



Subgroup on Innovation for agricultural productivity and sustainability

1st Meeting
10 March 2015

REPORT



In January 2015 the European Rural Networks' Assembly was successfully launched as the main governance body of the ENRD and EIP-AGRI Networks. The Assembly provides the strategic framework for the activities of the networks and forms a platform to share stakeholders' priorities and concerns, covering all aspects of the Rural Development Policy 2014-2020.

The European Rural Networks' Assembly includes several subgroups. The **permanent Subgroup on Innovation for agricultural productivity and sustainability (hereafter 'Subgroup on Innovation')** is one of them. Gathering together 56 organisations this subgroup supports the EIP-AGRI networking activities aiming to make EU agriculture and forestry more sustainable and more productive.



The main objectives of the Subgroup on Innovation are to:

- Support the implementation of the EIP-AGRI in Rural Development Programmes
- Identify common issues, problems and good practices
- Support networking between EIP-AGRI Operational Groups
- Provide input for the work programme of the EIP-AGRI Network
- Cooperate with the National Rural Networks to support innovation

The Subgroup on Innovation met for the first time in Brussels on 10 March 2015. The meeting was opened by Aldo Longo, Director of DG AGRI. In his speech Aldo Longo welcomed the members, highlighted the increased importance of innovation in the new Rural Development Policy, and the challenges rural areas, agriculture and forestry face. Working together in the subgroup on innovation is a great opportunity to stimulate innovation in agriculture and benefit from the broad and varied experience in the group. In the subsequent presentation, Iman Boot, DG AGRI H5 (Research and innovation) presented the governance structure, the mandate and the tasks of the subgroup. [Download the presentation.](#)

The main part of the **morning session** was dedicated to an interactive session which took up the 12 priority themes for innovation identified during the first meeting of the European Rural Networks Assembly. [Download the report](#)

Margarida Ambar from the EIP-AGRI Service Point introduced the interactive session and presented the **12 priority themes with the 2 main questions** to discuss within the 6 breakout groups.

The 12 priority themes for innovation:

1. Farming methods and systems
2. Sustainable and efficient input use
3. Knowledge transfer
4. Knowledge systems
5. Circular economy
6. Waste management
7. Social innovation (improving farmers' marketing skills etc.)
8. Bottom up innovation in the knowledge system
9. Market innovation
10. Short supply chains and rural-urban partnerships
11. Climate change (adaptation and mitigation)
12. Soil quality

The two main questions:

1. What are the main challenges for innovation in each theme?
2. What does each theme mean for the innovation actors and how could networking help?

Chapter I of this report summarises the outcome of the first interactive breakout group discussions on "priority for innovation".

In the **afternoon session**, the main focus was put on the **EIP-AGRI networking tools**. Willemine Brinkman from the EIP-AGRI Service Point presented these networking tools. [Download the presentation](#).

Sergiu Didicescu (EIP-AGRI SP) introduced the second interactive session with the two main questions addressed to the 6 breakout groups:

1. What themes and objectives would you propose for the EIP-AGRI tools?
2. What other networking tools do you have available to support the EIP-AGRI network? What could you consider doing?

Chapter II of this report summarises the outcome of the second interactive breakout group discussions on "networking tools".

In the final session the participants, based on the outcomes of the breakout sessions, prioritised a number of topics for the further planning of networking activities in 2015.

The following candidate topics were identified:

For focus groups:

- Emissions from livestock production
- Sustainable intensification
- Agroforestry / mixed systems/ farm diversification
- Benchmarking farm performance (on sustainability)
- Post-harvest losses

For workshops:

- Precision farming (follow up to Focus Group)
- Short supply chains (follow up to Focus Group)
- First experiences of Operational groups
- Circular economy / waste management / reducing food waste

For a seminar:

- Knowledge systems and interactive innovation – how to get all actors involved

The detailed agenda of the first meeting and all presentations can be found on the eventpage of the 1st meeting on the EIP-AGRI website [through this link](#)

The next meeting of the Subgroup on Innovation for agricultural productivity will be on 23 June 2015 in Brussels.



CHAPTER I. Report of the breakout sessions: Priorities for innovation

Group 1: Farming methods and systems and sustainable and efficient input use

What are the challenges for innovation in farming methods and systems and in Sustainable and efficient input use?

Farming methods and systems:

- Intensive – extensive – integrated production
- Plant breeding system
- Pest resistance
- Agricultural diversification and market diversification
- Common performance matrix (benchmarking)
- Tillage methods
- Eco-system services
- Costs and benefits over time

Sustainable and efficient input use:

- Water – fertiliser - pesticides
- Crop rotation
- Market innovation
- Precision application of input

What do Farming methods and systems and Sustainable and efficient input use mean for you as different innovation actors? What relevant networking activities can be developed?

- Orient research needs for practice
- Demonstration farms, monitoring farms
- Transfer knowledge from organic to conventional
- Where to find the knowledge, centralised information
- Need for an EU level of EIP
- Adaptability is essential
- Involve business in eco-system services

Group 2: Knowledge transfer and Knowledge systems

What are the challenges for innovation in knowledge transfer and knowledge systems?

Knowledge transfer (*more linear – general agreement that this should be transformed to more interactive knowledge systems*)

- Language barriers (both national, and between research and practice)
- Involving less active farmers; not working with pioneers only
- How to provide the right information at the right time, in the right language
- From transfer to exchange through involvement
- Developing sufficiently tailored, and tested solutions
- Relevance of knowledge: value added - profit per ha, social and environmental benefits
- Too much advisory time spent on scheme administration
- Creating new paths for knowledge transfer, also 'horizontally', between research institutes
- Creating incentives for researchers to work on practical solutions
- Change evaluations and evaluators for applied research programmes

Knowledge systems

- How to involve relevant actors, and address their interests
- Finding out the actual needs, problems and ideas of farmers and forest owners
- Linking research to users: connecting with farmers and advisers
- Change of mindset towards integrated objectives
- Finding innovative ways to motivate knowledge system members to cooperate more and better
- Need to move from analytic to systems approaches – more interdisciplinary research approach
- Some fields of agriculture are very specialised – can lead to lack of independent advice in some countries
- Building better communication capacity (research, advisers, farmers)
- How to use new media channels, eg videos instead of articles

What do **knowledge transfer** and **knowledge systems** mean for you as different innovation actors? What relevant networking activities can be developed?

- Listen more and find new friends
- Use the diversity of farmers, and a range of communication methods
- Involve farmers in knowledge transfer and exchange
- We, as institution, need to 'do the research' among research institutes
- Use peer to peer influence and benchmarking performance
- EU network of specialists to address lack of independent advice mentioned above
- Infrastructure for innovation (example from Lithuania)

Group 3: **Circular economy and waste management**

What are the challenges for innovation in circular economy and waste management?

Circular economy:

- To integrate the whole production system
- To identify current low value from products agriculture, food chain which may have high value for chemical, pharmaceutical, ...industries
- To Add value to every product from the farm (co-products, residues)
- To ensure the quality and safety of products
- To recycle nutrients and prevent run off
- To inform on (and evaluate) existing experiences

Waste management

- How to turn waste in energy or to reuse waste
- To minimise waste streams through the whole value chain

What do circular economy and waste management mean for you as different innovation actors? What relevant networking activities can be developed?

Circular economy:

- Referring to integration of the production chain, it means:
 - Establishing network of stakeholders to map all challenges and opportunities
 - Fostering end-user-driven research: bottom up
Networking could help by connecting all actors for exchange of experiences
- Referring to identification current low value from products agriculture, food chain which may have high value for chemical, pharmaceutical, ...industries, it means :
 - New opportunities for farmers to get extra incomes
 - Raw materials for industries, new application for research
Networking could help by facilitating the interaction between farmers, researchers, industries, consumers and Managing authorities who should provide funding to kick-off the process

Waste management:

- 1st challenge refers to circular economy, especially on integration of the production chain
 - Research for bioenergy
 - re-use of nutrients, use of organic fertilisers, precision fertilisation
- 2nd challenge: awareness raising, training, information, labelling products, logistic and storage solution
 - Networking could help by disseminating information

Group 4: **Social innovation** and **bottom up innovation** in the **knowledge system**

What are the challenges for innovation in social innovation and bottom up innovation in the knowledge system?

- Farmer involvement
 - The main challenge is to get farmers involved in the first place
 - To do so, one needs to gain the "trust" of the farmers
 - Which farmers should we reach out to; the top 10% or "the others"
 - What is the role of women as innovators in rural areas and how to involve them
 - How to set up a "good" operational group
 - what are the skills of good Innovation Support Services
- How to avoid bureaucracy
- How to get "good" examples
- How to organise brainstorming between farmers / industry / scientists
- How to organise the link between farmers and scientists in practice

What do **social innovation** and **bottom up innovation** in the **knowledge system** mean for you as different innovation actors? What relevant networking activities can be developed?

Examples of concrete action that is undertaken / can be undertaken:

- Innovation race: Students from different disciplines are challenged to develop solutions for existing issues within a defined time limit. The outcome are ideas to be tested in practice.,
- Innovative farms networks: Farmers develop many ideas on their farms that may be interesting for other farmers as well. At the same time farmers learn most / easiest by seeing how other farmers are doing. A network of innovative farmers addresses both issues.
- Seminars on business development: The turn an idea into a successful innovation skills are needed that are not automatically available. Seminars could address this issue.

Networking activities should be organised at the proper level:

- Develop activities at regional or local level
- Co-organise events in cooperation with other organisations

Networking activities that are needed to clarify issues:

- Discussions are needed on funding rules (these rules should allow innovation to happen)
- Discussions are needed on the tension that exists between the obligation to publicise the outcomes of projects and the interest to safeguard the intellectual property rights (IPRs) that deriving from publicly financed projects

Communication activities:

- Good examples should be made available to the general public.
- End user material should be made available also on how to set up bottom up processes

Group 5: **Market innovation** and **Short supply chains and rural-urban partnerships**

What are the challenges for innovation in Market innovation and Short supply chains and rural-urban partnerships?

Market Innovation:

- Farmers' (and other actors) communication / marketing skills
- Use of social media as a tool for sales and marketing
- Tools for marketing and communication
- Watch out for "fake" local (need for more transparency)
- Tell the farmers' story to the consumer: how does he produce?
- Consumers' demand is key: safe, healthy,... products
- How to communicate EU quality features of food?
- Non-food products: materials, energy, substances, health,...
- Innovation in food + crops specialties (tofu / meat, etc.)

The group identified as the most relevant ones:

- Need for an overview on tools for entrepreneurs / SMEs + other actors (each one in particular) to engage in market innovation
- Smart logistics + solutions (difficult but crucial)
- Improve negotiation power (by taking more the lead)

Short supply chains and rural-urban partnerships:

- SSC: not just about income; also relevant for consumer and regional income
- Mainstreaming the "niche"
- Good practices / examples: Malmö example
- Role of cooperatives (organising supply)
- New tools for selling
- Long supply chains

The group identified as the most relevant ones:

- Public procurement issues (at local level)
- Need for overview of already existing innovations (products, tools)

What do **market innovation** and **short supply chains and rural-urban partnerships** mean for you as different innovation actors? What relevant networking activities can be developed?

Market Innovation:

- Need to collect and monitor (update) innovation data at regional level; create innovation centers for agriculture
- Need to identify education gaps related to market innovation
- Need to organise education courses

Short supply chains and rural-urban partnerships:

- Need to share best practices / offer solutions now
- Need to organise “Erasmus” for farmers and their partners (Go and see! Learn!)



Group 6: Climate change (adaptation and mitigation) and Soil quality
What are the challenges for innovation in Climate change and Soil quality?

Climate change:

- Phyto-sanitary solutions
- Use of genetic resources
- Water management
- Use of best crop combinations
- Use of mosaic landscapes
- Carbon sequestration
- Emissions reduction from the livestock sector
- Adequate fertilisation
- Waste management (biogas production)

Possible Tools:

- Use of satellite tools
- Precision farming
- Agro-forestry
- Animal disease
- Floods and draught prevention

Soil quality:

- Soil biodiversity
- Stability of Carbon in soil
- Chemical quality, in particular aspects related to: salinization, phosphorus, heavy metals
- Physical quality, in particular aspects related to: erosion, compaction

Possible Tools:

- Satellite information

What do **Climate change and Soil quality** mean for you as different innovation actors? What relevant networking activities can be developed?

- Operational Groups have the potential to cover most of the themes
- Operational Groups need to cooperate transnationally and ensure mutual learning
- Work should be based on farmers and foresters needs for which Operational Groups should establish concrete solutions
- Think globally act locally

CHAPTER II. Report of the breakout sessions: Networking tools

What themes and objectives would you propose for the EIP-AGRI tools?

Group 1

Seminar ideas:

- Communication with farmers – focused and using farmers language

Workshop ideas:

- Success stories to fulfil objectives of EIP-AGRI (methods and tools)
- Diversity as benefit for farmers, economics of diversity

Focus Group ideas:

- Tools for market innovation – e.g. database, production forecast
- Improve efficiency in sustainable intensification of livestock farming: e.g. feed
- Criteria for innovative demonstration farms

Group 2

Seminar or workshop ideas:

- Agriculture and agri-food: integrated approach to the whole supply chain – creating better connections
- Operational groups: how to benefit; successful examples of Operational groups or similar projects
- Connecting people, especially farmers with research (best practices, good examples)

Ideas for Focus groups:

- Decision support tools for farmers: how to exchange more effectively on existing tools; real success cases.
- Fertilisation and Climate Change
- (Precision farming) – is ongoing

Other:

- Impact of regulation on agricultural production and competitiveness: Driver for innovation, or obstacle?

Group 3

- Themes: EU Networking to support independent advisory services and How to better connect practice, research and advisory services
 - **Seminar** on “Better understanding of funding instruments (RDP+H2020) “ for FAS and independent advisors
- Theme: Integration of value chain: mapping challenges and opportunities
 - **Seminar** on “Better understanding of value chain” for farmers, managing authorities and other actors of the value chain
- Theme: Education needs from farmers on market innovation
 - **Focus Group** on “Identification of education needs from farmers in relation to innovation”
 - **Workshop** on “Farmers in market innovation” for farmers and cooperatives, advisors
 - i. Exchange of best practices
 - ii. Concrete examples



Group 4

The ideas were discussed in general without identifying what exact tool (seminar, workshop, focus group) should be used.

Themes and objectives for farm level innovation:

- The development of farm level strategies for extreme weather events.
- How to unite the different interests that exist regarding wild animals, in particular big carnivores, in farmed landscapes.
- The development of automation in pasture based systems.
- How to build trust in collective approaches (such as in operational groups).
- Develop farm benchmarking across the EU.

Themes and objectives for innovation at production systems level:

- How to optimise silvo-pasture systems
- How to create markets for eco-system services.
- In biomass supply, how to increase the market power for farmers and foresters.

Themes and objectives for innovation at regional level:

- How to increase nutrient recycling efficiency (how to close the farm city loop)?
- How to improve rural transport and logistics?

Themes and objectives regarding networking and knowledge exchange:

- How to improve the knowledge exchange system?
- Regarding networking, do we have the right tools?

Group 5

Seminar idea:

- “Farmer-driven innovation” (related to topic 5: peer-to-peer exchange) as a show-case for EIP-AGRI; objective: improve knowledge + involve farmers in EIP so that they act as multipliers + improve farmers profile; invite the top 10 % farmers in EU + advisory services;

Workshop ideas:

- “Connecting farmers, researchers and advisory services”; objectives: identify good and bad practices + discuss how other sectors organise this (ex. shoe production; user-lead innovation)
- Follow-up to the FG on SSC; objectives: disseminate the results of the FG + discuss consumer relationships

Focus Groups:

- Carbon sequestration + climate smart agriculture; objective: identify agricultural practices at farm level that improve carbon sequestration (practices that are business integrated – no compensation)
- How to include innovation in farmers’ education and training
- Benchmarking data to support decision making at farm level; objective: make data available to farmers which is farmer-friendly

Group 6

Seminar ideas:

- Gather all ideas that came out from previous Focus Groups and Workshops
- What has been achieved during the first two years of EIP?
- How does it all fit with EU 2020 strategy?
- Showcase crazy innovations for inspiration

Workshop ideas:

- Share the first experiences from Operational Groups, pioneers tell their stories

Focus Group ideas:

- Food Waste – prevention, minimisation, recovery
- Agro-forestry – design (which species, what mix?), explore and quantify the benefits (and the immediate benefits from farmer/forester angle)
- Alternative solutions for use of phyto-sanitary products in perennial systems – mixing of species (inter-cropping), biological pest control, monitoring, allelopathy.
- How to measure productivity and efficiency gains – benchmarking, farm management, data collection and making use of it, ICT use, environmental impact.

What other networking tools do you have available to support the EIP-AGRI network? What could you consider doing?

Group 1

- Need for good practices in local languages in the databases
- Knowing all national, regional and EU level events
- National workshop on data protection - simplification of data collection
- Annual sectorial events – national, regional levels

Group 2

- H2020 Brokerage event in France: seek support from EIP-AGRI SP
- Innovation exchange system; support in finding partners; good process with innovation brokers

Group 3

- Local actors: interactive video using specific and national languageTRUST

Group 4

- Organise activities on cooperation with other organisations (COPA, EURAF)

Group 5

- Annual IALB, EUFRAS Conference Limerick June 15-16
- Lithuania – World Dairy Conference, Vilnius, September 2015
- World Expo Milan June-Sept 2015
- European Rural Social Science Research Conference – Scotland in July

- AIAEE Conference Wageningen 28-29 April
- Agriculture in an urbanised society – Rome, September
- CECRA (IALB Germany) – Training in advisory (extended to non-German speakers)

Group 6

- Cooperation with European Enterprise Network – it happens at national level, how can we use the tools of the EEN to link with the EIP objectives?, EEN helps SME's apply for H2020
- Make use of regional AKIS "Basque County example" – regional innovation agency, uses different funding, involved in innovation support services thematic network
- Make use of thematic network "OK Net Arable" – links with EIP Network, Innovation Conference upcoming in October 2015, Innovation market linking researchers with farmers
- Thematic Network AGRI SPIN – preparing a book of innovative agricultural practices

CHAPTER III. Summary of the outcome of the breakout sessions with a view to the 2015 EIP-AGRI network workplan and next meeting preliminary draft agenda

The discussion in the breakout sessions provided ideas for the further development of the EIP-AGRI 2015 workplan with proposals for:

- 3 new focus groups (5 potential topics identified)
- 2 workshops (4 potential topics identified), and
- 1 seminar (1 overarching topic identified).

Next meeting of the subgroup and preliminary draft agenda points

- The Subgroup on Innovation will meet next time on **23 June** in Brussels
- The preliminary draft agenda points:
 - Outcome / follow up of EIP-AGRI and other events (NRN meetings, Bioeconomy workshop)
 - Embedding the Focus Group activities in the broader network activities
 - Interaction with the first H2020 projects
 - Preparation of EIP-AGRI - 2nd half of 2015
 - First ideas – workplan 2016