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...

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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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