

Agricultural/rural networks: Features which enhance farmer's ability to co-innovate in cooperation with other actors?

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Practical and theoretical background

- ❖ Innovation as a broader concept, comprising incremental innovation and new types such as social innovation
 - Adjusting products and processes to market/agro-ecological conditions
 - Innovation aiming at solving social problems involving farming
 - Innovating by learning new ways of thinking and doing through social interaction
 - Build on different types and sources of knowledge
- ❖ Networks as platforms that facilitate learning and innovation
 - Innovation as a result of collaborative processes
 - Multi-actors interaction
 - Mobilizing scientific, practical and tacit knowledge
 - Informal interactions



Research Question

❖ Features of the networks enhancing farmers co-innovation with other actors

- Four qualitative case studies were undertaken, in Germany, Italy, Portugal and UK
- Networks selected were described comprehensively to understand their structure and configuration, as well as
 - To map their actors and interactions
 - To understand their goal(s)
 - Funding and governance
 - Knowledge and information processes and flows
 - Innovations enhanced / developed / tested/ implemented
 - Entry/exit of farmers and other actors
 - Links with the knowledge and advisory infrastructure



A case study approach of networks

comprehensive description in 4 countries (1/2)

- ❖ In Germany [Policy-induced agricultural innovation network in Brandenburg]
 - Research-practice innovation network aimed at testing seeds adapted to climate change, funded by the German Ministry of Education and Research; Led by scientists and involving large farmers and other actors farm-related; Network showed effective and cohesive; Dissolved when the funding ended.
- ❖ In Italy [Anti-Mafia innovation network: *from land to fork*]
 - Emerging rural network in the northern Campania region (Southern Italy) aiming at solving a social problem: revitalizing an area affected by crime and environmental damages by resorting to organic farm carried out on care farms organized through collective action and led by a consortium of social farming cooperatives; Network is in itself a social innovation and enhances entrepreneurial innovation involving a large set of actors, including consumers, local communities and grassroots movements; it's a on-going network trying to be funding self-sustainable.



A case study approach of networks

comprehensive description in 4 countries (2/2)

❖ In Portugal [The berry networks]

- The cluster of small fruits is a horizontal, farmer-led, nationwide sectoral network recently established to cope with huge demands for knowledge, skills and information in a new sector experiencing a wave of new-entrants, mostly inexperienced farmers; it's also a way to organise an explosion of farmer's networks driven by advisory, market and innovation needs of small-scale producers.

❖ In United Kingdom [Monitor Farms in Scotland]

- Two monitor farms were studied from a group of 40, funded by the Scottish Monitor Farms Programme. Monitor farms were studied as an example of agricultural/rural innovation led by a farmer-community network. They involve a farm used as a monitor for experiencing, testing and validating changes in farming practices intend to increase productivity and profitability; A surrounding farmers community is involved and co-innovation is enhanced by the participation of other actors, such as R&D organisations, levy bodies, suppliers...



Results: *Diversity of networks* (1/3):

- ❖ Diversity of network's reflecting regional diversity of agricultural structures, AKIS, funding opportunities and problems addressed
 - Taking advantage of funding opportunities to address farmer's relevant problem (Brandenburg research-practice network, DE)
 - Answering place-based societal problems (Anti-Mafia network, IT)
 - Filling AKIS gaps regarding the offer of knowledge, information and skills to new-entrants farmers into novel sector (Berry networks, PT)
 - Implementing a new model of advise and innovation build on a real-farm experience and involving the farmers-community (Monitor farms, UK)

- ❖ Diversity of network's structure and configuration
 - Different scales depending on the nature and goals of the network (sectoral, territorial, local, regional...)
 - Well-bounded to fuzzy unbounded



Results: *Network features enhancing co-innovation* (2/3):

❖ Structure

- Flat hierarchy

❖ Actors and relationships

- Multi-actors
- Relevance of goals to farmers needs
- Proximity to R&D actors and experts
- Practice and solving-problems oriented goals
- Horizontal and informal ties
- Informality in entrance and exit the network
- Previous interactions among actors and trust capital
- No-fees implied by the entrance in the network



Results: *Network features enhancing co-innovation* (3/3):

❖ Governance and stability

- Leadership (facilitator-guided; small core-network; researcher-guided...)
- Long term public funding (to network and not short term project-based)
- Convergence between individual farmers goals and collective goal

❖ Knowledge processes and flows and innovations

- Exchange and sharing of quality and relevant information
- Participation of R&D actors, experts and good/best farmers
- Problem solving perspective and demonstration approach
- Creation and co-creation of practice-related knowledge
- Co-innovation focused on incremental and small-scale innovations
- Multi-actors networks enhance knowledge dissemination outside of networks, both formally and informally



Conclusions

- ❖ Multi-actors networks prove to be an effective tool for enhancing farmers learning and (co-) innovation capabilities
 - Create platforms that facilitate the exchange and the sharing of knowledge, information, experiences; in both formal and informal ways; that can continued by virtual interaction, micro-networks establishment, self-research...
- ❖ Multi-actors networks prove to be an alternative and/or complementary model for advise
 - Create platforms that facilitate the meet and the interaction between the advisory supply and demand side, allowing for multi-topic and transversal advice and better focus on practice and farmers problems
 - Facilitate the participation and the interaction of/with private advisors, down and up stream industry actors, the validation of information provided, and the farmers ability to cross-check information
 - Evidence the farmers needs and preferences towards the forms and contents of advice



Conclusions

❖ Multi-actors networks need to be promoted and publicly funded

- So far they have been funded on project and short-term basis, what has limited their potential to enhance co-innovation involving the cooperation between farmers, R&D and advisory structure actors, sectoral and other rural actors
- Cooperation as co-innovation are long-term processes, need time to develop and to be observed and assessed [this is an exploratory research and systematic/life-cycle need to be conducted]





Thanks for your attention!

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