Subgroup on
Innovation for agricultural productivity and sustainability

6th Meeting
20 October 2016
REPORT
Introduction

The Subgroup on Innovation met for the sixth time in Brussels on 20 October 2016. The meeting focused on shaping the work plan 2017 of the EIP-AGRI network, including both the thematic work and capacity building activities.

Iman Boot (DG AGRI) reported about the Cork Conference on rural development of 5-6/9/2016. He also provided an update on past and ongoing activities of the EIP-AGRI network concerning farm data management and digitisation.

Inge Van Oost (DG AGRI) reported about the EIP-AGRI Workshop "Cities and Food", held in Cracow (Poland) on 5/09/2016.

Session I “Shaping the thematic work for 2017”

Subgroup members had an in-depth exchange about the topics to be covered by the thematic work of the EIP-AGRI network in 2017. Discussions were organised in break-out sessions around five themes identified on the basis of the priorities previously indicated by the Subgroup, of the topics covered by Operational Groups in the Member States, of the indications provided by the Rural Networks' Steering Group as well as by other stakeholders. The five themes identified for discussions were:

1. DIGITAL FARMING
2. SUPPLY CHAIN
3. FARM RESILIENCE
4. CARBON FARMING & ADAPTATION TO CLIMATE CHANGE
5. ENERGY & WATER EFFICIENCY AT FARM LEVEL

After the break-out sessions the facilitator of each group briefly reported about the main issues discussed; a summary is provided below; a detailed collection of the points raised during the break-out sessions is available on the EIP-AGRI website.

1. DIGITAL FARMING

This theme is high on the EU political agenda and was clearly indicated as a priority topic both by the Subgroup on Innovation and the Rural Networks' Steering Group. The topics suggested for discussion were:

- Business development based on data-driven applications for agriculture and forestry
- Use and exchange of data: ICT standards and interoperability, data privacy, data security, data ownership and data protection
- Unlocking the opportunities for digitisation in agriculture and forestry, e.g. through Rural Development Programmes

Discussions were initially concentrated on how to maximise the benefits that farmers can draw from digitization. To achieve this aim farmers need to...
develop their skills while digitization providers need to develop tools that are simple to use and which increase benefits for the farming activity (economic and/or environmental). Ownership and use of data are important topics that deserve to be further explored.

More needs to be done in order to promote the digitisation of farmers and of rural economies. It is important to move from the current model of early adopters to a larger scale implementation. Innovation brokers, demonstration farms and the use of drivers such as young farmers and cooperatives are essential. Collecting and disseminating good project examples about using digitization in farm risk management and farming operations (e.g. in irrigation) would be helpful. The results of relevant EIP-AGRI Focus Groups should be further disseminated.

An interesting idea was to organize a farmer led data hub which aims to add value to the use of farming data. Such data hub can be useful by concentrating the data in one single source and allowing for multiple uses of that data so that farmers can get increased benefits by sharing and putting their data together.

2. SUPPLY CHAIN

This theme builds on previous networking activities concerning the food supply chain and is relevant for a significant number of Operational Groups working on supply chain issues. The topics suggested for this group were:

- Reducing wastage along the supply chain as part of the transition towards a circular economy
- Development of new products and new markets
- Reducing post-harvest losses
- Health and nutrition factors
- Collaborative agribusiness value chains

Discussions focused firstly on the need to support farmers to be active part/initiators of short supply chains. One key element is to make farmers able to understand and apply the principles of circular economy to their production sector (horticulture, arable farming, dairy etc.). New markets should be explored through market intelligence orientation and market mapping.

New forms of cooperatives or "farmers' clubs" could be explored as a mean to create a favourable environment for new knowledge and new ideas to emerge. Farmers need to learn new ways to establish their presence on the local market especially in those regions where short supply chains are not well established.

When supply chains are considered, it is important to focus not only on producers but also on consumers: consumers' preferences should be better
analysed and consumers’ awareness should be raised through different tools, including social media campaigns.

Finally the group discussed the importance of supporting SMEs in the development of innovative services and products, for instance in relation with health and nutrition factors and valuing by-products according to the principles of the circular economy. The link to market demand should be as close as possible, for instance with local restaurants or catering companies.

### 3. FARM RESILIENCE

This theme builds on past networking activities and previous indications by the Subgroup. It is relevant for several topics emerging from the calls for Operational Groups in many Member States. The topics identified for discussions were:

- Crop diversification for more resilience
- Soil fertility
- Soil contamination (e.g. by metals)
- Pest and disease management (e.g. biological control and biopesticides)
- Bee protection
- Regenerative agriculture (e.g. holistic approach management, permaculture, no-till crop production, perennial crops and polyculture)

The following issues were considered key to improve economic, social and ecological resilience of European farms:

- **Education, training, knowledge exchange and peer to peer learning:** it is crucial to improve farmers education and training (digital skills, soil conservation, water management, etc.). Education and training should be practical, affordable and available for farmers and their families; they should also aim at facilitating adaptation to changes and increasing flexibility.

- **Diversification on the farm:** farm economic resilience can be enhanced by diversifying production and applying the principles of agro-ecology as well as by developing non-agricultural activities on the farm (tourism, processing, etc.). Ideally farmers should be able to produce multiple products and deal with multiple markets/supply chains.

- **Optimization of farming according to the circular economy approach** (protein production, manure handling, etc.): differences in farm types should be taken into account. Collaborative forms of production should be considered.

- **Organic farming:** it is important for the network to continue working on this issue, taking also into account the large number of Operational Groups active on organic farming.
### 4. Carbon Farming & Adaptation to Climate Change

This theme builds on previous networking activities and previous indications by the Subgroup. It is relevant for several topics emerging from the calls for Operational Groups in many Member States. The topics identified for discussions were:

- Managing emissions and carbon sequestration on the farm (e.g. perennial crop systems)
- Manure management
- Farmers' cooperation to reduce carbon footprint
- Facing extreme weather events (e.g. restore crop systems affected by natural disasters)
- Climate change adaptation for small forest owners - Managing and preventing forest fires

The following main issues emerged from the discussion:

- **Climate change and carbon awareness**: in general there is a lack of knowledge not only about the expected impacts and costs of climate change, but also about incentives for farmers to reduce their carbon footprint. There are tools available to be used at farm level but they are underused. Exchange of good practices is quite limited. An interesting idea was to develop a farmer's toolbox to reduce carbon footprint. New ways to improve carbon sequestration after biomass mobilization in forests should be promoted. Advisors, industry and insurance companies (for risk management) have to be involved.

- **Climate change adaptation and genetics**: climate change brings the need to adapt the species to the new environmental conditions both in agriculture and forestry. Both the use of new breeding techniques and the selection/improvement of species presently used are required as well as the way to tackle new pests (tools, biocontrol, precision farming). It is important to collect local knowledge and to combine short-term solutions with long-term approaches. Breeding companies, seed banks, consumer organisations, industry and OG active in this field need to be involved.

- **There is a need to upscale climate strategies from farm level to regional level through integrated and holistic approaches applied to specific production sectors, including forestry and aquaculture.**

### 5. Energy & Water Efficiency at Farm Level

This theme builds on previous networking activities as regards water. Energy-related themes have been less present in past networking activities, while are included in many calls for Operational Groups in the Member States. The topics identified for discussions were:

- New approaches to promote energy efficiency on the farm, including the use of renewable energies
New approaches to improve water efficiency and water saving at farm level

As regards water the discussion focused on the following issues:

- Innovative use and management of water, thanks *i.a.* to new digital technologies and improved farmers’ skills;
- Smart irrigation: revitalisation of existing neglected infrastructure, optimisation of irrigation schedules, improved water collection and storage;
- Use of soilless/protected crops and glass house technologies, based on a careful economic analysis of investments.

As regards energy the following main issues emerged:

- Fossil-free farming models should be promoted;
- By improving their energy efficiency, farms can be main actors of the shift towards a decarbonized economy;
- Greater and better use of renewable energy sources at farm level should be fostered;
- Networking activities can be used to disseminate new ways for producing and using energy at farm level;
- Collective approaches for selling energy produced on the farm and the link with territorial development of the surrounding area should be taken into account.

Session II

“OG networking, capacity building and peer exchange in 2017”

This session was preceded by a presentation of the Danish national service for agricultural knowledge by Jørgen Korning (member of the Subgroup representing the Danish Advisory Service SEGES) highlighting the importance of strong farmers’ cooperation in the Danish innovation and advisory model.

The objective of the session was to provide input for capacity building and peer-to-peer activities in 2017, in particular regarding the networking of OGs at EU level and the role advisers can play within the EIP-AGRI. Following a short introduction by Anikò Serégelyi, Subgroup's members split in three break-out groups to discuss the following questions:

Q1 - Are you aware of activities/ building and networking for OGs and advisors as innovation drivers?
Q2 - What kind of EIP-AGRI (networking) activity would fit the best to upscale/interlink those activities at the EU level?
The inputs from the 3 breakout groups are summarized below.

Q1 - Are you aware of activities/ building and networking for OGs and advisors as innovation drivers?

The participants presented and discussed a series of activities/good practices at national/regional level regarding capacity building and networking for OG, referring to concrete examples within some main types of activities:

- capacity building - via training / workshops dedicated to advisors or to staff in farmers’ organisations (to act as innovation brokers)
- working together / collaborating – via regular meetings involving different types fo stakeholders to discuss research needs from practice; meetings between the Managing Authority (MA) and the evaluation committee for calibration of the evaluation of applications for OG projects; sharing info and tools between regional MAs in the same country; meetings with all national Focus Groups (FG) members to look for ways to further disseminate the FG work and to explore possibilities at national level
- creating awareness – holding events, organising visits, setting-up Q&A desks, using media
- collecting and disseminating info – creating databases on OGs (thematic)
- inspiring stakeholders – showing examples of good projects (like the ‘Baltic Deal’ project)

Q2 - What kind of EIP-AGRI (networking) activity would fit the best to upscale/interlink those activities at the EU level?

Afterwards, the groups brainstormed on EU level activities to upscale/interlink those national/regional level activities, and several ideas came forward:

- disseminate the results of the OGs - through videos, exchange programmes, local agricultural press; moreover, “new” media could be used to strengthen knowledge sharing using Skype, conference of OGs, interactive workshops, webinars, e-learning tool for OGs
- promote other ways to share knowledge – such as creating an EIP-AGRI specific ERASMUS programme and facilities for OGs to meet and exchange experiences;
- preparing tools or protocols to promote exchange between members of OGs in different countries working on the same theme;
- engaging with farm organisations, national rural networks and adviser networks in local workshops;
- promoting OG active participation in research activities
- organising an event on capacity building for leaders in OGs;
- organising a conference or thematic workshops to share OG experiences;
- creating an EU exchange forum, a platform to facilitate exchange and discussions among OGs (OGs grouped by topic: climate, organic, food supply chain etc.);
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- creating a webpage where simple information about OGs can be found, such as: name of project leader, country, name of project, contact details;
- organizing a survey to be sent to the Managing Authorities to get info about the ongoing OGs and publish the collected info on EIP website

- evaluate the implementation of Operational Groups projects in different MS/regions
- identify the designated participants in EIP activities from each country/region (this would make it easier to contact and disseminate information)
- ask every NRN to provide translations of EIP-AGRI materials and to allocate budget for this activity.
- produce factsheets in short format (easy to translate), one for each EIP activity
- promote links with H2020 Thematic Networks

Summary and input for the Rural Networks' Assembly

The ideas collected during the day were summarized in order to have a basis for defining the work plan of the EIP-AGRI network in 2017 and to feed the 3rd meeting of the Rural Networks' Assembly planned for 1/12/2016.

As regards thematic work the following simplified summary in 15 points was presented to the group:

1. Digitisation: opportunities for farmers and new businesses, skills, tools (workshop?)
2. Digitisation: development of knowledge hubs
3. Disseminate the possibilities of digitisation (conference Portugal?)
4. Linking farmers and consumers in short supply chains (seminar / workshop?)
5. New tools for raising consumer awareness (social media / event / other?)
6. Support to SME for innovative services and products (workshop / seminar?)
7. Farm resilience: focus on farmers’ education, training and knowledge exchange (event?)
8. Farm diversification / alternative sources of income (FG, workshop?)
9. Optimising farming systems in a circular approach (FG / event?)
10. Climate mitigation tools & incentives for the farming & forestry sector (FG?)
11. Upscaling climate adaptation strategies to the regional level (workshop / seminar?)
12. CC adaptation: insurance schemes / risk management (FG?)
13. New ways for energy use on the farm (FG?)
14. Revitalising existing, neglected infrastructures and irrigation scheduling (old and new)
15. Demonstrations, better use of water, more efficiently (included smart irrigation & knowledge)

Subgroup's ideas for capacity building and peer to peer activities were summarized as follows:
• Disseminating results of OGs
• Events for OGs working on the same topic
• Connecting OGs with research (Multi-actor projects and Thematic Networks in particular)
• EIP-Erasmus+ approach visits/exchange for OGs
• OG cross-border activities
• Combining workshop + webinars...
• EU seminar on specific topic bringing advisers together
• EU seminar on OG setting-up / share approaches
• Exchange forum on specific themes (eg climate change)
• Exchange OG plans, project reports, experiences,...
• Shared Q&A space on the EIP-AGRI website
• Webpage on OGs
• NRN budget for translation
• Share information with MAs about participants in EIP activities from their country

Next steps and closing

Antonella Zona (DG AGRI) concluded the meeting highlighting the importance of the contribution provided by the Subgroup for future networking activities. She stressed that the summary of discussions held today was not the final work plan 2017 of the EIP-AGRI network. The ideas put forward by the Subgroup will be considered against the resources available and the need to avoid overlapping with activities carried out by other groups at the EU level. There is also a need to better define the focus in order to better target the initiatives and maximise their potential impact.

The 7th meeting of the Subgroup will take place in February 2017 and will focus on the assessment of EIP-AGRI Focus Groups. DG AGRI is considering the possibility of holding the 8th meeting of the Subgroup in Portugal, back to back with a big international event on agricultural innovation organised by the Portuguese authorities. The meeting was closed at 5 p.m.

The detailed agenda of the meeting and all presentations can be found on the EIP-AGRI website.

The next meeting of the Subgroup on Innovation will take place on 16 February 2017 in Brussels.