



Coordination Committee Focus Group Knowledge Transfer & Innovation

Summary of Phase 1 Report, April 2013



Innovation has been placed at the heart of the Europe 2020 strategy¹ which aims at a smart, sustainable and inclusive growth. In the light of the new policy priorities, the European Network for Rural Development (ENRD) Coordination Committee launched the Focus Group (FG) on Knowledge Transfer & Innovation (KT&I) in June 2012². The Focus Group is composed of representatives from European Union (EU), Member States (MS), national administrations, National Rural Networks (NRNs), as well as European organisations and academics.

The Focus Group's mandate is to provide recommendations about how to promote KT&I more effectively in the next generation of Rural Development Programmes (RDPs). Particularly in the context of the European Commission's proposal for rural development policy after 2013 which identifies innovation as a horizontal priority. The FG's work also seeks to

1 http://ec.europa.eu/europe2020/index_en.htm

2 The Phase 1 Report of Focus Group on Knowledge Transfer & Innovation presenting the outcomes of the work carried out between June and December 2012 is available at: http://enrd.ec.europa.eu/themes/research-and-innovation-gateway-development/kt-innovation/kt-focus-group/ en/kt-focus-group_en.cfm

identify the links between future RDPs and the European Innovation Partnership on Agricultural Productivity and Sustainability (the agricultural EIP) and the implications of that for making future RDPs an effective vehicle for the implementation of the agricultural EIP.

The Focus Group developed a strong evidence base regarding KT&I support being provided in the current programming period, through the European Agricultural Fund for Rural Development (EAFRD). More than 65 case studies were collected from 17 MS as informative reference for further analysis, of which this report summarises the main findings.



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Definitions and methodological framework

While defining the conceptual reference and focus for the work of the FG, three issues became very clear:

- i. The concept of 'innovation' should not be caught in one single definition to be universally valid. Situations all over Europe do vary according to the context. Instead, and specifically for policy recommendations, innovation is to be considered as a permanent process of renewal and adaptation.
- ii. The existing knowledge and innovation systems have tended to focus on agriculture. However, it is very relevant also to include issues of environmental and social innovations as well as being innovative in new ways, such as cooperation between public administration, farmers and other stakeholders in the rural domain.
- iii. Policy is to enable a 'culture of innovation' wider than the work of actors in the so-called Agricultural Knowledge and Innovation System (AKIS) in the strict sense. Rural development policy is to embrace rural innovation beyond agricultural production and processing.

Theories about innovation usually distinguish two models: the linear and the systemic model (see Table 1). In the linear model, innovation is seen as a scientific and linear process driven by experts and technology. Such innovation is developed by researchers or scientists with the results expected to be applied and replicated in practical situations. Linear innovation promotes a flow of knowledge from the scientific experts to the end-users (e.g. farmers, foresters, agri-food businesses and other rural enterprises). However, experience has shown that obstacles can limit the knowledge flow to end-users. The success of linear innovation is very much dependent on the scientific research being designed to produce



tangible results that are relevant to end-users. Moreover, innovation reaches beyond scientific issues. Another weakness of the linear approach to fostering KT&I is a failure to appreciate that role end-users can play as originators of successful innovation.

Compared to the linear model, the systemic model of innovation is more complex. The cases examined by the FG make it clear that both models are relevant to understanding how rural development innovation works. In its analysis, the FG has integrated elements that pertain to both models.

Instead of focusing on a detailed definition, the FG found it more appropriate to focus on innovation dynamics, or on innovation as a process. As the European Union's Standing Committee on Agricultural Research (SCAR)³ has stated: "Innovation starts with mobilising existing knowledge. Innovation is a social process, more bottomup or interactive than top-down from science to implementation. Even pure technical innovations are socially embedded in a process with clients, advisors, etc. Very often partners are needed to implement an innovation."

Table 1: Changes in academic thinking about innovation regarding different aspects (Leeuwis & Aarts, 2011)

Aspect of innovation	Linear model of innovation (dominant 1950-1980)	Later modes of thinking (dominant from 1990 onwards)
Origin	Science and research	Building blocks come from science, practice and intermediaries
Nature	New technical device	New successful combination of technological devices, modes of thinking and social organisation
Social conditions for application	Are 'outside' the innovation	Are an integral component of the innovation
Key processes	R&D, adoption	Interactive design, co-evolution, learning
Adoption	Is an individual process	Is a collective process within nested networks of interdepen- dent stakeholders
Steering	Change can be engineered, predicted and planned rationally	Change is an unpredictable, messy and emergent process
Role of science	Designing innovations	Delivering inventions that may be turned into innovations Responding to questions that emerge in the innovation process
Diffusion	Happens after the innovation is ready Focus is on spreading of a product	Starts already during design, while scaling out often includes contextual re-design Focus is on spreading of a process

Regarding the actors engaged in the innovation process, the FG considered that - in the initial stages - informal knowledge, personal capacities and networks of innovators (including farmers) are essential to build liaisons. Such 'social capital' is at the forefront of innovation policy, as it animates and consolidates emerging networks of innovators.

Building on the latter, a new development to systemic innovation thinking has led to the introduction of an 'interactive innovation model'. The agricultural EIP has adopted this interactive multi-actor model of knowledge exchange to promote end-user-focused solutions. The application of this model refers to the forming of partnerships using bottom-up approaches under the agricultural EIP and linking end-users, advisors, researchers, businesses, and other actors in Operational Groups to produce concrete innovative results.

At this stage, innovation brokers can play a useful role in addition to the standard AKIS actors (research and education institutions, extension services, etc.) who are often present in the process of scaling-up innovation. According to the definition of Howells (2006)⁴, innovations broker is "an organization or body that acts as an agent or broker in any aspect of the innovation process between two or more parties. Such intermediary activities include: helping to provide information about potential collaborators; brokering a transaction between two or more parties; acting as a mediator, or go-between bodies or organizations that are already collaborating; and helping find advice, funding and support for the innovation outcomes of such collaborations."

In collecting examples about RDP support to KT&I across Members States and regions, the FG sought to encompass the variety in situations in the MS and the differing perspectives on the KT&I systems that are functioning. The research also sought feedback as to whether current experience in innovation support could shed some light on the functioning of the intended agricultural EIP operational groups⁵.

4 Howells, J. (2006): Intermediation and the role of intermediaries in innovation. Research Policy, 35, pp. 715–728.

5 The European Innovation Partnership (EIP) "Agricultural Productivity and Sustainability" aims to provide a working interface between agriculture, bioeconomy, science and others at EU, national and regional level. Its implementation will be channelled through operational groups and supported by a network facility. *http://ec.europa.eu/agriculture/eip/pdf/com2012-79_en.pdf*

Case studies analysis and findings

Around one third of the examples received included projects funded or co-funded by Axis 1 (26 examples). Axis 3 and Axis 4 were the source of financing for around 10% of the examples received (12 examples) while two cases where funded by Axis 2. Technical Assistance (TA) budgets and the NRNs also play a significant role in supporting the innovation process as they finance training and information activities, the evaluation of pilot projects and the provision of micro grants through best practices (4 examples). Interestingly, the largest number of examples (39), stress the use of additional or alternative means of finance generated through various public (e.g. national, regional administrations) and private sources (e.g. bank loans, business) as well as other EU funds (e.g. European Social Fund, European Regional Development Fund, INTER-REG, Leonardo da Vinci programme).

In the majority of cases, the innovation process originated from the need to enable the actors of the primary sector (farmers, cooperatives, producers, agrofood industries, etc.) to maintain and/or improve their competitiveness. The need to address the beneficiaries' knowledge gaps was reported as another major reason for innovation. Responding to changing market demands or new opportunities was also a strong driver for innovation and environmental issues led to innovation in a number of examples. Finally, the need for new services and to address societal issues in rural areas also triggered the innovation process.

The actors involved in the innovation process in the examples collected are very diverse. Interestingly, farmers or farmers' organisations were, in the major-

ity of the cases, the ones who initiated the innovation process. Research institutes and universities were also important actors in initiating novelties. Advisory services, Local Action Groups (LAGs) and agro-food businesses were found to have been a catalyst in some of the case studies. Other actors who initiated innovation processes included Non Governmental Organisations, chambers of commerce/agriculture, development organisations, etc.

The predominant type of innovation involved new processes or practices (e.g. the adoption of new or improved farming or production methods and techniques), followed by innovation related to new forms of organisation which included marketing innovation (e.g. the formulation and establishment of new networks aiming to facilitate experimentation) and the development of innovative products (e.g. the production of woodchip pellets from thinning).

Knowledge Transfer (KT) was found to be a precondition of the innovation process and it appears that the benefits of KT are also contingent on several interrelated factors such as creating partnerships, building capacity, and raising awareness. From the case studies it became evident that KT is beneficial not only for the end-users of the innovation (e.g. farmers, agrifood businesses, local entrepreneurs and rural society) but also for the research sector, the public administration and policy-makers.

The networks involved in the innovation process include a diverse range of actors: farmers, farmers' organisations, agro-food businesses, regional governments, universities, research institutes, advisory and extension services, etc. The contribution of these formal as well as informal networks was found to be both versatile and important throughout the innovation process.





Lessons learnt

Based on its analysis, the FG has deduced a number of relevant lessons regarding the innovation process:

- Animating the potential innovators. Very often the stakeholders have already conceived a possible innovation but they lack the knowledge and support in order to proceed.
- Advisory services and innovation brokers play a key role acting as facilitators in a process with a high level of complexity and multiple actors involved.
- Good communication and cooperation is fundamental for success in this interactive process involving various actors and combining different competences.
- Assessing market needs is a precondition for innovation. Understanding the changes in consumer and market needs is an important condition for identifying new domains for innovation.
- Combining different funds and different measures enables the implementation of more complex projects.

- **Building the right partnership.** It is important to bring together the right partners those who have the motivation, skills and knowledge of the subject and who are willing to invest in a successful partnership.
- A local business model is required, one which is adapted to local specificities and incorporates the economic, social and cultural characteristics of the area.
- Ensuring the flexibility of authorities and regulations, on how rural development policy is implemented and supports the innovation process.
- **Managing risk and handling failure**, as risk taking and the possibility of failure are integral parts of the innovation process.
- A clear innovation support framework is also important for defining the measures and conditionality which can lead to innovation.

Possible intervention areas and initial recommendations

Based on the lessons learnt, the FG has agreed on a number of initial policy recommendations for six relevant intervention areas. The six intervention areas along with the most relevant recommendations follow:

1. Simplify rural development regulations.

Practical recommendations for both the EU and MS are to:

- Minimise the administrative burden related to all innovative projects.
- Keep the monitoring and evaluation system simple for the innovators.
- 2. Connect RDP-networks, innovation and EIP networks within the agricultural EIP.

Practical recommendations for both the EU and MS level are to:

- Invest in good communication and coordination on the agricultural EIP at the EU and MS level.
- Provide comprehensive information about 'why innovation' as one of EU 2020 priorities and 'how innovation' through the setting up of operational groups.
- Invest in active cooperation between the agricultural EIP network, the ENRD network, the NRNs and in communication with the activities of European Evaluation Network at the EU and national level.
- Member States with regional RDPs may require one single national framework for implementing the agricultural EIP.
- Communicate the possibilities of the agricultural EIP operational groups to work on themes and with stakeholders beyond agriculture production alone.

A practical recommendation at EU level is to:

• Elaborate guidance to MS in addressing innovation in the current programming process preparing the next phase. MS without past experience with measure 124 need assistance in establishment of innovation measures. 3. Enable a climate for innovations – also considering complex innovation processes. Allow for risk and failure; follow a 'step-wise' approach in planning and in funding; and learn from the experience acquired.

Recommendations for both the EU and MS level include:

- Rural development policy should support innovation processes from the same inclusive conceptual framework as the agricultural EIP has proposed. The concept of 'interactive innovation model' is most welcome. This will allow a wide range of types and subjects of novelties and innovation that reflects the wide variety of contexts in the EU MS.
- It is important for RDP measures to include non-agricultural innovations as well (wider rural perspective).
- Realise that not all innovations e.g. new environmental services from farmers will eventually be paid by the market. Thus it is important to allow at least initial payments from RDP budgets.
- Support both innovation itself and the experimentation with the novelty in practice. The current provisions on the agricultural EIP already suggest this as a possibility.
- Encourage RDPs to make use of articles 36 (cooperation), 15 (training) and 16 (advice) under the EC's proposal for rural development after 2013 to also promote innovation (e.g. support innovation brokers).
- Design guidelines for collectives (of farmers, among others) to deliver green (nature) and blue (water) services. Two specific demands came from the cases: a) a legislative framework allowing payments for these services and; b) a format for contracts between collectives and authorities.
- Deepen the notion of 'innovation brokers' and challenge creative entrepreneurship. In other words: promote the "innovation spirit".
- Monitoring & Evaluation of innovative projects should not only focus on the results but also on the process. The option of failure has to be accepted as part of the innovation processes. The European Evaluation Network could invest some effort in the design and appropriate Monitoring and Evaluation system for innovation.

At MS level it is recommended to:

- Find and share good benchmarks of innovation process support.
- Increase TA support, in particular within the NRN action plan, to emphasize on training and include training on topics such as leadership, Community Led Local Development (CLLD), innovation facilitation and brokerage, business and marketing skills, understanding environmental, social and communication issues.
- Devote a substantial part of the TA to support and train innovation advisors/brokers on innovation processes, on an inclusive view on innovation, facilitation of transnational exchanges and cooperation at local, MS, and EU level.
- Allow a risk-taking attitude. Design and experiment with risk guarantee funds and monitor their performance. Revolving funds (for guarantees/loans) could be co-funded from the RDPs 2014-2020 budgets.
- Make wider use of the exemptions allowed by EU legislation from large industry food processing regulations for small innovative initiatives, with a view to foster innovative initiatives.
- In innovation processes the risk is difficult to foresee. In such circumstances it is recommended to follow a step-wise approach in planning and in funding and allow failure as it is also important to learn from the experience.

4 Promote wide stakeholder involvement. Start informing relevant actors on the objectives and opportunities of the EIP erational groups for 2014-2020 already in 2013 with the support of National Rural Networks.

Practical recommendations at EU and MS level are to:

- Promote training in facilitation and leadership in complex processes involving systems innovation, as keeping the various stakeholders together is a challenge, also at local level.
- Design and share simple formats for public & private partnership contracts (e.g. for the delivery of environmental services).

At MS level it is recommended to:

- Start informing relevant actors on the objectives and opportunities of the EIP operational groups for 2014-2020 already in 2013.
- Include information activities and support to innovation processes and stakeholder involvement into the tasks of the next generation of National Rural Networks.
- Challenge CLLD groups/LAGs to lead innovation and building local or regional partnerships. From this experience they will be able to generate relevant issues for rural development research.



5 Strengthen the already existing Agricultural Knowledge and Innovation System (AKIS). Ensure the actors in AKIS are informed on the potential of the EIP operational groups.

Recommendations at MS level suggest to:

- Make sure the actors in AKIS are inspired by the agricultural EIP suggestions for operational groups. Either by direct information from the Managing Authority or the relevant ministry.
- Farmers should be included in developing agricultural research agendas, as rural inhabitants should also be involved in setting the agenda for rural research.
- In most MS the NRN can assist in promoting the potentials of agricultural EIP operational groups in strengthening the AKIS and in linking existing local networks with the agricultural EIP.
- Include a 'rural relevance' condition for research proposals if it is to be financed from RDP budgets: the relevance of the innovative project to end-users is crucial. Researchers should be rewarded not only according to their academic publications but also by the impact of their work in rural areas and interactive processes.

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6 Support innovation networks in the emerging stage. Challenge CLLD groups or LAGs in the next programming period to initiate and support innovation at micro-regional and transnational levels and make use of the agricultural EIP.

A recommendation at EU level is to:

 Suggest models for 'local business development' and 'grassroots economics' to inspire emerging networks.

At MS level it is recommended to:

- Challenge CLLD/LAGs in the next programming period to initiate and support innovation by building local or regional partnerships and developing a 'grassroots economy' and 'local business models'.
- Ensure transparency in evaluating emerging innovation networks and share Monitoring & Evaluation indicators within the European Evaluation Network.

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