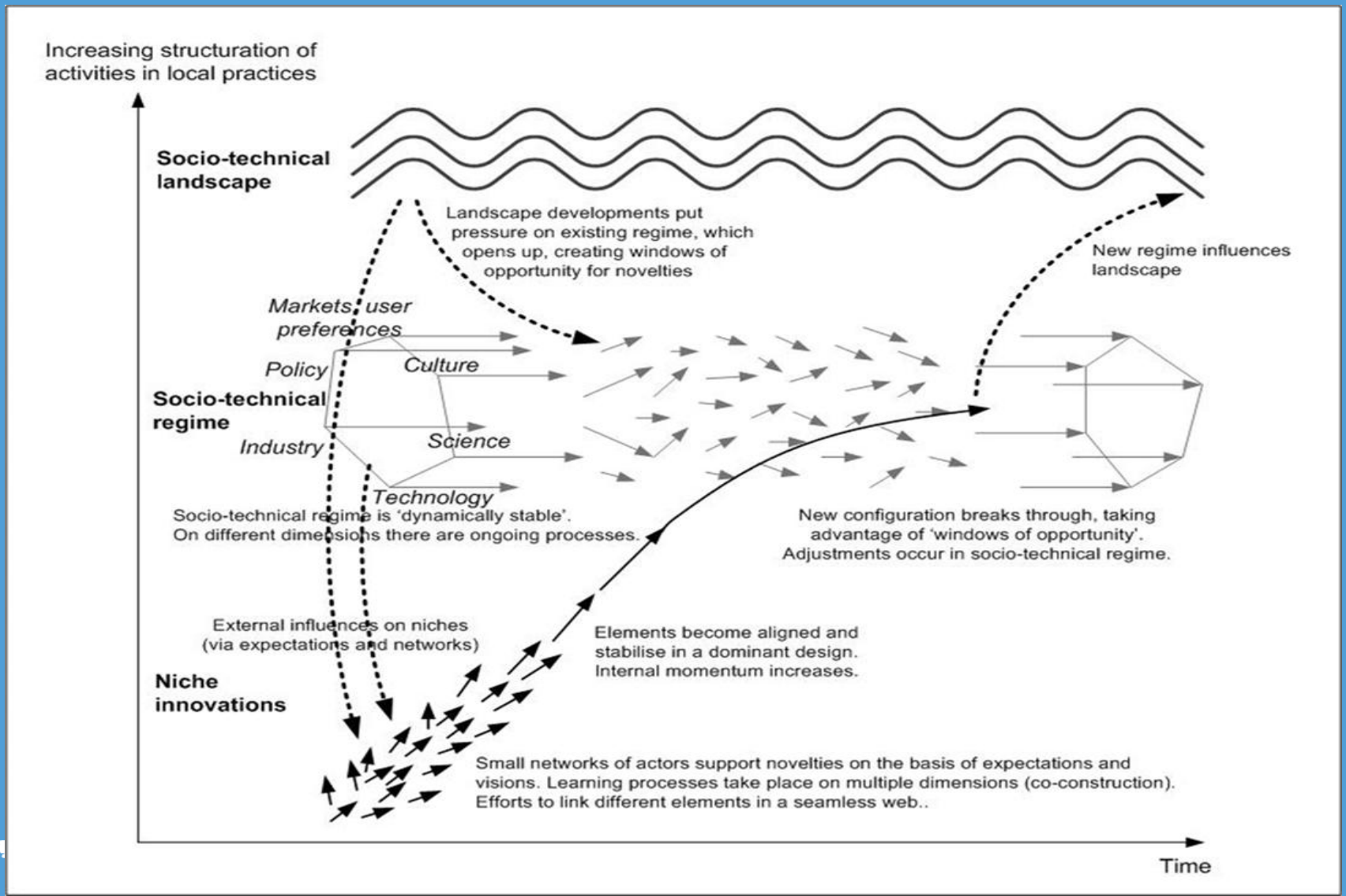
Introduction

- Importance of networks for sustainable agriculture has been recognized
- Need for networking at different levels (farmer level, innovation support system, value chain, policy level)
- However, different structural embedding in AKIS of different European countries
- What has been done in the European context, some examples and key lessons from recent projects:
    - SOLINSA (boundary work/objects)
    - PURE (different institutional conditions)
- Implications for policies (e.g. EIP)

SOLINSA*

* Slides courtesy of Heidrun Moschitz, FIBL

Based on ideas around sustainability transitions – LINSA are often niche networks



Different LINSA

- Brighton and Hove Food Partnership
- Permaculture Community
- The European Organic Data network
- Réseau Agriculture Durable
- Charter of Good Agricultural Practices in Cattle Production
- Bavarian Rural Women's Association
- German agricultural society
- The NATURAMA Alliance
- Consorzio Vacche Rosse
- Association for Solidary Economy Crisoperla
- Biogas Production Network
- Fruit Growing Network
- Cooperative Boer en Zorg
- Sustainable Dairy Farming
- Association for the development of fodder production
- Naturli Co-operative Cheese production

Six Features of a LINSA

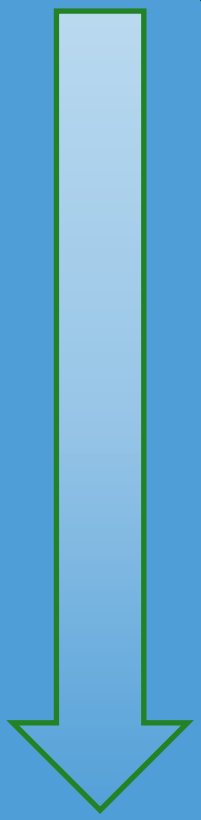
1. Dynamic balance of diversity and commonality
2. Shared goal of innovation
3. Mutual engagement (participation, commitment - although not all actors participate to equal extent)
4. Minimum level of governance and organization of network
5. Reflexivity: network participants have to steward learning activities, reassess innovation objectives and evaluate sustainability performance
6. Innovation and sustainability are to be connected and embodied in LINSA activities and practices of their members

Learning in LINSA

LINSA development

Diffuse networks, few links to formal AKIS

Close links with formal AKIS



Learning approaches

Uncoordinated learning, informal approaches

Some formalisation, no overall coordination

Highly coordinated

Dynamics of LINSA and innovation

- LINSA development:
  - Develop from outside or inside pressure
  - Both bottom-up (grassroots) and top-down management

- Different types and ways of innovation may lead to longterm change
  - Begin either radical or more incremental as the latter is more widely accepted
  - May be radical at the local level, but incremental at the EU level

Boundary objects and boundary work

- Discourses, artefacts, processes
- Engage in negotiation between diverse actors
- Spaces for testing and exploring new forms of collaboration
- Help internal integration, mobilisation of external support, adjustment of network goals

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Recommendations for advisory services

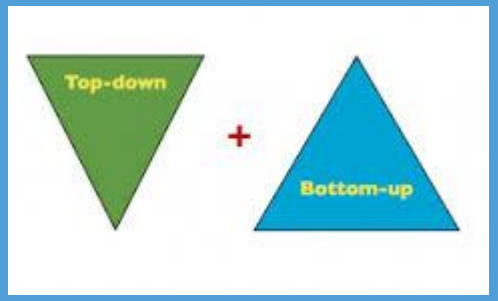
- Acknowledge diverse knowledge needs of learning and innovation networks
- Create opportunities for fostering knowledge co-creation
- Interactive, participatory, needs-based approaches that respect the ethos of LINSA

Recommendations for research

- Participatory research can assist LINSA in developing their potential
  - include a phase of carefully approaching the networks before effectively working with them
- Participatory research requires particular skills of researchers
  - Need to be learned and practiced
  - Research policy can enhance such approaches

Recommendations for policy

- Supporting social learning LINSA
  - incorporate a strong focus on process, thus going beyond technical/content support
- Supporting LINSA to foster institutional innovation
  - Manage the link between LINSA and AKIS to profit from LINSA as drivers for institutional change
- "Dual track governance"



For more information:

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Structural Conditions for Collaboration and Learning in Innovation Networks: Using an Innovation System Performance Lens to Analyse Agricultural Knowledge Systems

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Interactions between Niche and Regime: An Analysis of Learning and Innovation Networks for Sustainable Agriculture across Europe

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Learning and Innovation in Agriculture and Rural Development: The Use of the Concepts of Boundary Work and Boundary Objects

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CAP Reform and Innovation: The Role of Learning and Innovation Networks

La réforme de la PAC et l'innovation : le rôle des réseaux d'apprentissage et d'innovation

Die Reform der GAP und Innovation: Die Rolle von Lern- und Innovationsnetzwerken

Gianluca Brunori, Dominique Barjolle, Anne-Charlotte Dockes, Simone Helmle, Julie Ingram, Laurens Klerkx, Heidrun Moschitz, Gusztáv Nemes and Talis Tisenkopfs

PURE


pure
Innovative crop protection for sustainable agriculture

General background

- The involvement of farmers is widely seen as an essential aspect to enhance the success of research for sustainable agriculture
- The responsiveness of researchers' specific institutional contexts however greatly matters to the room they have and able to take to 'do participation' and to make it work

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Institutional context

The context which is embodied by ‘hard’ and ‘soft’ institutions and which governs the behaviour of actors who operate in it (Hall et al., 2001)

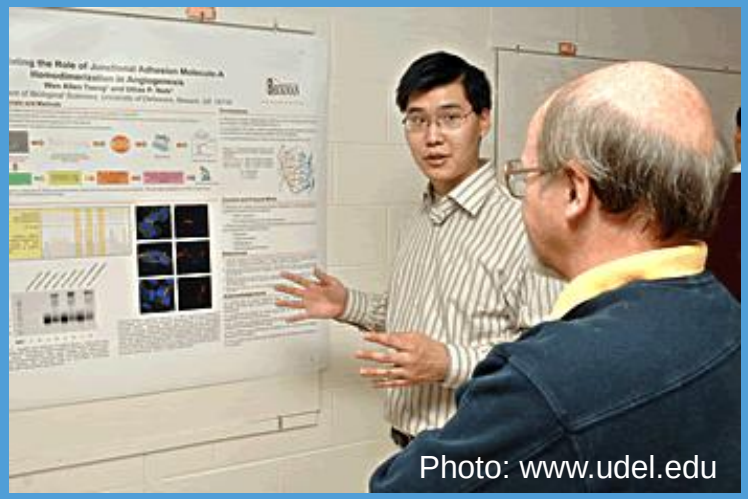


Photo: www.udel.edu


Photo: www.westminstercollege.edu

Institutions influence:

- Professional identities – what is good science?
- Organizational dis(incentives) for participatory research
- Country culture (e.g. societal organization, ways of communication)

Photo: www.timeshighereducation.co.uk

Institutional factors in PURE

Inst. context dimensions	Key institutional factors
1. Personal	• professional identities, roles and routines
2. Pilot team	• Composition of country-pilot teams
3. Organisational	• institutional roles and objectives
4. Pilot basis	• The (earlier) projects on which the pilots are based
5. WP13	• Institutions within the work package
6. The PURE-IPM-project	• Institutionalisation of co-innovation within the PURE-IPM-project
7. Country AKIS	• The institutional landscape of the Agricultural Knowledge and Innovation System (AKIS)
8. Country level	• Country-specific cultural norms

Example: personal dimension

- *[co-innovation] it's not so easy because each one of us [the pilot team members] has its routines." (FR-researcher*

- *"normally you don't have so much exchange in advising farmers, therefore it's a new method and something new in my scientific life […]" (DE-researcher)*

Example: Pilot team dimension

- *"It seems to me, the German team is not so close to practice. [...] In France they have a combination of advisor and researcher, that's why it goes so easy there, in my view. To me, that's playing quite a role." (NL-researcher)*

Example: organisational dimension

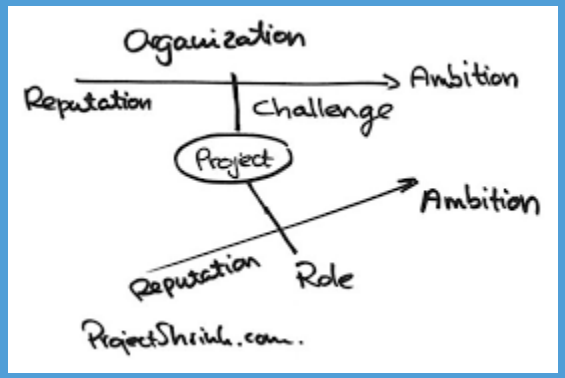
- *"[…] the organisational structure is from time to time an obstacle to this kind of interdisciplinary activities . It is also an obstacle to transversal activity between advise and research and so on […]" (FR-researcher)*

Example: Pilot basis

- *"We did not have an existing group in the beginning of the project. The advisory organisations in PURE did already have a group which they facilitated, so they started working with them. For us, firstly we wanted to start quite from scratch: let's try to identify a topic that generates energy and form a group around it, instead of taking a group and find out on what topic they have energy." (NL-researcher)*

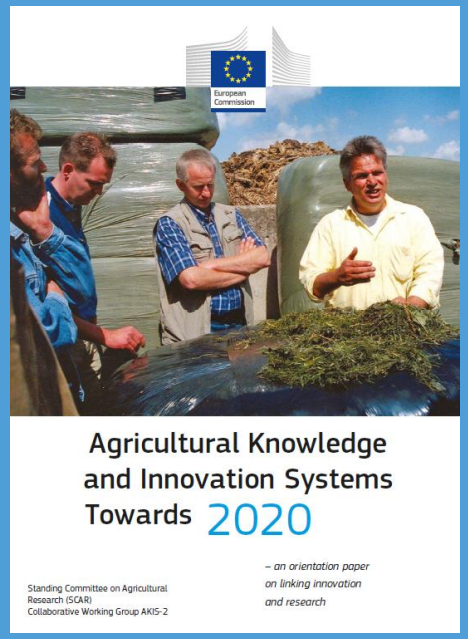
Example: project context

- *"Well I think we all benefitted from each other's experience and applied, well we didn't apply so much from the others but there was at least to hear and to listen about their processes and other pilots that was very interesting [...] it's always one step forward and sometimes two steps backwards and again one step forwards so that it is not such a straight process as probably all of us has thought in the beginning." (DE-researcher)*



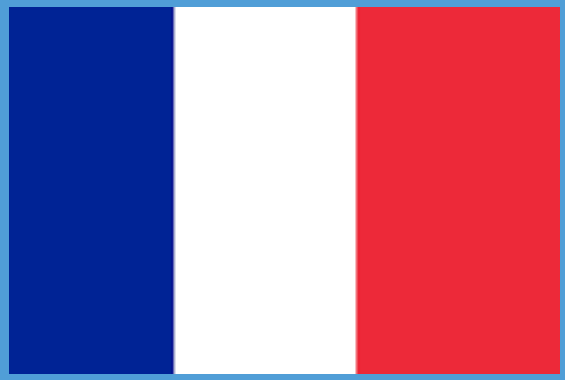
Example: Country AKIS

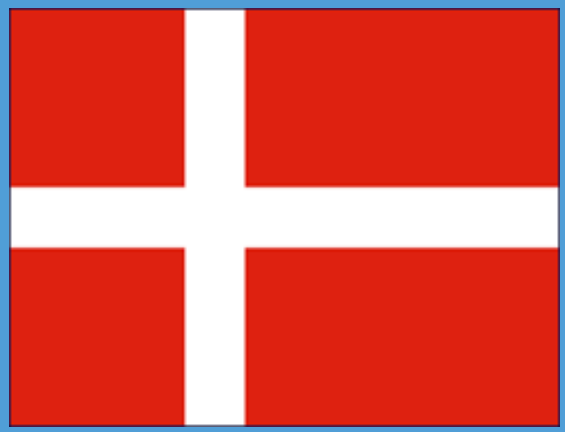
- *"I think we have a culture of working in very fixed roles, so if you are an adviser, you talk to farmers, if you are a scientist, you stay in your lab and do whatever crazy thing comes into your head but don't interfere with or try to be an adviser. I think that's general of the system." (DE-researcher)*



Example: country norms

- *"I think in France the situation is very similar to ours [the German situation] because they also have this clear division of roles and I think science is also sometimes not very much linked to practice, practical farming, so that's very similar. I think in the Netherlands and Denmark, you do have more of this culture to develop things together". (DE-researcher)*





Conclusion PURE

- Institutional contexts and histories and path dependencies lead to different starting point for similar work packages
- Projects create learning environment in which researchers/advisors contribute to embedding participatory research
- Key risk in ‘exporting’ or ‘transplanting’ participatory methodology from one context to the other
- More awareness in international programme design as regards different starting conditions and institutional contexts

Concluding reflections – implications for EIP and Horizon 2020

- Innovation as a learning process
- Interactions between different actors involved in networks generate learning and by this innovation
- Learning interactive networks focused on specific topics serve the general aims of the 'European Innovation Partnership for agricultural productivity and sustainability (EIP AGRI) and Horizon2020 (H2020)
- EIP-AGRI is a new instrument created to 'facilitate the information flow between research and practice', to 'promote a faster and wider transposition of innovative solutions into practice'
- Funded under CAP-RD and H2020 Research funds, EIP-AGRI is based on the interactive innovation model: Operational Groups (GO)

Concluding reflections – implications for EIP and Horizon 2020

- EIP-AGRI overcomes the bottlenecks to getting research results adopted on the ground: a major weakness is the insufficient information flow and missing links between different actors of the AKIS
- Farmers, extension services and advisors, food industry, researchers, government and NGO representatives and other stakeholders
- Horizon 2020 offers the base for research projects, including on-farm experiments, to provide the knowledge base for innovative actions
- Interactive innovation formats such as multi-actor projects and thematic networks genuinely involving farmers, advisors, enterprises, NGO, etc. "all along the project"
- However, local embedding is essential as national AKIS differ

Thank you for your attention!

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