

eip-agri  
AGRICULTURE & INNOVATION



# EIP-AGRI WORKSHOP

## ORGANIC IS OPERATIONAL

FINAL REPORT  
14-15 JUNE 2017

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## 1. Introduction

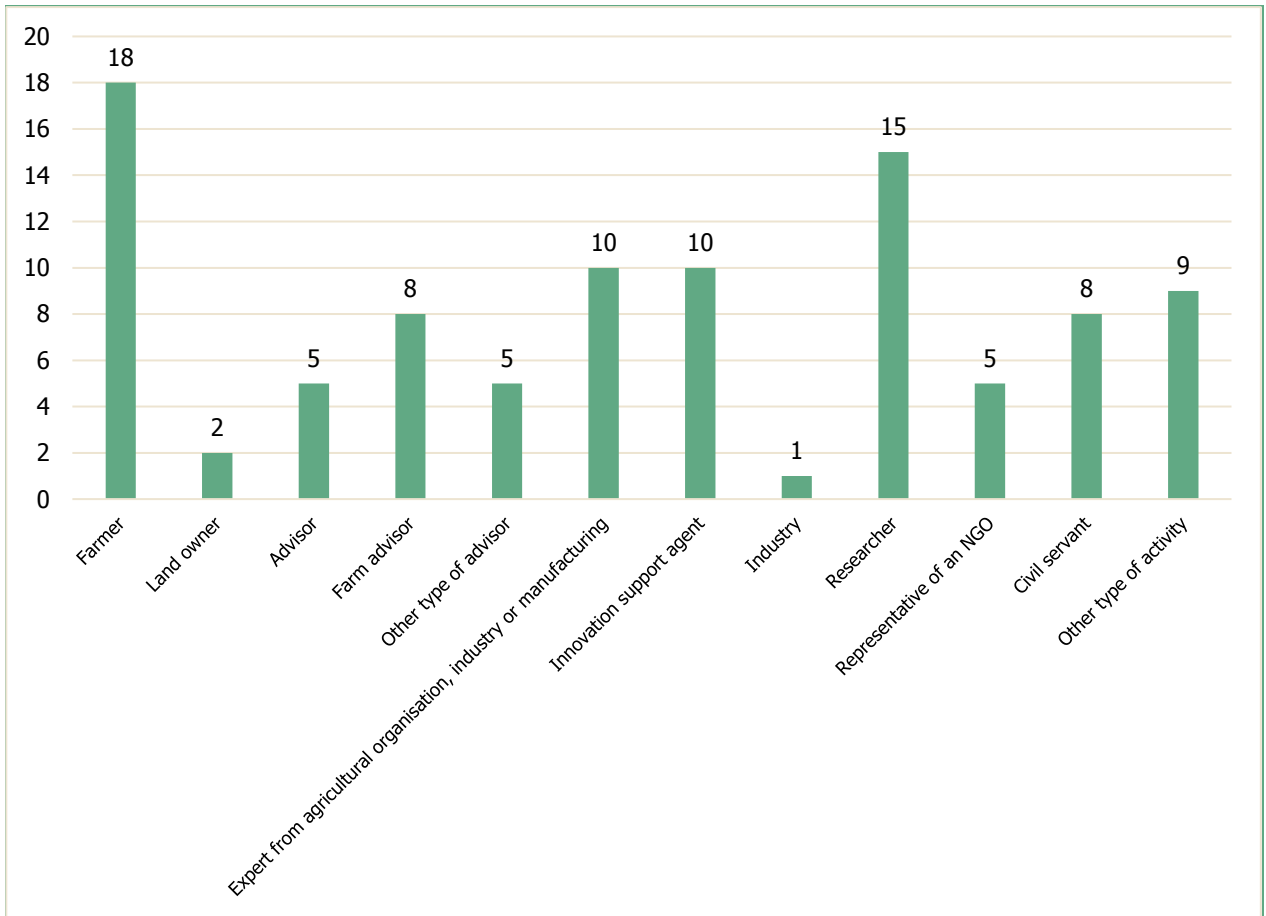
This EIP-AGRI workshop "Organic is Operational" offered an opportunity for improved networking amongst the first Operational Groups (OGs), supported under the Rural Development Programmes, working in organic farming or closely related subjects across Europe.

At the time of organising the event, around 300 OG projects had started working on innovation in European agriculture and forestry. Organic farming had emerged as one of the top five themes with around 40 projects. Numbers are continuously growing, as more projects are being approved in the various regions of Europe. The organic OGs address challenges related to soil management, organic arable farming, organic horticulture, pasture and grassland management, various livestock species as well as business models and accessing the market and they often combine new technology with tradition.

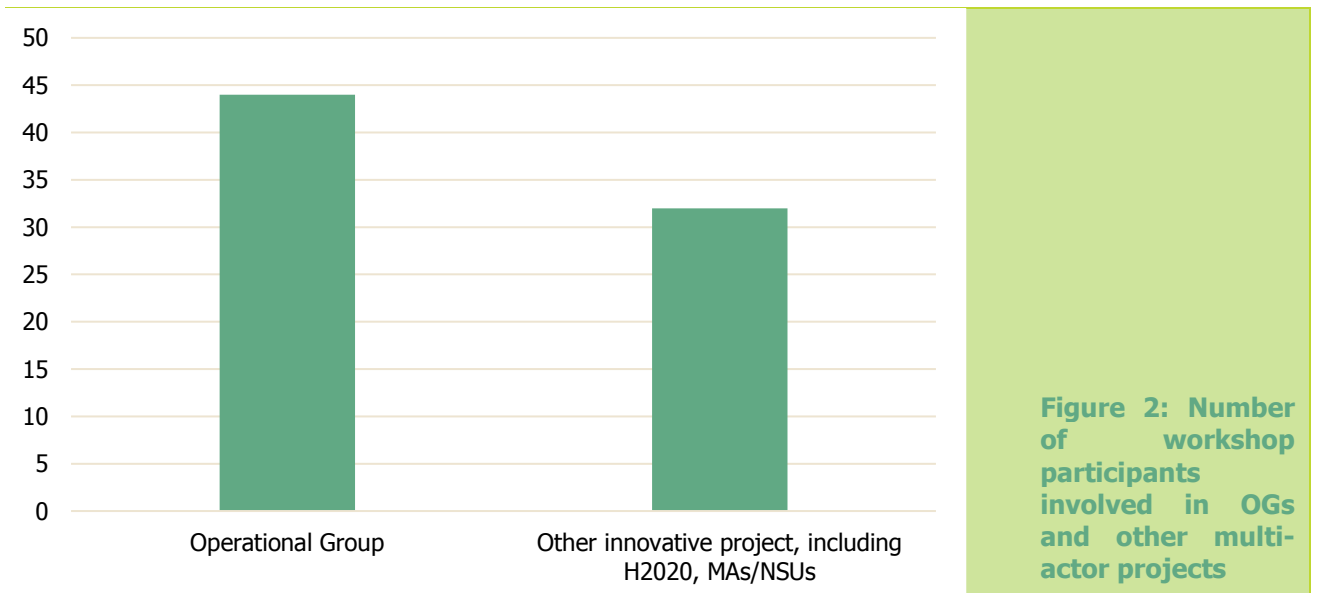
A short survey distributed to organic OGs before the workshop indicated great interest in an event that could create space for knowledge exchange between OGs dealing with organic agriculture and related topics and relevant research projects. The survey also showed specific topic suggestions including technical issues, management and running of OGs and sharing of results.







**Figure 1b. Number of workshop participants per sector**



**Figure 2: Number of workshop participants involved in OGs and other multi-actor projects**

On the first day of the workshop the participants were welcomed by:

- ▶ **Alberto D'Avino** from the European Commission – DG AGRI who provided some context about EIP-AGRI,
- ▶ **Heinrich Terwitte** from the Ministry of Environment, Agriculture and Rural affairs in Schleswig-Holstein, which was one of first EU regions to implement the support measure for EIP-AGRI OGs in the Rural Development programme.

Two further presentations set the scene for the workshop:

- ▶ **Anikó Seregélyi** from the DG AGRI of the European Commission presented the overall context, and the state-of-play of the EIP-AGRI
- ▶ **Susanne Padel** from the Organic Research Centre, and coordinating expert for this event, outlined some specific issues related to innovation in organic agriculture

These inspiring presentations were followed by short interviews introducing the different types of projects represented in the EIP-AGRI network:

- ▶ **Controlled Traffic farming** (OG) introduced by **Karel Dewaele**, INAGRO. The project aims to assist organic farmers in their use of 'controlled traffic farming' which uses GPS to guide tractors so that they use the same tram lines to limit soil compaction and improve the soil and plant growth conditions. More information [here](#).
- ▶ **OK-Net arable** (Horizon 2020 Thematic Network) introduced by **Bram Moeskops**, IFOAM-EU. The project aims to improve knowledge exchange in organic arable farming amongst farmers, and between farmers, farm advisors and researchers. It has also generated an Organic Knowledge Hub.
- ▶ **Galician Milk Farming in harmony with natural and agricultural biodiversity** (OG) introduced by **Mario Fernandez**. The project aims to improve waste management in dairy farming through use of filtration ponds. More information [here](#).
- ▶ **LANDMARK** (Horizon 2020 Multi-actor project) introduced by **Francesca Bampa**, WUR. The project aims to provide better understanding of different soil functions, including the development of a practical decision support tool called Soil navigator.

During the first day of the workshop there was an [exhibition](#) with information about the OGs and projects taking part in the workshop. The exhibition was followed by a break-out session on the implementation of the experimental innovation process, which gave to the participants the opportunity for a discussion, in order to exchange experiences about innovation in their specific sector. Participants also attended [field visits](#) on organic farms taking part in OGs in the nearby regions of Schleswig Holstein and Niedersachsen (Lower Saxony).

The second day of the workshop provided more opportunity for direct exchange through group discussions on how to organise the work in a multi-actor innovation group. This was followed by an open interactive session to discuss topics proposed by participants and identify possible common interests in view to develop future collaboration. There was also a presentation by [Willemine Brinkman](#) (EIP-AGRI Service Point) on networking tools and possibilities to connect EIP-AGRI actors.

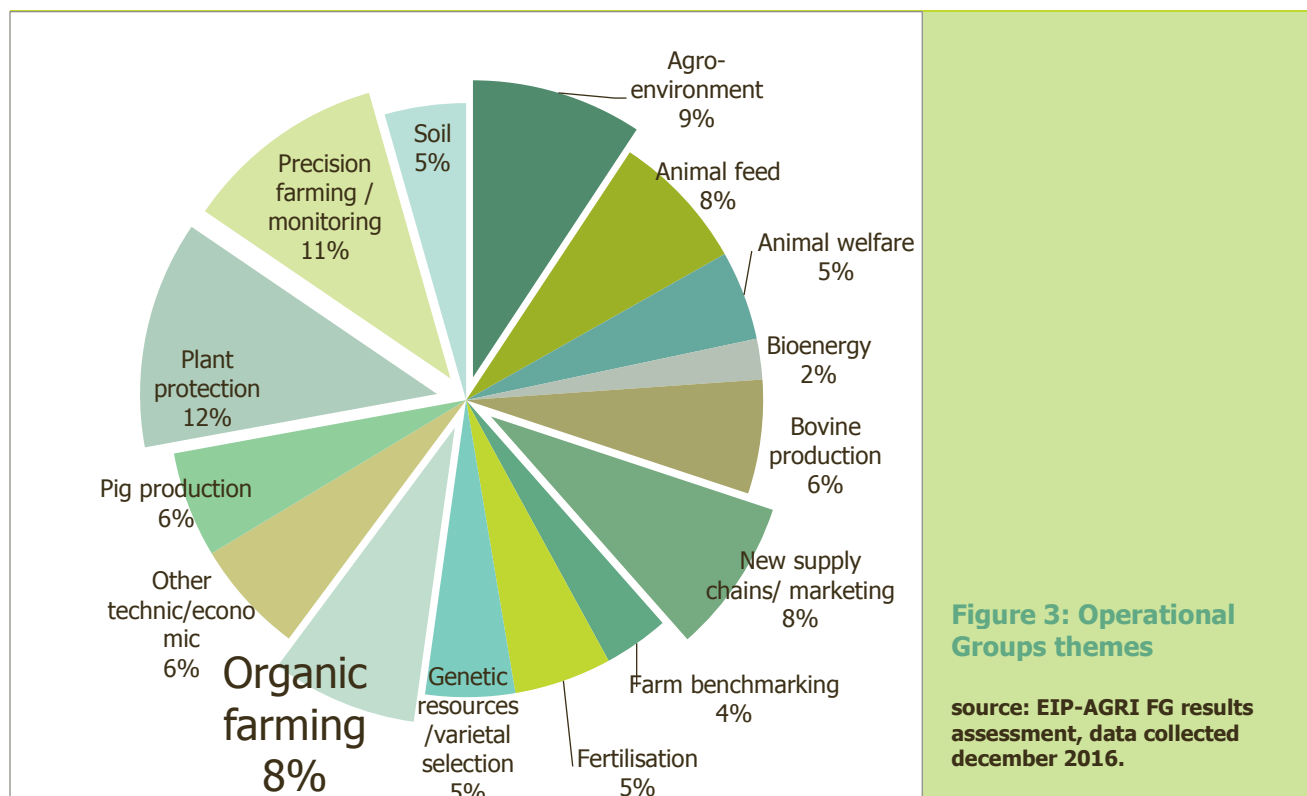
The [full programme](#) can be found here.

### 3. Setting the scene

Innovation is crucial for creating a competitive and sustainable farming sector that is fit for the future. Innovation emerges from interaction between people with various different backgrounds and knowledge. The European Innovation Partnership for "Agricultural Productivity and Sustainability" (EIP-AGRI) is working to foster creative thinking and problem solving by bringing together farmers, advisors, scientists and other innovation actors in a new interactive, multi-actor approach to innovation. EIP-AGRI recognises the central role of farmers in this and is supporting bottom-up innovation through **Operational Groups** as part of **EU Rural Development policy** (EC Regulation No. 1305/2013). OGs link farmers with research and other important actors, so that good ideas can be turned into innovation and lead to improved practices on farms and in related businesses, supply chain and in rural communities. Alongside Operational Groups, the EU's research and innovation programme, **Horizon 2020**, funds **multi-actor projects** and **thematic networks** involving partners from at least three EU countries. These types of projects are part of the EIP-AGRI strategy, see presentation on [Networking tools and possibilities to connect with EIP-AGRI actors](#).

Because of the stringent rules on the use of external production inputs – many of which are associated with some negative side effects of modern agriculture – organic farming can sometimes open up new avenues and new ideas on how to overcome challenges faced by agriculture. The ethos of organic farmers and business fits well with EIP-AGRI. In the organic sector, there is a tradition for close collaboration between farmers and researchers and farmer-led innovation. A broad definition of innovation appears most appropriate to capture the innovative potential of the organic sector in the whole supply chain, from the soil to the consumer. This definition would include social, organisational and ecological innovation, aiming to create both economic and environmental value.

Organic farming is one of the top five themes of the first OGs (see Figure 3) alongside plant protection, precision farming, agro-environment measures and new supply chains.





## Topics of Operational Groups in Organic Agriculture

### Organic cropping systems and arable production

- Home grown protein supply through growing, processing and infrastructure for native pulses and novel feed sources (e.g. clover pellets)
- Various strategies for improving soil fertility and yields through use of catch crops, composts, mycorrhiza and reduced tillage/controlled traffic
- Coping with problem weeds, such as docks through biological weed control
- Developing organic production strategies for specific crops (e.g. soil fertility and water management in vineyards), producing organic oil seed rape, and weed control in vegetables and perennial crops

### Organic horticulture

- Solutions for specific pest/disease challenges, such as disease control in potatoes, controlling the maize rootworm, rodent control in orchards
- Use of technology and novel inputs in organic fruit production
- Organic vine production

### Organic livestock

- New tools for improved grassland and pasture management
- Strategies for housing, feeding, herd management and health and welfare of organic layers and pigs
- Maintaining rare breeds and working with minor species (e.g. rabbits)

### Developing the market

- Use of heritage varieties and diverse population of cereals (mainly wheat)
- All year round vegetable production (e.g. growing winter vegetables),
- Bread making with low-protein wheat
- Marketing for specific products (e.g. goat meat, layers at the end of productive cycle)



The 40 organic OGs identified in April 2017 address a number of different thematic areas. Around 20 are related to organic cropping systems and arable production. The others deal with horticulture, grassland and livestock systems and topics related to developing organic markets (see below). Several of these OGs have members that want to learn from organic practices even if their farms are not certified as organic.



## 4. Interactive sessions on implementing the experimental innovation process

The participants were invited to join parallel discussions for the different agricultural sectors of arable farming, horticulture and livestock. Here we present a summary of common emerging themes which include technical topics and the methods which the groups are using to work together.

Common challenges and opportunities can also be found in the [description of some of the participating OGs and projects](#).

### Common challenges and opportunities that the Operational Groups and innovative projects encounter

#### Yield stability for organic production is an important issue

This topic has already been identified as a major issue by the [EIP AGRI Focus Group on Organic Farming](#). It is also one of the main topics in the thematic network [OK-net Arable](#) that created an [Organic Knowledge Hub](#) for farmers. Participants felt that there is lack of research on to how organic farmers can improve yields and increase yield stability for the various crops they grow. Introducing (technical) innovation in organic agriculture has to also consider the acceptability of any new technologies by the consumers.

#### Several common technical challenges were identified which could also provide opportunities for future innovation projects. These include:

- Working with legumes and the Nitrogen cycle
- Adaptation to and mitigation of climate change
- Working with seed mixtures and suitable cultivars
- Plant protection, pest and disease management
- Increasing the productivity of organic farming without increasing production costs
- Bio-mimicry (copying biological processes) as a new field of research
- Developing of new adapted machinery
- Developing animal welfare-friendly housing systems
- Small farms have different innovation needs such as reducing high costs for machinery
- Land management for soil conservation

#### The market is ready for more organic products

An important topic was also the organic market which presents many opportunities. Farmers and consumers perceive the added value of short and organic food chains. The market can be developed in innovative ways and there is also a market for innovation (new crops, new products, new markets). Networks can be set up along the whole supply chain to increase the value of organic products.

Other issues mentioned included a potential market for ecosystem services and the challenge of preserving livelihoods and social structures in rural communities.

### Working processes for organic Operational Groups and other innovative projects

#### Working together is not always easy in practice

The 'multi-actor' process is an essential part EIP-AGRI and ensures that farmers can play a central role in operational groups. There is therefore a need for:

- Thinking outside the box
- Ensuring the farmers are equal partners and are rewarded for their time and effort, including during the preparation phase of a project
- Organic and non-organic farmers to work together. It is interesting to gain the point of view of "conventional" farmers regarding their eco/organic technical approach, in order to close the gap between integrated production and organic farming

The collaboration should be broad. This includes:

- Finding the right scientific support
- Bringing in outsiders that add a new perspective
- Monitoring wider impact of innovation (e.g. through benchmarking) as part of the project
- Setting up clear and harmonised data collection protocols to improve analysis and reliability of results

### **There is a need for flexibility in supporting innovation**

An interesting discussion also emerged around themes such as the trade-off between flexibility in shaping innovation projects and control requirements required by the administration, where the realities on the ground require changes to be made and farmers' innovative ideas do not always fit in the application form questions. In line with rural development guidelines the funding agencies prefer project applicants to present clear and results-based work plans. Farmers may find the bureaucracy of project applications very challenging and are therefore less likely to take the role of the lead applicant, relying on professional support through consultants or innovation brokers. And several groups were thinking about how they can ensure continuity after the project period comes to an end.

Some participants also commented on the difficulty in accessing funds which address their specific problem.

## **5. Field visits**

On the afternoon of the first day the participants divided into four visits that provided examples of how organic farms engage in innovation, including as members of OGs. The day ended with a guided tour of the historical organic farm [Hof Eggers](#).



### **1. Field visit "Horticulture" - Esteburg experimental farm**

The [OG Adapting technology in professional fruit growing in the "Altes Land" region](#) aims to adapt technology for commercial organic fruit growing in this Northern Germany apple region. This OG is not focused on organic farming but illustrates that some processes and machinery tested in this region can also be useful for, and transferable to, organic production. We visited the [Esteburg experimental farm in Jork-Moorende](#), where several organisations work together for organic and conventional fruit growers in North Germany. Technology to avoid spray drift (adapted from viticulture) and to improve fruit storage through short heat treatment instead of using chemical preservation was demonstrated.



## 2. Field visit "Animal husbandry" Hof Dannwisch

The OG [InnoBau](#) tests the use of new criteria in the planning of new ideas for livestock housing systems. The group visited [Hof Dannwisch](#), the oldest bio-dynamic farm in North Germany that keep pigs, cattle and chickens and grows some vegetables. At Hof Dannwisch, the OG InnoBau helped to design innovative mobile housing for laying hens, allowing the farmer to easily move the hens to fresh pasture every two weeks.



## 3. Field visit "Arable/soil management" - Gut Wulksfelde

The OG [Sustainable yield increase in ecological cash cropping](#) tests different farm specific catch cropping strategies to enhance soil fertility and conserve the soil. The participants visited [Gut Wulksfelde](#), a well-established diverse organic farm just outside Hamburg with a focus on arable cropping and adding value by processing farm produce: the farm has a bakery and farm shop. Wulksfelde also showed how they use compost and silage as a fertiliser for growing potatoes. As part of [Ackerhelden.de](#) they offer small plots which are already planted with organic

vegetables that families can care for and harvest throughout the season. Approximately 12.5% of the cropping area of Gut Wulksfelde is used for conservation, with landscape elements including 22 amphibian ponds, 18 km of hedgerows, a newly planted extensive orchard as well as participation in some specific agri-environment measures.



## 4. Field visit "Arable soil management" - Buschberger Hof

This OG: '[Use of composts made of biowaste and treated compost in organic potato production](#)', carries out trials on farms comparing the impact of different composts and composting techniques on compost quality and yield and on the quality of different crops. The visit went to [Buschberger Hof](#), a diverse biodynamic growing care farm working with people with disabilities. The idea for the OG was inspired by one organic farmer using a different composting method that other farmers wanted to try.



## 6. Interactive sessions on getting the best out of multi-actor groups

This session was aimed at deepening the exchange on the working processes which OGs are using. The following is a summary of the common themes which emerged:

### How to organise internal communication and coordinate/manage the group members?

**A good facilitator or leader is crucial for good communication between all partners.** There is also a need for some administrative support, such as preparing meeting documents and looking after financial issues. Important skills for a good facilitator include:

- ▶ Training in soft and facilitation skills
- ▶ Having clear aims and agendas for meetings with the option for individual follow-ups
- ▶ Having knowledge of work already done in the specific area

**Operational Groups are finding new ways of working together.** Many common issues emerged around how to work in a participatory way with a horizontal rather than hierarchical structure, supported by a good facilitator:

- ▶ Having the 'right' partners who have a strong interest in the topic, and respecting the equality of partners
- ▶ Aiming to bridge gaps so that everybody feels comfortable and overcoming old top-down habits
- ▶ Aiming for a stable core group that gets to know each other and the farms
- ▶ Having a partnership agreement that defines a clear role for each partner (management, scientific, technical, financial, administration etc. ) and sets out common rules from the beginning that can be respected by all
- ▶ Identifying the benefits of taking part for each partner.

**Planning a balanced communication strategy can be tailored to the specific project.** Communication should make use of formal and informal channels but remain flexible and link into existing social networks of farmers. The following different tools were used by the workshop participants:

- ▶ Social media and email updates,
- ▶ Phone/video conferencing
- ▶ Face-to-face meetings, workshops and field visits

### How is innovation shared and disseminated?

**Using videos and visuals can help overcome language problems.**

Language represents a common problem, not only for sharing knowledge across borders, but also in understanding the practicalities of working on farms and in 'translating' scientific knowledge into farming language.



To overcome this, participants suggested developing communication through images and short videos. The workshop participants shared experiences and suggested the following as rules or **good practice for knowledge exchange and dissemination**:

- ▶ Knowing the target of the communication: identify and list different stakeholders interested in the results of the project
- ▶ Considering dissemination right from the start of the project
- ▶ Using a variety of tools for sharing
  - Short and precise communication using visuals
  - Short videos for different audiences (farmers & general public)
  - Organising regular field visits with expert input
  - Websites and social media
  - Present results in existing events (e.g. exhibitions and agricultural shows)
  - Written/printed publications, newsletters, practice abstracts, leaflets,
- ▶ Organising a range of different on-farm trials and experimental stations for demonstration and knowledge sharing events
- ▶ Using the stable school model of moderated farmer discussion groups
- ▶ Adapting the ways of communication considering the different perspectives of the multi-actor group of stakeholders (farmers, students, advisors, processors, researchers, consumers)

### What is specific about working with innovation in organic farming?

Organic farming is value driven and has a more general outlook. The sector has close connections to consumers and the value chain creating new opportunities, also through collaborating with other sectors, such as tourism or public health. The farmers are willing to share, and there is a tradition of bottom-up innovation and interactive ways of working together.

However, organic farming is also seen as a closed community. There is a lack of scientific research knowledge, even if the collaboration with the conventional sector is improving, as shown in a recent brochure [Innovating for Organics](#) published by TP Organics.



## 7. Encouraging further exchange after the workshop

Willemine Brinkman (EIP AGRI Service Point)'s presentation **Networking tools and possibilities to connect EIP-AGRI actors** explained to participants how they can join the EIP-AGRI network and benefit from its networking opportunities. This includes registering to the newsletter and website, applying to Focus Groups and events and suggesting topics for future Focus Groups and research needs from practice.

This was followed by an interactive open-space session that encouraged the participants to propose and discuss topics of their own choosing. The table shows the topics and the person who suggested them.

Title	Person proposing with project affiliation
Creating new fruit varieties with farmers, in a participatory way	Vianney Le Pichon, OG ClimArbo, France
Guidelines for better agricultural practices for soil conservation: maintaining soil organic matter and promote soil preservation from erosion	Carla Scotti OG PRO-VITERRE: Guidelines for soil conservation in the main hilly vine areas, in Emilia-Romagna (Italy) Carla Scotti OG PRATI_CO Parmigiano Reggiano: Agronomical techniques organic carbon footprint (Italy)
Biodistricts	Roberta Centonze, OG APPEN.BIO, Italy
Using internal (farm) resources to prevent crop pests like Olive fly attacks	Francesca Petrini, OG Production of organic pasta – Spirulina algae, Italy
Community Supported Agriculture	Laurence Dungworth, Farmer, Germany
Conservation tillage, cover crops and soil organic matter in organic farming	Aldo Dal Pra, OG Agroecological Cover, Emilia Romana, Italy
Decision support for farmers for functional land management : The Soil Navigator from the Landmark project	Francesca Bampa, H2020 Project Landmark, Wageningen University
Mycorrhiza: implementing binational projects	Hans Joachim Heermann, OG AMF Agrimycorrhiza for potatoes, corn and soybean, Germany
Agroforestry in organic farming	Maria Rosa Mosquera Losada, H2020 project AFINET, Spain
Using new techniques and technologies in organic farming (drones, sensors, robots, 3D printers)	Kees van Zelder, IFOAM-EU group, Netherlands
Communicating farmer to farmer in different languages and across borders	Antonio Fernandez de Molina, OG Technology Platform Ecological Agriculture, Spain Silvia Folloni, OG BIO2, Italy
Inviting consumers	Martin Crusat, H2020 project WineNetWork, Spain

The groups discussed how they can operate in the future and exchanged email addresses. Participants are encouraged to get in touch with those proposing the topics for further information and if they would like to engage in follow-up activities.



## 8. Further reading

### Presentations

Day 1: Wednesday 14 June 2017

- ▶ [Anikó Seregélyi \(European Commission - DG AGRI\) - Setting the scene: The architecture of EIP-AGRI](#)
- ▶ [Susanne Padel \(Organic Research Centre, Workshop expert\) - Thematic introduction & objectives and programme of the workshop](#)

Day 2: Thursday 15 June 2017

- ▶ [Susanne Padel \(Workshop Expert\) - Key ideas emerging from day 1 activities](#)
- ▶ [Willemine Brinkman \(EIP AGRI Service Point\) - Networking tools and possibilities to connect EIP-AGRI actors](#)

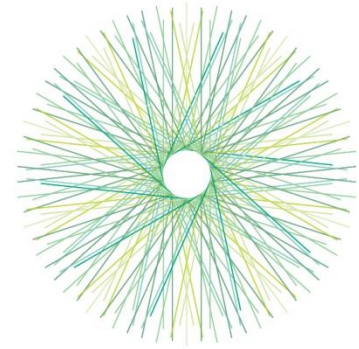
### Workshop documents

- ▶ [Final programme](#)
- ▶ [Speakers' CVs](#)
- ▶ [Participants list](#)
- ▶ [Some of the Operational Groups and projects represented at the workshop](#)

### More information

- ▶ [TP organics brochure – Innovating for Organic. Organic agriculture in EIP-AGRI Operational Groups](#)
- ▶ [EIP-AGRI brochures](#)
- ▶ [EIP-AGRI factsheets](#)

All publications available at the workshop are also downloadable from the [EIP-AGRI website](#).



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**The European Innovation Partnership 'Agricultural Productivity and Sustainability' (EIP-AGRI)** is one of five EIPs launched by the European Commission in a bid to promote rapid modernisation by stepping up innovation efforts.

The **EIP-AGRI** aims to catalyse the innovation process in the **agricultural and forestry sectors** by bringing **research and practice closer together** – in research and innovation projects as well as *through* the EIP-AGRI network.

**EIPs aim** to streamline, simplify and better coordinate existing instruments and initiatives and complement them with actions where necessary. Two specific funding sources are particularly important for the EIP-AGRI:

- ✓ the EU Research and Innovation framework, Horizon 2020,
- ✓ the EU Rural Development Policy.

funded by  European Commission



Join the EIP-AGRI Network & Register via [www.eip-agri.eu](http://www.eip-agri.eu)

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