

eip-agri
AGRICULTURE & INNOVATION

agri innovation

WHERE RESEARCH AND PRACTICE MEET

2015

2

ISSN 2363-2143



- Young European farmers: next generation innovation
- EIP-AGRI Focus Groups to inspire innovation
- Field testing: Organic research gets practical on the farm
- Focus on Rural Development: Portugal prepares to support innovation

Romania: Using innovation to protect farmland biodiversity

The Netherlands: Boosting the bioeconomy with tall grass

Germany: Farmers find innovative rescue plan for traditional pig breed

funded by





Table of contents

Welcome	3
Innovation for young European farmers	4
Research vision Expo Milan: Towards a long-term strategy for European agricultural research and innovation	6
Plant-based bioproducts to boost regional development	7
German farmers make money by saving a pig breed rich in tradition	8
Making a difference on the farm: CORE Organic ERA-NET bridges organic research and practice across Europe	9
Setting up Operational Groups across the EU: Inspiration from the EIP-AGRI seminar for Managing Authorities	11
Focus on Rural Development: Portugal prepares to support innovation	13
Walk a mile in their boots: A new training tool for farm advisers	15
Exploring new crops for the bioeconomy, while improving aircraft safety near Amsterdam Schiphol airport	17
Expanding the EIP-AGRI network: a perspective from EPSO	18
EIP-AGRI Focus Groups: inspiring innovation and sharing knowledge	20
Fundatia ADEPT: Using innovation to protect Romania's farmland biodiversity	22
Joining forces to weed out strawberry plant diseases	23
Searching for innovation? Ask Valerie!	24
Opening a Window on Innovation: reaching out across Italian regions	25





Welcome

More than ever, innovation is key for the agricultural sector. Producing sufficient and healthy food for everyone, now and in the future – while facing more extreme weather, fickle markets and critical consumers – are challenges that innovation can help to address. A more competitive European agriculture and forestry, which also protects the environment, leads to productive and vibrant rural areas. The European Union (EU) Member States and the European Commission set up the EIP-AGRI to help farmers, scientists and everyone working with them to find innovative ways to make EU agriculture more productive and sustainable. The EIP-AGRI is still young, and the coming year will be crucial for it to grow and fulfil its promise.

Bridging research and practice, the EIP-AGRI needs two strong bridgeheads: on the practice side, the Rural Development Programmes support innovation, especially through ‘Operational Groups’ which tackle practical problems or test innovative ideas in the field. The new Rural Development Programmes are starting. In fact, some countries have already selected their first Operational Groups. Information on these projects must become accessible to all, to speed up the introduction of new innovations. The Operational Groups will also benefit from sharing information with colleagues facing similar problems. The EIP-AGRI network will play a central role in ensuring this flow of information.

On the research side, the Horizon 2020 work programme that will be published autumn 2015 will support European research actions for 2016-2017. This call especially supports projects that are immediately relevant to the sector, for example finding ways to contain and combat pests and diseases. You will see that a large share of the budget will be devoted to innovation and to multi-actor projects that specifically contribute to the EIP-AGRI.

We are also thinking ahead. EXPO Milan 2015 has focused the world’s attention on food and agriculture for six months. Hundreds of events organised at the EXPO are discussing knowledge and innovation. On 19 June, one of these launched a process to build a long-term vision for agricultural research and innovation. How will the sector develop? What are our future research needs? How can we best address these? How can we better involve farmers in creating and exchanging knowledge? Collecting input from a wide range of sources, a conference that I will host on 26-28 January 2016 in Brussels will conclude this process.

So, we have our bridge-building blocks. We need your help to ensure that EIP-AGRI makes a difference that is felt by individual farmers and enterprises. In this magazine you will see what is happening and what others are doing. I hope it will inspire you to step up your involvement in the EIP-AGRI and help us catalyse innovation in the sector.

Phil Hogan
European Commissioner



Matteo Bartolini - President of the European Council of Young Farmers



Innovation for young European farmers

Investing in new opportunities and technologies for strong future generations

Young farmers are likely to be open to innovation, change and new technologies. They can greatly benefit from the innovation opportunities offered by the European Innovation Partnership for Agricultural Productivity and Sustainability (EIP-AGRI). Matteo Bartolini, President of the European Council of Young Farmers (CEJA), is a young farmer himself. He runs a truffle farm in Umbria, Italy and is involved as an expert in the EIP-AGRI Focus Group on Short Food Supply Chains. He was happy to share his experience and his views on young farmers and agricultural innovation.

Matteo, how do you think young European farmers can benefit from innovation?

Matteo: "The farming community will face higher demands in the next decades. Embracing innovation can help young farmers to increase production and reduce costs, while respecting societal demands for biodiversity and sustainability. Innovation can also open up new opportunities for young farmers who set their sights on export markets beyond the European Union (EU). A thriving European agricultural sector contributes to creating jobs and growth within the

bigger picture of the EU economy, and therefore benefits (young) farmers, consumers as well as all Europeans".

"We need to ensure that the results of EIP-AGRI Focus Groups are not just scientific theories that can be used in academic papers, but that they are transformed into concrete and usable outcomes for the farmer."

**- Matteo Bartolini,
CEJA President -**

What do young farmers expect from the EIP-AGRI?

Matteo: "Young farmers have high expectations of the EIP-AGRI. There are many ambitious, highly-educated and committed young farmers in the EU. We should make sure that they are involved in Operational Groups, which bring together research, industry and producers to develop or test innovative farming methods and solutions. If these insights are shared among different farms across the EU, we can achieve a multiplier effect that substantially increases productivity. Higher

productivity leads to higher profit, which can be re-invested into new technologies and innovation for farms. We need to ensure that the results of EIP-AGRI Focus Groups are not just scientific theories that can be used in academic papers, but that they are transformed into concrete and usable outcomes for the farmer."



Based on your own experience as a farmer, in what way do you think collaboration is important?

Matteo: "I have experienced first-hand what innovation and farmer-scientist collaboration can do for young farmers. A few years ago, I worked with researchers from the University of Perugia to develop new ways to cultivate truffles. On my farm land in Italy, we set up technology to analyse the soil and provide information on water content or nutrient levels up to five times an hour. These details allowed me to bring down the resource use (for instance by guiding me in terms of land irrigation) and to effectively speed up the truffle production process. This technology helped build a successful truffle farm, which now features a 'Truffle School' where visitors can learn about the art of truffle hunting. These new insights have also had an impact on truffle production elsewhere."

What are your recommendations for supporting the involvement of young farmers in the EIP-AGRI?

Matteo: "At CEJA, we do our best to inform our young farmers about opportunities within the EIP-AGRI. To close the information gap for farmers, it would be useful if the European Commission explained the opportunities of the EIP-AGRI directly to farmers, and answered any questions that they may have. Although brochures and other forms of information are crucial for a first insight into the EIP-AGRI, more detailed follow-up needs to show farmers how their involvement can benefit them. That is why I was very happy to see members of DG AGRI and the EIP-AGRI Service Point present at CEJA's Working Group in December 2014. Finally, to encourage farmers to get involved, it needs to be made clear to farmers themselves that they are absolutely essential in initiatives such as EIP-AGRI Focus Groups.

Last but not least, I was delighted to hear that generational renewal was a theme that attracted particular attention in the European Rural Networks' Assembly, which took place in January 2015. As young farmers, we're pleased that the EIP-AGRI provides a platform where this urgent issue can be discussed and developed further." ●

► www.ceja.eu



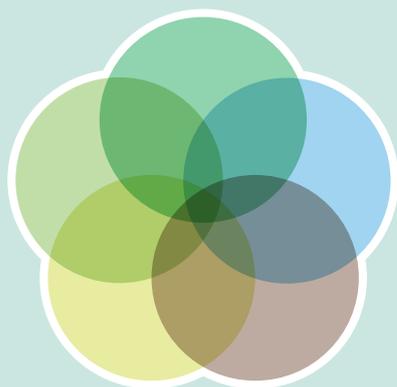
The EIP-AGRI Focus Group on New entrants into farming started in June 2015 and will run for about a year. For more information, visit: <http://bit.ly/1HrYEn7>

For information, reports and recommendation papers from the EIP-AGRI Focus Group on Short food supply chains: <http://bit.ly/1Del6Lq>





Towards a long-term strategy for European agricultural research and innovation



RESOURCE-EFFICIENCY IN A CHANGING CLIMATE

ECOLOGICAL APPROACHES

HEALTHY PLANTS AND LIVESTOCK

NEW OPENINGS FOR RURAL GROWTH

HUMAN AND SOCIAL CAPITAL



Adapting to climate change, producing enough food and biomass using fewer resources, fighting diseases, using new technologies, creating jobs. Farmers and rural populations are facing a range of long-term challenges which research and innovation could help solve. But for research investments to have more impact, we need a long-term strategy.

The European Commission (EC) presented a springboard for ideas on long-term agricultural research and innovation (R&I) needs on 19 June in Milan.

The long-term character of challenges facing agriculture and research activities, as well as the recent increase in EU resources allocated to agricultural R&I, call for a strategic approach to improve consistency and impact.

The workshop in Milan aimed to kick-start a discussion on how to structure the future strategy and what its focus should be. The 90 participants and 500 on-line followers included representatives from the EIP-AGRI 'Innovation sub-group', scientists, officials, members of European organisations representing farmers, industry, civil society, environment, and international organisations.

Five core priorities to initiate dialogue

The EC put forward initial ideas in a background paper structured around five core priorities (see image). Jerzy Plewa, Director-General for agriculture and rural development at the EC presented these ideas and encouraged people to contribute. "A long-term strategy will only be useful if it is developed in a collective manner", he said.

Twelve speakers and the audience discussed this structure and the content of the priorities. All were positive about the initiative and provided useful insights to feed into the future strategy.

How can you contribute to the next steps?

The EC intends to consult EIP-AGRI members on a draft strategy in December 2015. A large conference will then be hosted by Commissioner Hogan on 26-28 January 2016 in Brussels, to which EIP-AGRI network members will be invited.

To join the EIP-AGRI network visit www.eip-agri.eu

More information on the Milan workshop:
http://ec.europa.eu/agriculture/expo-milano-2015/cap-events/long-term-vision_en.htm





Plant-based bioproducts to boost regional development



A company and a farmers' organisation in Sardinia, Italy have teamed up to create new, innovative supply chains to produce bioproducts from a particularly hardy and versatile plant. They recently signed an agreement to encourage the cultivation of cardoons in the north of the island. This crop grows well in dry climates and it can be transformed into a range of low environmental impact chemical products.

Hardy cardoons

Cardoons, which are related to artichokes, have been cultivated as a vegetable in Europe for thousands of years and are still grown in the Mediterranean region today. They are a low-input crop which grow on arid lands unsuitable for many other crops and they require very little water.

Boosting regional development and the agricultural sector

Novamont is an industrial company developing and producing biomaterials and biochemicals. Coldiretti is a farmers' organisation representing individual farms, cooperatives and agricultural companies across Italy. The cooperation agreement between these two organisations is the basis for the establishment of short, agro-industrial chains which aim to provide a new income stream for farmers and increase the vitality of the rural area.

New products, new income, new supply chains

The farmers involved will sell the cardoons, along with other agricultural waste, to the nearby Matrica biorefinery which will transform it into biochemicals, bases for biolubricants, monomers for bioplastics and bioadditives for rubber. Scientists and farmers from both organisations are also testing if a by-product from the transformation of the cardoons can be used for animal feed, reducing reliance on imported plant proteins. The agreement sets out a programme of advanced payments and advice on managing the cardoons once harvested for farmers. It also includes plans for research initiatives to improve the process and a regional project to promote the use of bioplastics.

The work is in its early stages. The Matrica biorefinery, built using the abandoned infrastructure of a former chemical plant, is currently running tests. A number of farmers are growing cardoons in pilot fields to analyse its resistance in long-term cultivation. "A positive impact is expected for the whole agricultural sector in terms of new income opportunities as well as for the development of areas that are experiencing economic difficulties" says Battista Cualbu, President of Coldiretti Sardinia. ●

► www.novamont.com

► www.sardegna.coldiretti.it

► www.matrica.it

"We are creating a new regional development model based on shared projects which can introduce the concepts of a circular economy and continuous innovation, facilitating contributions from participants, and creating a climate of collaboration and respect between everyone involved"

- Catia Bastioli, Novamont CEO -





Inspirational idea



Innovation to the rescue: German farmers make money by saving a pig breed rich in tradition

The Swabian Hall pig breed (Schwäbisch-Hällisches Landschwein) has a long history. In the eighteenth century, German king William I of Württemberg ordered Chinese Jinhua pigs to be brought to Europe by the East India Company. These black and white pigs spread throughout the European mainland and to the royal domains in the area around Stuttgart, where they were crossed with local pigs. The new livestock breed developed especially well in the area around the town of Swabian Hall (Schwäbisch Hall), which gave the breed its name.

A distinctive pig breed

Swabian Hall pigs are very popular among farmers of the German Hohenlohe region because of their high fertility. Furthermore, their long bodies and longer intestines make them excellent grazing animals that digest green fodder very effectively. The animals have a natural layer of fat and their flesh is firm and somewhat dark with a distinctive taste, making them a favourite with gourmet chefs as well.

Innovation triggered by successful cooperation

By the beginning of the 1980s, the breed was nearly extinct due to increasing competition with fast-growing lean pigs. A small group of farmers wanted to save the breed and decided to found the Swabian Hall pig breeders' association (Zuchtvereinigung Schwäbisch-Hällisches Landschwein).

With up to 950 farms participating today, the association has invested in an innovative facility by renovating the – originally communally-run – slaughterhouse. By bringing this facility up to a high standard, all production and processing requirements are fulfilled and the producers now have direct access to the market. Swabian Hall pork carries the EU's 'protected geographical indication' (PGI). Participating farmers have to respect the requirements set for the environment and for keeping the animals. When they do so, they receive a significantly higher price for their pork compared to the normal market price, making Swabian Hall pig farming a lucrative activity.

The story of the pig breed and of the association's innovative approach became widely known through stories and advertising in local newspapers, radio and on television. This has also helped promote transparency and trust between producers, buyers and end customers. Visitors from all over the world now come to Schwäbisch Hall to learn about this initiative in regional development. ●

Visit the EIP-AGRI Focus Group webpages to read the latest information on

- ▶ the EIP-AGRI Focus Group on Genetic resources:
<http://ec.europa.eu/eip/agriculture/en/content/genetic-resources-cooperation-models>
- ▶ the EIP-AGRI Focus Group on Reducing antibiotics in pig farming:
<http://ec.europa.eu/eip/agriculture/en/content/animal-husbandry>





Ulla Bertelsen
CORE Organic coordinator



Making a difference on the farm:

CORE Organic ERA-NET brings organic research closer to practice across Europe

The CORE Organic research network finances research projects that span the entire organic food chain. One of its key goals is to make organic research results usable in practice, so that they can have a real impact on the organic agricultural sector.

ERA-NETs (European Research Area Networks) are networks of funding agencies that coordinate transnational research programmes in Europe. The ERA-NET CORE Organic started in 2003 and is now in its third period of funding from the European Commission. CORE Organic requires all its funded projects to upload their scientific publications to the open-access database Organic Eprints, which is the 6th largest archive on agricultural research in the world, used by more than 6,500 researchers, farmers, advisers and teachers every day. Articles are available in English but those that are directed at farmers and advisory services are also published in the national languages, making them very accessible.

CORE Organic coordinator Ulla Bertelsen is convinced that CORE Organic and the EIP-AGRI share a lot of common ground and could learn from each other.

"We want end users to be involved in research and innovation efforts, to ensure that research results are relevant and applicable on farms.

**- Ulla Bertelsen,
CORE Organic coordinator -**

Ulla, which similarities do you see between CORE Organic and the EIP-AGRI?

Ulla: "I've met EIP-AGRI Service Point staff in different places in Europe, and am happy to see that the European Commission is making efforts to create a bridge between research and practice. At CORE Organic, we share the same focus on sharing results with different European stakeholders but especially with people from practice. We want farmers and other end users to be involved in research and innovation efforts, to ensure that research results are

relevant and applicable on farms. Our goals are very similar, and while we work in organic agriculture, many of our research results could also benefit conventional farmers. Applying organic practices in livestock health management or soil and weed management, and learning how to reduce the use of pesticides, for instance, could have economic and other advantages for them as well."





Visit the CORE Organic website and the Organic Eprints archive to keep track of project results: <http://www.coreorganic2.org/> - <http://orgprints.org>
Read the article from the latest CORE Organic seminar in Stockholm, where scientists from all over Europe exchanged results and ideas: <http://www.coreorganic.org/Pages/Artikler/MeetingStockholm.html>



Inspirational idea

Healthy strawberries thanks to 'flying doctors'

The BICOPOLL project is an example of one of the projects funded through CORE Organic II. It shows that honeybees and bumblebees can help protect strawberry crops against grey mould, one of the most common diseases causing crop loss. Researchers placed tiny doormats filled with beneficial microbe spores at the entrance of beehives. The bees' legs are coated with the spores when they leave the hive in search of flowers. Project coordinator Dr. Heikki Hokkanen explains: "The bees apply the spores exactly where and when needed. Biocontrol via bees can provide a real solution for organic and conventional strawberry farmers." Marketable yields in organic strawberry farming often increased by over 50% when bees were used to apply biocontrol agents to the strawberry flowers, while pollinating them at the same time. Currently over 10% of berry growers in Finland use the 'flying doctors', but this is expected to rise rapidly due to a new environmental support scheme for horticulture in Finland. Commercial uptake is also starting in other countries such as Estonia and Sweden.

► More on Bicapoll: <http://coreorganic2.org/bicapoll>

Interested in learning more?

Download our EIP-AGRI brochure on ERA-NETs at:

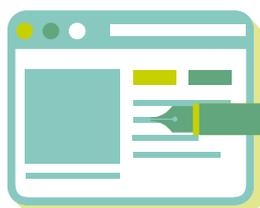
► <https://ec.europa.eu/eip/agriculture/en/content/eip-agri-brochure-research-innovation-across-eu-borders>.

Read and download our EIP-AGRI brochure on Organic Farming at:

► <http://bit.ly/1Htv3Yf>

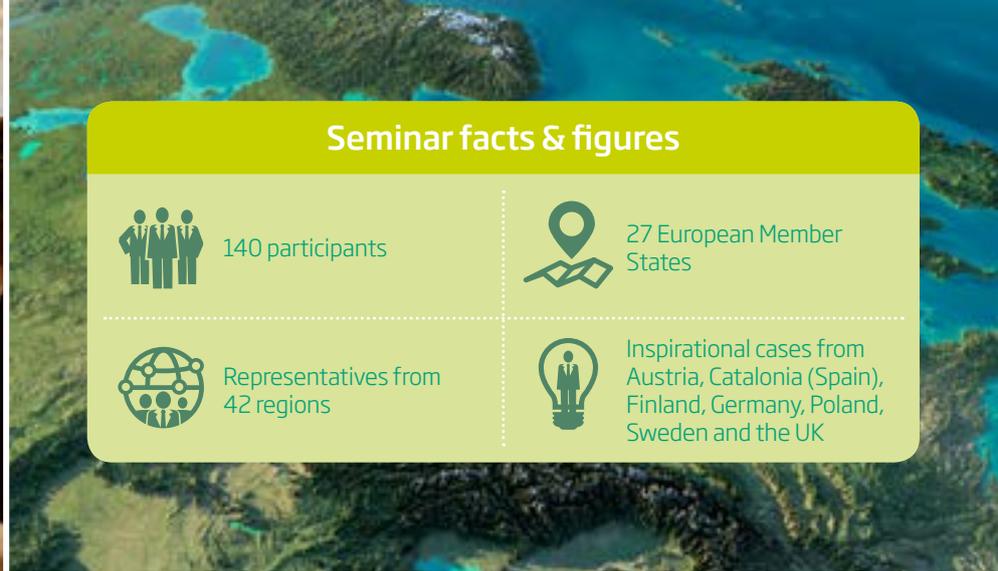
How do you think the EIP-AGRI and CORE Organic can complement each other and enhance their impact?

Ulla: "Several CORE Organic members have participated in EIP-AGRI Focus Groups, and we're encouraging them to apply. We also plan to integrate the results and recommendations from the EIP-AGRI Focus Group on Organic Farming in our next project calls and use the results in our network. We've uploaded our projects into the EIP-AGRI database and hope this will enable people to find project partners. The EIP-AGRI is in turn helping to spread the results of CORE Organic projects through its newsletter and through the AgrInnovation magazine, for instance. We're always looking for different ways to reach end users, which is why we look to the EIP-AGRI Service Point for inspiration. Collaboration is useful, and we could learn from each other." ●



Share your ideas!

Register to the EIP-AGRI website at www.eip-agri.eu to find and share inspiring project results that could help you and others to build a successful innovation project. We especially welcome projects with results that are applicable in the field!



Seminar facts & figures



140 participants



27 European Member States



Representatives from 42 regions



Inspirational cases from Austria, Catalonia (Spain), Finland, Germany, Poland, Sweden and the UK



Setting up Operational Groups across the EU

Inspiration from the EIP-AGRI seminar for Managing Authorities

Setting the scene

On 18 and 19 November 2014 the European Commission's Directorate General for Agriculture and Rural Development (DG AGRI) organised a seminar dedicated to launching EIP-AGRI Operational Groups (OGs) with funding from the 2014-2020 Rural Development Programme.

The seminar discussed practical aspects of organising Operational Group calls and offered tips on how to support EIP-AGRI networking at a national or regional level, also involving innovation support services and advisory services that focus on innovation. The 140 participants included representatives of Managing Authorities from the different Rural Development Programme areas, particularly those responsible for EIP-AGRI implementation, and representatives of National Rural Networks.

The Spanish region of Catalonia presented an inspiring case for other regions. We sat down with Jaume Sió Torres, Deputy Director for Agrifood, Innovation and Knowledge Transfer of the Catalan regional government to talk about how Catalonia encourages farmers, researchers and industry to cooperate and (net)work together.

Will Catalonia be implementing Operational Groups?

Jaume: "Yes. We have a specific situation in Spain. At the regional level, in Catalonia, we expect to build on our experience with the cooperation measure from the previous programming period. We want to keep

fostering the connection between farmers, researchers and industries now that we have the possibility to set up these new Operational Groups. Through the national programme, people from different regions have the possibility to cooperate. An Operational Group from the south of Spain can work together with one from the north, for instance."

Are people in Catalonia interested in this opportunity?

Jaume: "Everyone's very interested. Researchers find it easier to find the information though, so Catalonia needs to invest more time to explain to individual farmers that this is a tool to bring innovation to their farms and to bring them up to date."



"We prepare and connect, but it's important to get ideas from the sector."

**- Jaume Sió Torres,
Catalonian regional
government -**



What activities are going on in Catalonia, to prepare for the implementation of Operational Groups?

Jaume: "About 25,000 people, including farmers, advisers and researchers have participated in seminars and meetings to share information on the topic of agriculture, innovation and research. When a particular topic is important for the sector, we prepare specific meetings with people from different parts of the food chain. Researchers who work in the area of winter cereals, for instance, meet and exchange ideas with farmers, industries and even people who actually bake the bread. We prepare and connect, but it's important to get ideas from the sector."

Did you find this seminar useful? Have you learned anything from other Member States?

Jaume: "Yes, I found the discussions very useful. I heard some ideas on how to prepare the Operational Groups, how to connect stakeholders and how to disseminate the results. We picked up interesting stories and it gives us confidence when we hear that people are taking the same approach as us." ●

We also asked Inger Pehrson, coordinator of the National Innovation Network of Sweden, how Sweden is informing farmers and other interested parties about the opportunities offered by Operational Groups.

Will Sweden be implementing Operational Groups?

Inger: "Absolutely, and we want to catch people's attention to make sure that we get a good start. It's important that we can get farming magazines, press and organisations on board to encourage farmers to come with initiatives."

"If we succeed, we can make farmers an equal partner in a group. That's the challenge."

**- Inger Pehrson,
coordinator of the
National Innovation
Network of Sweden -**

Are people in Sweden aware of this measure? Are they interested?

Inger: "Yes, because this is a very good opportunity. It's the first time that farmers can be rewarded for developing ideas that are close to their hearts. Farmers now have the possibility to work together with someone who is interested in the same question, and that doesn't have to be a person from the same village or region but could be anywhere else in Sweden. People can have the same ideas and develop them together. Also, if we succeed, we can make farmers an equal partner in a group. That's a challenge, especially for researchers, because it is not the traditional way of working. But I think that creating a dialogue can benefit both parties."

What is happening in Sweden to prepare for the implementation of Operational Groups?

Inger: "We've had an Agricultural Innovation day with over 200 participants interested in innovation, opened by our prince Carl Philip. That was a good way to spread the word. We also held a workshop where we discussed this measure, and we're initiating meetings with different people involved in farming, agricultural advice or research, to inform them and encourage them to give us feedback on what we should think about when we're building this network."

Did you find this seminar useful?

Inger: "Very much. I'm looking forward to the results from the break-out groups, which will help us in our programming efforts. It's also helpful to meet colleagues from other countries.

The thing is, joining this EU network is a fantastic way to get in contact with others just to see what's happening. You don't have to be in an Operational Group, anyone can do this. It's really important to motivate people to join so they can find and be found. This will result in good contacts and innovative ideas for the agricultural sector." ●



Inger Pehrson
coordinator of the Swedish
National Innovation Network



Focus on Rural Development

Portugal prepares to support innovation

Several European countries are preparing for the implementation of EIP-AGRI Operational Groups. Maria Custódia Correia, coordinator of the Portuguese National Rural Network (NRN), gladly gave us her insights on how Portugal is getting ready to support innovation through the new Rural Development Programme.

Maria, how is the Portuguese National Rural Network preparing for the launch of EIP-AGRI Operational Groups?

Maria: “Well, our role is to help Portuguese stakeholders set up Operational Groups. We’re organising workshops and seminars to inform people, and the high number of participants at these events shows that people are really interested in learning about these opportunities. We’ll have an online interactive platform where people can discuss their experiences with and results of Operational Groups and EIP-AGRI Focus Groups, and where they can find partners and share ideas for new innovative projects. We also launched an ‘Initiatives Centre’ (‘Bolsa de Iniciativas’) in January 2015, to gather all the ideas of potential partners for setting up Operational Groups.

We are also supporting the implementation of the EIP-AGRI more broadly. We organised a big seminar where we informed our members on how Horizon 2020 can provide support, and we’re spreading information through our website. We’ve also set up a ‘thematic working group on innovation’ which has established an annual joint programme for all our partners.

We have collaborated with other networks and facilitators of innovation. For example, we’ve taken part in workshops and brokerage events where we have had the opportunity to connect people with other stakeholders in view of forming partnerships and starting up new innovation projects.”



How do you think the EIP-AGRI Service Point and the Portuguese NRN can cooperate?

Maria: “The Service Point provides us with important information on EIP-AGRI Focus Groups, Operational Groups and Horizon 2020. We’re collecting these results and are making them available on our website. We try to translate as much information as possible so that people who speak only Portuguese also get access to the documents.

We’re interested in receiving information on Operational Groups that are being set up in other countries to learn more about general and practical guidelines for implementation and dissemination. To support the exchange of information across borders, the EIP-AGRI Service Point offers valuable information on Portuguese and other Operational Groups that are working on the same themes. This would give us the opportunity to connect them through thematic groups. Information on Horizon 2020 projects can help Portuguese partners to find potential partners, form partnerships and set up new projects.

“We’re collecting results of EIP-AGRI Focus Groups and Operational Groups and are making them available on our website. We try to translate as much information as possible so that people who speak only Portuguese also get access to the documents.”

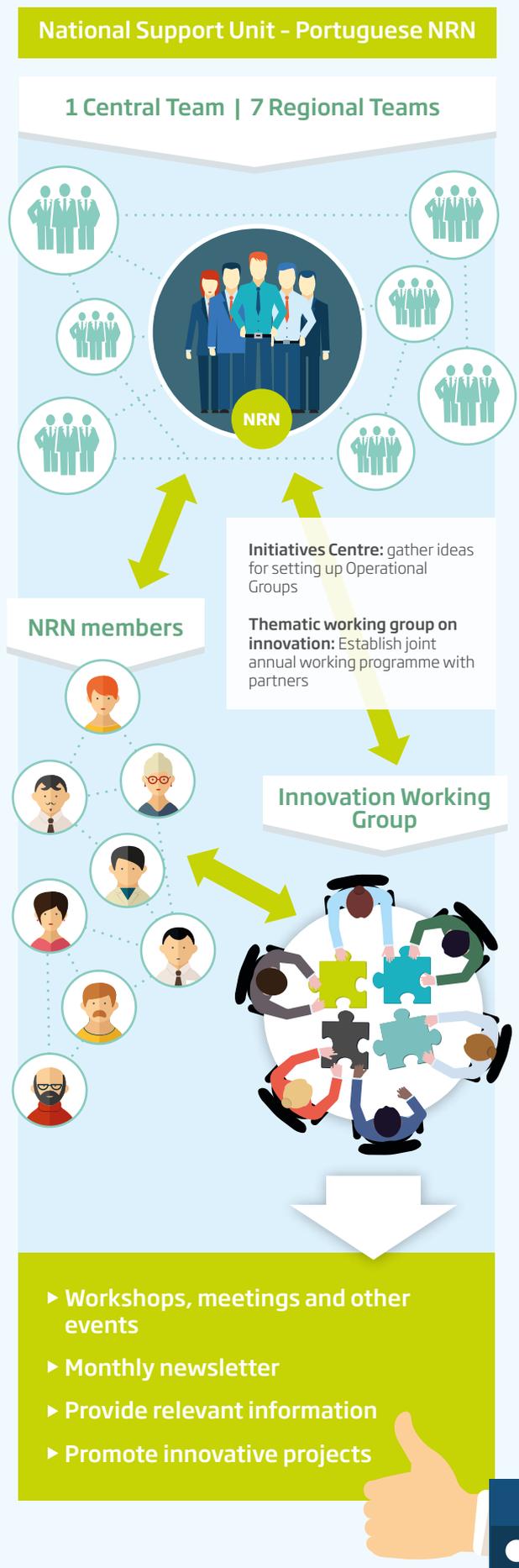
- Maria Custódia Correia, coordinator of the Portuguese National Rural Network -

Also, the Portuguese experts who have participated in EIP-AGRI Focus Groups have valuable insights that would definitely be useful for our Portuguese stakeholders.” ●

► For more information:
www.rederural.pt/index.php/en/

How can the EIP-AGRI Service Point support the NRNs?

- We will be happy to give relevant information and speak at your event.
- Visit our website to discover how other NRNs tackle challenges.
- If you’re interested in translating our brochures or infographics, we will send you the material you need. Several materials have already been translated by participants in the EIP-AGRI network. Have a look at our [multiplier toolbox](#) to find French, German, Finnish, Portuguese and other EIP-AGRI brochures and infographics: <http://ec.europa.eu/eip/agriculture/en/content/eip-agri-multipliers>.



CONTRACT

GAME-MASTER

GOOD QUESTIONS

ACTIVE LISTENING

IMPACT MAP

PLAN OF ACTION

FOLLOW-UP



Walk a mile in their boots

A new training tool for farm advisers

Involving the knowledge and creativity of farmers

The success of an adviser's work is usually measured by concrete results. To increase the value of an adviser's efforts for both adviser and farmer, the Danish Knowledge Centre for Agriculture (now called SEGES) has developed a new concept for in-service adviser training called 'Trump Card[®] - effective advice'. This training tool is based on the idea that advisers need more than just technical knowledge if they want to offer effective solutions to farmers. To tap into the full potential of adviser-farmer relationships, advisers need to ask the right questions, set realistic objectives, understand the farmer's problem, plan and follow-up.

Advisers need the farmer's own knowledge and creativity to develop successful solutions together.

Solutions for a successful partnership

This approach requires advisers to develop new and versatile skills for them to be able to develop successful solutions together with farmers. The 'Trump Card[®] - effective advice' tool uses a pack of cards to visualise seven essential soft skills. These skills allow advisers to supplement their expert skills with knowledge on different advising methods illustrated by case studies. The tool should encourage advisers to really understand the farmer's problem before offering a technical solution. In fact, when advisers and farmers develop solutions together they are likely to find better solutions.



Internationally available

The Trump Cards concept offers innovative training material, but it is also a practical tool that advisers can use before and during their visits to farmers. Danish agricultural advisers using the Trump Cards tool confirm that it improves the quality of their advice due to the fact that their relationship with farmers has become more relaxed and at the same time more efficient. Many of them were so pleased with the new concept that the decision was made to make it available internationally. The key elements (the cards and an information booklet) have been translated into English and French.

Because methodological challenges related to facilitating agricultural innovation, advising and disseminating technical knowledge can be seen as universal, SEGES believes that the card concept can also help advisers and farmers in other countries. ●

Trump Cards - for optimal advising

The 'Trump Card® - effective advice' concept uses a pack of seven cards, representing the soft skills that are needed for effective advising:

-  **Contract.** Defining clear objectives and expectations for the advising process.
-  **Gamemaster.** Stressing the skills of being a qualified chairperson, keeping the focus of a meeting.
-  **Good Questions.** Asking the right questions, to inspire reflection and involvement.
-  **Active Listening.** Making room for the farmer's needs, wishes and worries by creating an atmosphere of confidence and responsiveness.
-  **Effect Card.** Underlining the importance of focusing on results from the very start.
-  **Action Plan.** Drawing up a clear and realistic plan of action with measurable objectives.
-  **Follow-Up.** Focusing on the need to follow up on agreements and meet expectations.

Read more on the Trump Cards at: <http://bit.ly/1MwUfEa>
For more information, contact Heidi Hundrup Rasmussen: hhr@seges.dk





Exploring new crops for the bioeconomy

Farmers grow high-yield energy grass near Amsterdam Schiphol Airport

Four farmers have joined forces to cultivate new sustainable crops with biobased potential close to Amsterdam Schiphol Airport, resulting in several benefits for farmers, for developing biobased technologies and products, and even for supporting aircraft safety.



Cultivating solutions for the biobased economy

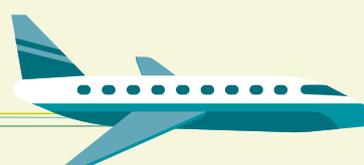
In December 2011, the Dutch National Government gave the green light for a 'Green Deal' to support a local sustainable project. The collaboration with the Dutch Service for Land and Water Management (DLG), the Wageningen University and Research centre (WUR) and the Schiphol Area Development Company (SADC) allowed a group of farmers to start a trial cultivation of tall grass (*Miscanthus sinensis* 'Giganteus'), also called "Elephant Grass", on Schiphol Tradepark grounds.

Miscanthus helps to ward off bird flocks, especially geese, increasing aircraft safety. It is effective in reducing noise and capturing carbon dioxide and therefore softens the effects of climate change. From a farmer's perspective, cultivating miscanthus also has several advantages. The plant has a high tolerance to brackish ground water and it needs little fertiliser and pesticides. It provides a renewable source of feedstock (for instance lignocellulose) for biobased technologies and a range of high-end products such as automotive and aircraft performance materials, Furniture for public spaces, bioplastics for catering cutlery and shopping bags, as well as chemicals, biofuels and kerosine.

Innovative crops as a testing ground for new collaboration

Both for the farmers and for Schiphol Tradepark, the plantation forms a statement of innovation and sustainability, inviting future business developments. The farmers rent land on the Tradepark grounds as a temporary extension of their own arable land to experiment with new or different crops. Using the businesspark grounds allows the farmers to grow and test miscanthus at an economic scale along with a wide range of other crops such as flax, fiberhemp, sorghum, quinoa, rapeseed and mustard.

The 60 hectares of planted miscanthus were harvested for the second year in the spring of 2015. The trading and compounding company Transmare, based in Rotterdam, is currently testing miscanthus feedstock in biopolymer production lines. The success of this project lies in the collaboration between different partners from agriculture and chemistry. Government support has been crucial to make partners meet and keep the process moving forward. This project could inspire similar biobased activities. New funding could further help to transform these into profitable businesses. ●





*Karin Metzloff
Executive Director of EPSO, the
European Plant Science
Organisation*



Expanding the EIP-AGRI network: a perspective from EPSO

What is EPSO?

The European Plant Science Organisation (EPSO) is an academic organisation with over 220 members in 31 countries, mainly from Europe. Its members are universities and research institutes that conduct both basic and applied research on plant sciences, for agriculture, horticulture, forestry, pharmaceuticals and other areas. We met Karin Metzloff, EPSO's Executive Director, to hear her views on how researchers can contribute to the EIP-AGRI.

Karin, how can EPSO members benefit from their involvement in the EIP-AGRI network? What solutions can the EIP-AGRI offer European researchers?

Karin: "At the moment, there's a huge gap between the farming and scientific communities, which is why the idea of the EIP-AGRI is really great. It would be wonderful if we could get farmers and scientists to work together more closely. I think it's relevant to bridge the gap between farmers and scientists. It would be good if farmers presented their needs and questions to researchers,

who could offer solutions. In turn, if scientists would explain to farmers what they're working on, this could give farmers ideas that they could use on their farms."

"When young people see that farmers and scientists work together, using new technologies and creating choices, it can stimulate them to take up a career in this field."

- Karin Metzloff, Executive Director of the European Plant Science Organisation -



Getting young people interested in agriculture and plant science

Every two years, EPSO organises the 'Fascination of Plants Day'. It invites farmers and farmers' organisations, science institutions and schools to organise activities related to plant science. The aim is to let families and children explore the world of plant science and its role in agriculture, horticulture, forestry, food production and environmental conservation, and to show young people that the world of plant science can be an attractive, positive and innovative environment with lots of possibilities.

Interested? Find out more on the Fascination of Plants Day webpage at <http://plantday.org/>

How are you spreading the word on the EIP-AGRI in your network?

Karin: "We're informing our members on the idea and goals of the European Innovation Partnership, and we've given information to member organisations in our annual general meeting and in regular briefings.



Many of our members are interested in getting involved and some of them

have already participated in EIP-AGRI Focus Groups. As a scientist, the first basic thing you learn is to collaborate - so our members are definitely willing to engage in activities such as EIP-AGRI Focus Groups or Operational Groups. If they get the opportunity to participate, they can meet new interesting people and expand their network.

All our members have their own networks, so at EPSO we also reach out to a range of networks at a global level. Our website contains a map showing all our members listed per country and institution. They can all be contacted via the EPSO team or through me. I think it's important, also for the EIP-AGRI, to expand the current circle and to reach out to people who have not been involved yet, and to actively encourage them to participate.

I think we especially need to encourage young people - young farmers, young scientists, and also for instance young teachers - to get involved in the EIP-AGRI network and to work on projects together. We are organising outreach activities where farmers and researchers but also schools, teachers and children can be involved. Through **the Fascination of Plants Day** for instance, we want to create an interest in the world of plant science and agriculture. When young people see that farmers and scientists work together, that farmers are using new technologies and that they have choices, it can stimulate young people to take up a career in this field." ●

► Learn more about EPSO and its members at www.epsoweb.org.



EIP-AGRI Focus Groups: inspiring innovation and sharing knowledge

Tackling questions from different angles

EIP-AGRI Focus Groups tackle specific questions, such as how to improve soil organic matter in Mediterranean soils so they become less susceptible to erosion and maintain or improve their fertility. The groups bring together twenty experts, including farmers, foresters, advisers, researchers and agri-business representatives, contributing both practical farming experience and scientific knowledge.

One of the main goals of EIP-AGRI Focus Groups is to catalyse innovation and spread knowledge on existing good practices. Their reports are made available through the EIP-AGRI Network.

"My participation in the EIP-AGRI Focus Group on High Nature Value Farming allowed me to bring my ideas to a lively debate with my peers and learn about innovative approaches and tools used in HNV across Europe. I also had the opportunity to share challenges and opportunities for further work during joint work on the final report.

- Jordi Pietx, expert from the EIP-AGRI Focus Group on High Nature Value Farming -

Sharing knowledge & innovative solutions

The experts that participate in EIP-AGRI Focus Groups discuss and collect best practices in a specific field. They take stock of the state of play in research and practice and they list problems but also look for possible solutions. The groups do not need to reach a consensus on all points discussed; they should rather highlight different perspectives and clarify important issues. Based on their discussions, the groups suggest and prioritise innovative actions. They identify ideas for applied research and for testing solutions in the field, involving farmers, advisers, the industry and other practitioners.

Thirteen EIP-AGRI Focus Groups were set up in 2013-2014 and five additional ones are starting their work in 2015. The reports and results from all Focus Groups can be found on their respective pages on the EIP-AGRI website at <http://ec.europa.eu/eip/agriculture/en/content/focus-groups>.

Each Focus Group meets at least twice over a period of about one year. When the final report has been completed, group members can continue their work in collaborative work spaces on the EIP-AGRI website.



Inspiring people to take action

The results and reports produced by EIP-AGRI Focus Groups are meant to inspire people across the European Union to take action. Focus Group results provide new and useful ideas to solve practical problems and start new Operational Groups or research projects.

“Several CORE Organic members have participated in EIP-AGRI Focus Groups, and we’re encouraging them to apply. We also plan to integrate the results and recommendations from the EIP-AGRI Focus Group on Organic Farming in our next project calls and use the results in our network.”

- Ulla Bertelsen, coordinator of the CORE Organic ERA-NET -

Interested in contributing?

Calls for EIP-AGRI Focus Groups are published several times a year and are open for a fixed period of time. Each call is made for a different EIP-AGRI Focus Group, on a specific theme.

Would you like to be kept up to date on future calls? Then subscribe to our newsletter at <https://ec.europa.eu/eip/agriculture/en/content/subscribe-newsletter> ●



Find out more!

To read interesting reports and publications, and get more details on EIP-AGRI Focus Groups,

- ▶ register to the EIP-AGRI website at <https://ec.europa.eu/eip/agriculture/en/user>
- ▶ or download our Focus Group brochure at http://ec.europa.eu/eip/agriculture/sites/agri-eip/files/eip-agri_brochures_focus_groups_2015_en_web.pdf



Current EIP-AGRI Focus Group topics:

- ▶ Ecological Focus Areas
- ▶ Fertiliser efficiency
- ▶ Genetic resources
- ▶ High Nature Value farming
- ▶ Integrated Pest Management for Brassica
- ▶ Mainstreaming precision farming
- ▶ New entrants into farming
- ▶ Organic farming
- ▶ Profitability of permanent grassland
- ▶ Protein crops
- ▶ Reducing antibiotics in pig farming
- ▶ Short food supply chains
- ▶ Soil-borne diseases
- ▶ Soil organic matter content in Mediterranean regions
- ▶ Water in agriculture

Innovative solutions for improving Soil Organic Matter content in Mediterranean regions

The experts from the EIP-AGRI Focus Group on Soil Organic Matter (SOM) content in Mediterranean regions made recommendations and found transferable innovative solutions for improving SOM in the Mediterranean area. Their final report lists suggestions for future research topics and ideas for Operational Groups. Focus Group expert Borbala Biro from Hungary explains: “We have set 16 priorities for improving Soil Organic Matter content in a cost-effective way, while securing soil functionality and soil fertility in the specific context of Mediterranean regions.”

The final report can be downloaded at:

- ▶ <http://bit.ly/1f4HQZu>



Razvan Popa
Director of Fundatia ADEPT



Fundatia ADEPT:

Using innovation to protect Romania's farmland biodiversity

For the past ten years, Fundatia ADEPT has been supporting and protecting the nature-rich farmed landscapes of Southern Transylvania, Romania, their biodiversity and the traditional farming communities that maintain them. Razvan Popa is Director of Fundatia ADEPT. He has been involved in the EIP-AGRI as a member of the High Nature Value Farming Focus Group.

Razvan, how do you think innovation can benefit agriculture and local communities in Southern Transylvania?

Razvan: "Innovation is really needed in Romania, but it can be difficult for people to understand what innovation actually is, especially in our local extensive farming systems where traditions and cultural aspects still play a large role. ADEPT wants to motivate people by informing them, so they can decide for themselves whether they want to implement innovative measures in their day-to-day practices."

What are your expectations of the EIP-AGRI?

Razvan: "I think the EIP-AGRI Focus Groups are very important to bring people together, find solutions and

generate innovation. The exchange of information between different experts and countries can help to spread innovative ideas to more people and to different domains.

We also need people from the European level to reach out to Romanian farmers. Our farmers are flexible and willing to cooperate in innovative projects. Lessons can be learned in both directions. I've seen that, with our help, local farmers have re-introduced traditional ideas and practices that still prove very useful today. The practice of sending all animals from a village to a communal pasture for grazing each morning, and having them return in the evening, for instance. Could we call this 'retro innovation'? It definitely allows farmers and policy makers to revive and rediscover efficient ways of working together, managing the

"ADEPT wants to motivate people by informing them, so they can decide for themselves whether they want to implement innovative measures in their day-to-day practices."

**- Razvan Popa,
Fundatia ADEPT -**

production better, and so on. The High Nature Value Focus Group is very relevant for our farmers and for the type of agriculture that is conducted in this area of Romania. We would be happy to promote the results when they become available, and to implement these results in concrete projects on the ground." ●

Learn more about Fundatia ADEPT:
► <http://www.fundatia-adept.org/>



Inspirational idea

Joining forces to weed out strawberry plant diseases

*For many years, the plant disease *Verticillium dahliae* caused problems for strawberry farmers in the federal state of Brandenburg, Germany. Thanks to the joint efforts of farmers and researchers, a solution has been found that can now be widely used. *Verticillium* infects the soil and causes severe damage to young strawberry plants. Farmers suffered economic losses because the disease can survive in the soil for over 15 years. Farmers had to accept yield losses and the risk that whole strawberry fields would have to be taken out of production.*

A practical solution became available after a number of farmers joined forces with the German research institute ZALF (Leibniz Centre for Agricultural Landscape Research), the innovation broker Agrathaer and a specialised SME (small and medium-sized enterprise). The EVI project (Erdbeer *Verticillium* Impfung - Strawberry *Verticillium* Immunisation), set up in 2011, successfully developed a biological control agent that helps to immunise plants, and designed a practical application method, immersing strawberry plant roots in a watery suspension before being planted.

Part of the success was due to the active involvement of farmers and farmers' organisations. Agrathaer organised one-to-one interviews with strawberry farmers, field surveys, and joint workshops between farmers and researchers. Press articles in regional newspapers and regional horticultural journals helped to raise awareness within the farming community. This enabled farmers to give feedback on challenges and practical solutions, contributing to the success of the project. ●

*"The *Verticillium* disease was widely known, but no systematic approach was taken to cure this problem. It would be helpful to have a database with all the information about ongoing research and efficient ways to exchange information."*

- Anita Beblek, Agrathaer -





Searching for innovation? Ask Valerie!

Farmers, forest managers and other players in the field of agriculture and forestry can boost innovation by interacting and sharing knowledge. The VALERIE project wants to support this interaction by making scientific results from EU and nationally funded research projects more available and useful in the field. VALERIE itself is financed through European research funding (FP7-KBBE-2013-7).

The project plans to launch an interactive communication portal called 'AskValerie' in 2017. This will allow farmers and advisory organisations to actively search relevant and applicable scientific and practical knowledge. The knowledge base will also include information posted on social media (Facebook, Twitter, LinkedIn) and regional case studies on innovation that give examples of how research can be successfully applied to practice. This portal will also enable its users to share their own practical knowledge and experience with their peers across Europe.

Reaching out to the EIP-AGRI

AskValerie.eu wants to make relevant information sources available, create keywords to help users search this information efficiently and find answers to their questions, and build a platform that will be usable even after the project has ended. The search engine will be embedded within the EIP-AGRI website, to allow more users to access and share information on innovation. ●

For more information,
▶ see www.valerie.eu



"We want to make a difference for practitioners in the field; easy access to innovative ideas, collected from research and from practice throughout Europe."

- Paul Newell Price, Valerie project partner ADAS -



Opening a Window on Innovation: reaching out across Italian regions

The 'Window on Innovation' is an interactive portal on the Italian Agriregionieuropa website that gives information on regional and European policy developments and on opportunities offered by the European Innovation Partnership (EIP-AGRI). Its first editions sparked a great interest in Italy, especially because all information on the website is published both in Italian and in English. Franco and Valentina were happy to explain this concept to us.

Valentina Materia is Assistant Professor on Innovation and Entrepreneurship at Wageningen University, The Netherlands. She manages the Italian portal 'Window on Innovation'. This service on the Agriregionieuropa website aims to create a virtual bridge between Italy and Europe.

"We want to present scientific information in a ready-to-access format, so that it can be picked up by farmers and stakeholders and be put to practical use."

- Valentina Materia -

What is the main idea behind the Window on Innovation?

Valentina: "We mainly want to inform people about what's happening in the field of agricultural research and innovation in Europe and in Italy. By using the local language, we want to increase the number of people that are aware of the opportunities of the EIP-AGRI. We give information on how to apply for EIP-AGRI Focus Groups, on guidelines for Operational Groups, on best practices and relevant research - but we want to present this information in a ready-to-access format, so that it can be picked up by farmers and stakeholders and put to practical use."

Franco: "This portal gives us an opportunity to involve farmers and producers, who have a crucial role in this field and need to be heard by researchers. The website opens up possibilities for us to reach local stakeholders and stimulate collaboration between the regions. Through the English version, we can also help spread innovation across Europe."

Valentina: "Italian regions are eager to learn about how other regions are planning to implement Rural Development Programmes. This can stimulate them to share knowledge, locally and throughout Europe." ▶



How do you see the Window evolving in the future?

Valentina: "We hope it will become an even more participatory and interactive tool where people can open debates and share expertise that can be used in practice. Our aim is to create 'Communities of Practice' where people can find information but also give feedback and actively participate, creating a cycle of knowledge. By sharing information and presenting best practices, we can facilitate a culture of innovation, so that the concept of innovation can become part of people's mentalities and gain the interest of everyone involved, especially farmers."

Franco: "With this tool, Agriregionieuropa wants to reach out to other initiatives that promote innovation in the field of agriculture and rural development. The Communities of Practice approach can offer a virtual platform where everyone involved in Operational Groups can share ideas, knowledge and needs, offering people a useful instrument to co-create innovation." ●

Franco Sotte is Professor of Agricultural Economics and Policy at the Polytechnic University of Marche, Ancona, Italy. He is also the director of Agriregionieuropa, the Italian on-line scientific review that has over 1,000 visitors a day and gives access to more than 1,200 scientific articles on agricultural economics and policy.



*Interested in learning more?
Visit Agriregionieuropa and the Window on Innovation!*

*<http://agriregionieuropa.univpm.it/>
<http://agriregionieuropa.univpm.it/views/articles/Agriregionieuropa/byType/1862/all>*





Managing Editor: Rob Peters,
Head of Unit - Research and Innovation, AGRI-H5, Directorate-General for Agriculture and Rural Development, European Commission

Layout and Design: EIP-AGRI Service Point

Photographs: Bäuerliche Erzeugergemeinschaft Schwäbisch Hall, Bicopoll / CORE Organic ERA-NET, CEJA (European Council of Young Farmers), Copa-Cogeca (cover: winning entry Copa-Cogeca's photo competition), EIP-AGRI Service Point, EPSO (European Plant Science Organisation), European Commission 2015, Fotolia, Fundatia ADEPT Transilvania, Materia Valentina, Matrícia, Rede Rural Nacional (Portugal), Shutterstock.com, SEGES (Denmark), Sotte Franco, Tiel Groenestege Vincent, VALERIE project

Subscribe to Agrinnovation at the following address: servicepoint@eip-agri.eu

You can also order a paper copy free-of-charge via the EU Bookshop website: <http://bookshop.europa.eu>

The contents of the Agrinnovation Magazine do not necessarily reflect the opinions of the institutions of the European Union.

The Agrinnovation Magazine is published in English and is available in electronic format on the EIP-AGRI website.

Manuscript finalised September 2015

© European Union, 2015

Reproduction is authorised provided the source is acknowledged.

For additional information on the European Union: <http://europa.eu>

Printed in Belgium

The text in this publication is for information purposes only and is not legally binding.



www.eip-agri.eu

Your space
Your conversation
YOUR NETWORK
Join now



SHARE WITH US information about you, your projects and project ideas, and research needs



SEARCH AND FIND funding opportunities, partners, and interesting projects at the EIP-AGRI meeting point



FOCUS ON practical innovative solutions to problems and opportunities provided in the EIP-AGRI Focus Group section



DEEPEN YOUR KNOWLEDGE by having a look at different EIP-AGRI related publications



STAY UP TO DATE on innovation-related agricultural topics and read about the latest EIP-AGRI news and events



MY EIP-AGRI connects you to your own EIP-AGRI dashboard that enables you to follow the information and people you are interested in

www.eip-agri.eu

Your one-stop-shop for agricultural innovation in Europe

Also:

- ▶ Subscribe to the newsletter on our website
- ▶ Follow us on twitter [@EIPAGRI_SP](https://twitter.com/EIPAGRI_SP)
- ▶ Join us on LinkedIn: www.linkedin.com/in/eipagriservicepoint