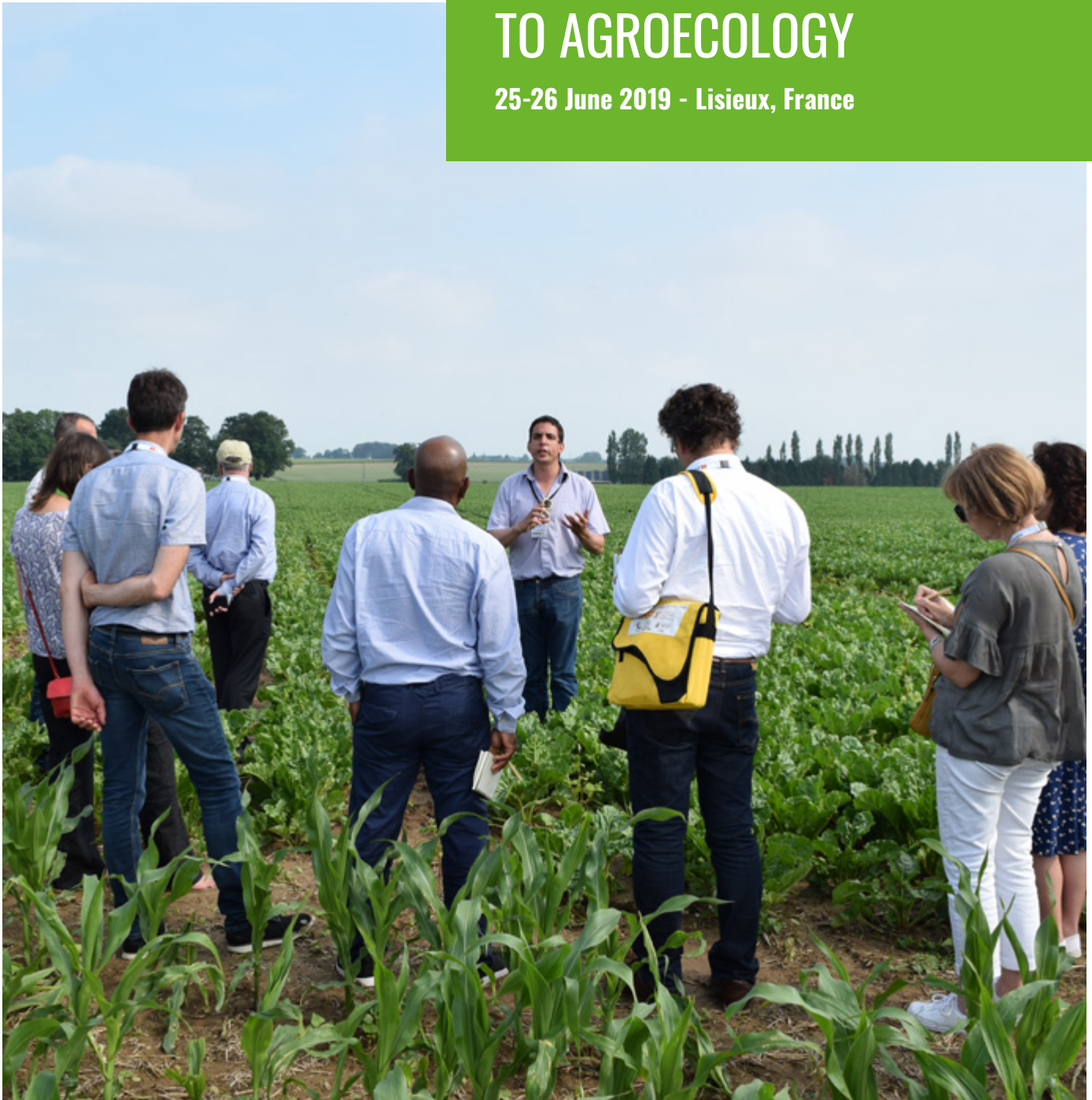




AGRI
Innovation summit 2019

THE EIP-AGRI LEADING THE TRANSITION TO AGROECOLOGY

25-26 June 2019 - Lisieux, France



FINAL REPORT – SHORT VERSION



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Introduction

Welcome to the short report of the AIS 2019, the Agri Innovation Summit held in June 25th and 26th, 2019, in Lisieux, France.



Phil Hogan,
European
Commissioner
for Agriculture
and Rural
Development

“Ensuring long-term food and nutrition security, addressing climate change and the overexploitation of natural resources, providing the basis for healthier diets, boosting the sustainable growth of rural territories... None of these can happen if farmers and foresters are not fully engaged in the innovation process. The Common Agricultural Policy has financed more than 1200 EIP-AGRI Operational Groups throughout the EU. In more than 90% of these groups farmers are present and play a key role in developing innovations that can be immediately operational in fields ranging from water and soil management, control of pests and diseases, food quality, competitiveness of the value chains, energy efficiency and many others.”

It was co-organised by the French Ministry of Agriculture (with the French Rural Network), the Normandy Region, the European Commission and the EIP-AGRI network. This event was the second European summit highlighting the potential of interactive innovation to address the challenges faced by European agriculture and forestry. The European Innovation Partnership for agricultural productivity and sustainability (EIP-AGRI) is a key tool for supporting interactive innovation in the sector both through local Operational Groups financed under the Common Agricultural Policy and transnational multi-actor research projects financed under the EU Research and Innovation policy (Horizon 2020 and Horizon Europe).

Following a first edition of the Agri Innovation Summit held in Lisbon in 2017 which was dedicated to digital transformation in agriculture, the AIS 2019 in Lisieux focussed on the transition to agroecology. The uptake of agroecological approaches in EU farming is key to improve productivity, resilience and sustainability. Supporting a network of agro-ecology multi-actor projects and living labs and ensuring knowledge exchange on agroecological approaches through EU-level platforms, like the EIP-AGRI network, can effectively accelerate the transition to agroecology.

The AIS 2019 brought together over 480 participants from all over Europe: farmers, researchers, advisors, businesses, associations, decision-makers ... 120 innovative projects and networks were presented at the event during the workshops and project market places. 8 field trips to discover projects located in Normandy were organised.

This short report presents the highlights of the AIS 2019 and complements the information available on the event website <https://www.reseaurural.fr/Sommet-agri-innovation-2019>.



Didier Guillaume,
French Minister
of Agriculture
and Food

"The agroecological transition is inevitable, it must guide our policies and agricultural practices. We must be successful in this transition in order to meet the expectations of citizens and to preserve the environment. The European Innovation Partnership for Agriculture is a valuable tool to tackle this challenge and the changes which need to be made. It encourages innovation and inspires all actors to build solutions together which are tailored to all types of farms and places."

The full AIS 2019 report presenting more in detail the results of the discussions and reflections that took place during the event is available [online](#).

The AIS 2019 started with opening statements by Phil Hogan - European Commissioner for Agriculture and Rural Development, [watch the video](#), Didier Guillaume - French Minister of Agriculture and Food, [watch the video](#), Hervé Morin - President of the Normandy Region and of the Association of French Regions and Maria Angeles Benitez Salas - Deputy Director-General for Agriculture and Rural Development for the European Commission. A roundtable dedicated to the "Future policy for innovation in agriculture and forestry" set the scene, presenting the needs and expectations of European innovation actors in the sector and how to address them through public policies. The transition to agroecology, the main theme of the event, was then introduced in a keynote presentation by Philippe Manguin, President and CEO of the French National Institute for Agricultural Research (INRA). **On the first day of the event, eight field visits were organised in the Normandy region to observe the results of innovation in multi-actor projects that could inspire and demonstrate some of the topics which are central to the transition to agroecology debate.** [Link to the fields visits on the event website.](#)

The 480 participants then engaged in interactive discussions on specific aspects of agroecology, which took place in three thematic sessions and nine workshops over the two days.

The process that took place in these thematic sessions used an innovative combination of participatory methods, such as 120 poster presentations, silent discussions, open discussions and plenary agreements. The participants explored the nine topics of the workshops to discover what is being done in the innovation projects and Operational Groups. They imagined and identified the ways forward by answering two questions in each workshop:

- ① "What are the most promising innovations that are taking place in Europe?" and,
- ② "What will it take to implement or scale up these innovations?"



Hervé Morin,
President of the
Normandy Region
and of the
Association of
French Regions

"It has been a great opportunity for Normandy and the rural area of Pays d'Auge to host the second edition of the Agricultural Innovation Summit, with representatives from 25 European countries. Over two days, this important event was a place of dialogue, reflection, sharing, exchange and mutual learning on the issues of innovation and knowledge acquisition to support agriculture. Innovation and the partnership between research, development, production and consumers are at the heart of regional policies in the agricultural sector. In 2019, the Normandy Region allocated a budget of 2.7 million euros, including 1.8 million euros of European funds, to finance its agricultural innovation policy."

The conclusions of these group discussions provided input for the second and final round table on the question "how to achieve successful sharing, co-creation and uptake of knowledge and innovation at all levels?"

Three sector representatives were invited to comment the discussion and results of the nine workshops to give their perspectives on the relevance, applicability and importance of these results:

- Christian Huyghe, Scientific Director of the French National Institute for Agricultural Research
- Paola Migliorini, President of Agroecology Europe
- Sébastien Windsor, President of ACTA (Coordination of French Technical Agricultural Institutes) and of the Chamber of Agriculture of Normandy

The insights and comments of these sector representatives conclude this report, with the aim to provide different points of views and food for thoughts to all those engaged in moving European agriculture towards agroecology.

The closing statements and reflections at the AIS 2019 were made by Clotilde Eudier, Vice President of the regional Council of Normandy, Pierre Schwartz, Assistant Director for environmental performance and regional development from the French Ministry of Agriculture and Food and finally by Maria Angeles Benitez Salas, Deputy Director-General for Agriculture and Rural Development for the European Commission.

Both this short report and the full report are available on the AIS 2019 [website](#), together with photos, videos, presentations and press materials.

Round Table

“What future policy for innovation in agriculture and forestry?”

Watch the video footage [online](#) and find a detailed report of the round table discussions in the full report of AIS 2019.

This round table was moderated by Nora Hamadi, journalist specialised in European affairs, ARTE television channel.



Wolfgang Burtscher,

Deputy Director-General for research and innovation for the European Commission (DG for Research and Innovation)

“If we want to produce more with less impact, we need innovation”



Hervé Morin,

President of the Normandy Region and of the Association of French Regions

“Farmers who want to innovate find the funding to help them do this. There are already enough funding systems in place.”



Iris Bouwers,

Vice President of the European Council of Young Farmers (CEJA)

“I have a higher education diploma. I grew up with the internet, I work on the internet every single day, but the system is so hard to understand, it is so bureaucratic, that at some levels it is not do-able. So I hired an adviser, and I had to pay the adviser.”
“It is really hard to act green when your numbers are in the red”



Anikó Juhász,

Hungarian Ministry of Agriculture's Deputy State Secretary for Agricultural Economy, Co-President of the Working Group on “Agriculture Knowledge and Innovation Systems” of the Standing Committee on Agricultural Research (SCAR)

“Innovation is about change”
“In order to change practices, we need to force farmers to do it. Changing practices therefore, comes from the adaptation to new regulations”
“Farmers believe farmers”



Eva Courtaulier,

Project manager at Panjee, innovative food-tech platform addressing sustainable food systems

“Co-construction with everyone involved is essential, all stakeholders have to be part of the process in order to create an innovation which is sustainable and accepted by all”



Arnaud Degoulet,

President of the agricultural and agri-food cooperative AGRIAL

“Innovation is about improving what we already have”
“There is a surprising number of requests for change from the members and elected officials of our cooperative”
“People are not afraid of innovation”
“It is variability, the unknown, which can hold back new initiatives”



Jean-Louis Peyraud,

Deputy scientific director for Agriculture at the National Institute for Agricultural Research (INRA)

“In order for change to be made, the solutions which are suggested have to be accepted and acceptable, therefore providing information is important and also you must co-create the innovations,”
“We must say to ourselves ‘What kind of information do I need to develop my processes’ and not ‘I’ve ordered a new sensor, what am I going to use it for?’”



Maria Angeles Benitez Salas,

Deputy Director-General for Agriculture and Rural Development for the European Commission

“The most important thing is to have a long-term vision”
“We need evolution, not revolution,”

Main Theme

Transition to agroecology

The Agri-Innovation Summit 2019 was dedicated to the contribution of the EIP-AGRI to the transition to agroecology. Philippe Mauguin, President and CEO of the French National Institute for Agricultural Research (INRA), introduced the theme underlining its multiple dimensions. The key points of Mr Mauguin's speech are summarised in the full report and the full presentation is available [online](#).

The outcomes of the nine interactive workshops held during the AIS 2019 which were to discuss specific aspects of the transition to agroecology are summarised in the following sections of this report.

The **Food and Agriculture Organisation of the United Nations (FAO)** has identified the different definitions of agroecology and [has listed 10 elements](#): diversity, co-creation and knowledge sharing, synergies, efficiency, recycling, resilience, human and social values, culture and food traditions, responsible governance, circular economy and solidarity.

France has synthesised it as follows: agroecology is the integrated use of natural resources and mechanisms for the purpose of agricultural production. It combines ecological, social and economic dimensions and aims to better leverage interactions between plants, animals, humans and the environment.

THE 10 ELEMENTS OF AGROECOLOGY



Diversity



Recycling



Responsible governance



Efficiency



Culture and food traditions



Synergies



Human and social values



Co-creation and knowledge sharing



Resilience



Circular economy and solidarity



THE FOUR MAIN DRIVERS OF AGROECOLOGY AS PRESENTED BY THE AIS 2019 ARE:

- 1 Engaging in a holistic and systematic discussion that puts the farm at the centre, with a view to finding the right solutions for each context;
- 2 Capitalising on the positive biological interactions in farming systems through: the promotion of practices that favour an increase in biodiversity (e.g. hedges, grass strips), natural regulatory mechanisms between plants and animals and pests, and the most appropriate cropping systems and crop rotations;
- 3 Supporting the autonomy and resilience of farms by promoting the completion of the bio-geochemical cycles (water, Nitrogen, etc.), including: crop rotation and cover crops, reducing dependence on inputs, improving soil fertility, developing livestock/crop synergies, management of organic effluents...;
- 4 Achieve a successful integration of agroecology within the whole supply chain in a way that contributes to a fair remuneration for farmers; including the agroecology principles in all parts of the food chain up to the consumer; promoting the creation of new value chains (new market opportunities and prospects, new products as a result of diversification)...



Agroecology Europe, a recognised European association, defines agroecology as the following: agroecology is considered jointly as a science, a practice and a social movement. It encompasses the whole food system from the soil to the organisation of human societies.

Challenges

Agroecology Europe identified 7 challenges to develop and amplify agroecology in Europe:

1	Lack of a common, broadly accepted definition of agroecology.
2	Education and training in agroecology.
3	Lack of widespread, interdisciplinary agroecology research.
4	Better integration in public policies.
5	Productivity and practices, since agroecology is more intensive in knowledge and labour and less in inputs and machinery.
6	Food systems.
7	Possible co-optation and misuse of the term 'agroecology' risking a watering down of the essence of agroecology as a science, movement, and practice.



Agri-Innovation Summit 2019

Thematic Sessions

The EIP-AGRI leading the transition to agroecology

A large part of the AIS 2019 was dedicated to interactive work on the theme of agroecology. 120 concrete examples were presented, illustrating multiple ways of moving the transition to agroecology forward thanks to interactive innovation. These examples were the starting point of interactive discussions engaging the 450 participants to reflect on different aspects of agroecology in Europe, organised in three thematic sessions and nine workshops.

Thematic Session 1:
 “How to reduce the use of inputs as a way to increase the self-sufficiency of farms?”



Feed self-sufficiency and animal health



Plant health



Plant Nutrition

Thematic Session 2:
 “What kind of production systems are needed for the sustainable management of natural resources?”



Soil: fertility, biological life and fighting against erosion



Climate resilient farming and forestry systems and water management



Wild and cultivated biodiversity

Thematic Session 3:
 “How can agroecology be better integrated within the value chain and with consumers, citizens and the local area?”



Integrating agroecology with the downstream: food value chains



Integrating agroecology with the downstream: non-food value chains



Governance models promoting this integration with citizens and local areas as well [as] with the downstream and consumers

Thematic Session

1



“How to reduce the use of inputs as a way to increase the self-sufficiency of farms?”

Workshops under this theme focused on the establishment of farming systems and practices that reduce or even eliminate the use of various external inputs, which can be harmful both for the environment and for health and costly for producers. Moving to such farming systems and practices allow farms and forestry businesses to improve their autonomy, reduce their negative impacts on the environment and increase their resilience to various shocks (economic, climatic, etc.). Three workshops addressed this theme:

Feed self-sufficiency and animal health



Feed self-sufficiency and animal health. These two subjects are combined in order to look at livestock production systems with the threefold objective of ① Reducing input supplies; ② Optimising farm labour, and ③ Improving animal health and welfare. Reducing feed costs reduces the impact on farms of fluctuations in cereals and soya prices. The selected projects showcased systems that enhance autonomy, contribute to developments in livestock rearing methods and encourage integrated crop and livestock production and the introduction of new crops, including protein-rich crops. The evolution in livestock production methods aims to improve animal health, thereby decreasing the consumption of veterinary medicines, reducing losses (mortality) and ensuring greater feed efficiency, all resulting in lower costs for farmers.

Plant health



The aim of this workshop was to move beyond the discussion on the need to reduce pesticide use. It explored the impacts on plant health of the structuring of farming systems through diversification, soil tillage, extended rotations, developing new crops, including cover crops, and optimising alternatives to chemical treatments, including biological control and new farm machinery. The role of the environment surrounding plots and the establishment of agroecological infrastructures (hedges, grass buffer strips, etc.) as tools to regulate pest cycles and to encourage the development of pests' natural predators, was brought forward. More productive or more resilient perennial crop systems were also to be highlighted.

Plant Nutrition



Alongside the subject of plant health, this workshop aimed to focus on the various approaches to both annual and perennial crop nutrition. This included the efforts being made to reduce the use of fertilisers through improved soil fertility management, in particular through the development of organic fertilisers. The importance of introducing new crops and service crops was also highlighted. The workshop took into account mixed farming systems and the circular economy from the perspective of animal waste recovery.

Thematic Session 2



“What kind of production systems are needed for the sustainable management of natural resources?”

Workshops under this theme aimed to look further into the systemic approach, which is key to agroecology. The aim was to focus on the interactions between the farm and its immediate surrounding environment and on the natural resources that are needed for agricultural production. Currently, these natural resources either constitute an asset in terms of production or are degraded and need restoration. Three workshops addressed this theme:

Soil: fertility, biological life and fighting against erosion



Soils: fertility, fight against erosion and biology life. For many years, soils have been regarded as merely an inert substrate, and loss of fertility was compensated for by the addition of chemical inputs. However, soil quality and health, and their crucial role for the ecosystem, have now become a major concern for farming and forestry sectors. This workshop aimed to discuss soil management practices that help to combat soil erosion, increase and preserve soil fertility and biology, notably by increasing soil organic matter and through soil preparation and crop diversification. The introduction of protein crops and intermediate crops to improve the symbiotic relationships between plants and micro-organisms and to combat soil contamination and the negative effects of climate change (eg. through greater water retention and increasing carbon storage in soils) were also discussed.

Climate resilient farming and forestry systems and water management



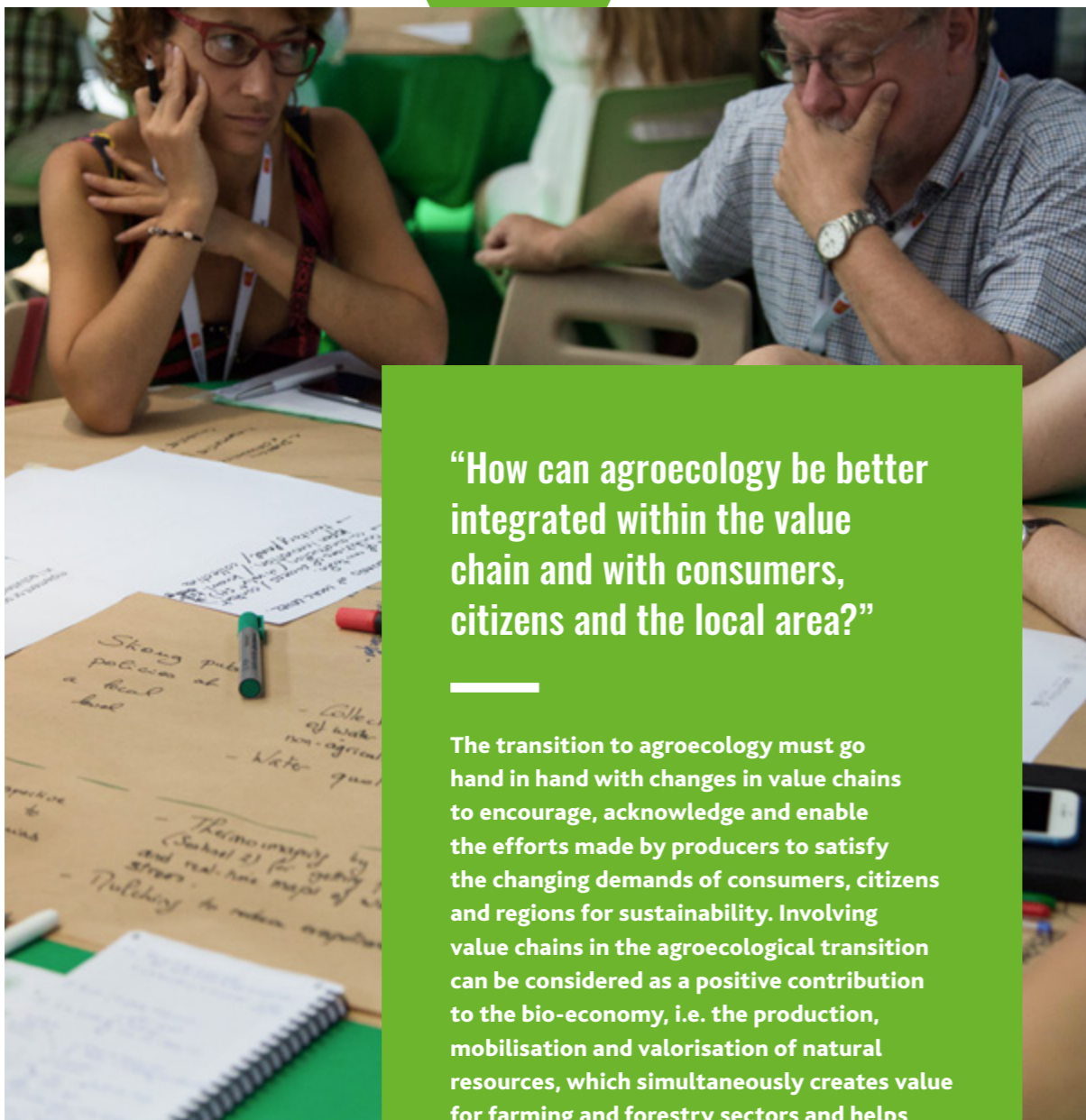
Climate resilient farming systems and water management. Agriculture has significant greenhouse gas emissions and is also directly affected by the effects of climate change (drought, water scarcity, rising temperatures, extreme events, etc.). This leads to loss of productivity, increased risk, the emergence of new pests and diseases, and in general new conditions to which crops are not adapted. Agriculture and Forestry need to combine mitigation and adaptation in order to be a carbon sink and simultaneously a resilience sector with reduced vulnerability to climate change. As a consequence, cropping systems will need to be adapted and planned to invest in carbon farming and adaptation to new climatic conditions. New strategies and management practices will need to be explored and put in place.

Wild and cultivated biodiversity



Wild, cultivated and domesticated biodiversity. Promoting biodiversity within the farm and livestock and in its surrounding landscape, including within forests, constitutes both an objective and a lever in terms of ensuring the success of the agroecological transition. This allows increasing reliance on nature in order to limit or reduce the use of chemical products on the farm. Moreover, genetic diversity is a powerful resource for climate change adaptation and for increasing the resilience of agricultural and forestry ecosystems. This workshop looked into farming and forestry practices that promote biodiversity, and into the relationships that those involved in farming and forestry can build with other stakeholders in their regions with the aim to preserve biodiversity. Finally, this workshop covered both crop and animal biodiversity and the promotion of varietal diversity and breed diversity, as means to enable farms to adapt to changing environmental and climatic conditions.

Thematic Session 3



“How can agroecology be better integrated within the value chain and with consumers, citizens and the local area?”

The transition to agroecology must go hand in hand with changes in value chains to encourage, acknowledge and enable the efforts made by producers to satisfy the changing demands of consumers, citizens and regions for sustainability. Involving value chains in the agroecological transition can be considered as a positive contribution to the bio-economy, i.e. the production, mobilisation and valorisation of natural resources, which simultaneously creates value for farming and forestry sectors and helps create new products and new markets, thus providing consumers with quality products whilst keeping the balance between food security, economic viability of diverse farming systems and preservation of ecosystems. Three workshops addressed this theme:

Integrating agroecology with the downstream: food value chains



Integrating agroecology with the downstream: food value chains. The agroecological transition requires operational changes within farms. These changes require investments, adaptation periods, evolutions in the products supplied by farms but also in processing industries. They also require the identification of profitable markets for these new products. Agricultural diversification is also a response to changing consumers’ demands. Discussion under this workshop will debate in particular: the possibilities of increasing added value, of acknowledging farmers’ efforts, and of diversifying farm income sources; alternative channels that improve the economic feasibility of the agroecological transition; market-based approaches that remunerate farmers for their environmental services to society.

Integrating agroecology with the downstream: non-food value chains



Integrating agroecology with the downstream: non-food value chains. The bio-economy and the creation new value chains to market new crops can provide farmers with additional income whilst contributing to the agro-ecological transition. Agroecology aims at closing production cycles, both on farms and at a regional level. It enables the agricultural sector to reduce and recycle both farm and food waste, as well as urban and industrial waste. The agricultural sector therefore forms part of the circular economy and can be a driving force behind new regional dynamics. Regarding biomass-derived energy, the recovery of effluents and biomass by farms contributes to the development of renewable energy sources and to the efficient and economic use of energy, typically within the local community. The structuring of all these new channels requires the development of new links between stakeholders.

Governance models promoting this integration with citizens and local areas as well with the downstream and consumers



Governance models promoting the integration with citizens and territories, as well with the downstream and with consumers. Both agroecology and the sustainable management of forests aim at balancing the production of agricultural or forestry marketable goods with environmental services. These environmental services fall within the scope of environmental public or common goods and public sector interventions, which require innovative governance systems and models. These public interventions may be organised at different levels (European, national, local, etc.) and can involve new stakeholders, such as associations, businesses, agencies, and citizens in innovative governance models. These governance systems may link public interventions and private approaches and these can trigger or prevent the shift towards agroecological practices. What and where are the positive innovations and how can we scale-up the existing solutions?

Posters & projects

The posters of Operational Groups and H2020 projects presented during the workshops can be [consulted on the event website](#).

Main Outcomes

The outcomes of the workshop discussions of the nine workshops can be found in the full report available on the AIS 2019 website.

Round Table

“How to achieve successful sharing, co-creation and uptake of knowledge and innovation at all levels?”

Here are some insights from the Round Table.

Find a more detailed report of the round table discussions in the full report of AIS 2019.



Almudena Justo,
Director of EU Programmes Department at Enterprise and Galician University Foundation – FEUGA

The multi-actor approach is not just a way to disseminate and involve, it should be included in all the tasks of research projects as a way to produce better, more applicable results, that can effectively go from research to practice. To do this, all the activities of research projects should have inputs from farmers and the agriculture sector.



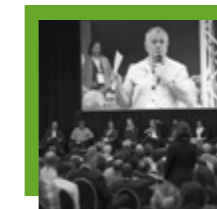
Margot Tysebaert,
Living Lab LIT Ouesterel

In a Living Lab we create a space and a process where producers, consumers, citizens, can work and reflect together. Working with cooperatives is an advantage because it becomes easier to reach farmers.



Declan Byrne,
Project Manager Operational Group - Sustainable Uplands Agri-environment Scheme (SUAS)

It is very important to promote cooperation between Operational Groups. Efforts need to be made to analyse all the Operational Groups and find synergies, to work, to take advantage of best practices and to transfer them to groups in other Member States. I think we have to do it better.



Comment from audience:

Farmers need time to participate in these very interesting projects. It is very long, it takes time to participate, and we do not necessarily have time to participate in all the projects we want.



Hubert Gerhardy,
Market Researcher, Consultant, and Part Time Professor, Operational Group Pig Health Lern-Netzwerk

In order for farmers to be motivated and to see a benefit of participation in an Operational Group or project we need to use approaches that take into account their particularities. This is what we did in (Operational Group Pig Health Lern-Netzwerk): we asked why are breeders reluctant to launch the necessary measures at the livestock level to reduce antibiotics? It was necessary to find new methods and using a bottom up approach we have set up a complete network (research, technical, consultants, breeders) that produced the first results and is now developing as a learning network to, then prove the transferability.



Claudine Le Guen,
Director of the institution for agricultural education EPLEFPA
du Robillard, Normandy

Agriculture education needs to exceed the old models of the past and stop promoting ready-made solutions. For several years now we have been thinking about no longer applying ready-made recipes, but helping young people to diagnose and find and apply locally adapted solutions. It requires multiplying the approaches, especially with the “plan to teach to produce differently” (which accompanies the agroecological project of the ministry). It has changed the training standards: move from a disciplinary approach to a multidisciplinary approach.



Marie Mardon,
co-manager of L'Atelier Paysan

It is important to remember that innovation is already happening on the farms. The first mission of Atelier Paysan is to go to the farms to research and document the innovations. Secondly, we invest in a free broadcast of these learnings. Farmers are able to self-build and should not be limited to buying their tools. It is also by building their tools that they can innovate and adapt tools to the particular conditions on the ground. We believe in a reconquest of peasant skills, making innovation accessible to all. Finally, we prefer to speak of accompaniment rather than advice: we accompany change and provide support and peer learning to make the right decisions.



Thierry Baillet,
Farming YouTuber

I have more than fifty thousand followers on YouTube because I believe that agriculture deserves to be explained and there are so many things to discover and explain! One of the most important things to empower farmers and to transfer knowledge is to put more resources into the communication of knowledge.



Jean-Marc Thévenin,
Facilitator of RITA – Agricultural Innovation and Dissemination
Network for French overseas territories

In RITA we have established a network that goes deep into the diverse French overseas territories, and we permanently have to be careful not to marginalize small structures, if we want to keep close to the farmers and the farming reality. The easiest to reach are the pioneers, and the passage of innovations from pioneers to smaller farmers is harder to reach and must be intensified. Our success comes from persistence, continuity and proximity.



Dr Hans-Christoph Eiden,
President of the German Federal Office for Agriculture and Food –
German EIP-AGRI network

We need money to finance all these networks and concrete achievements, not just thinking! Putting them in place requires money. There is a need to facilitate dialogues between the European Operational Groups. These dialogues must be thematic. There must be advantages for network partners, especially economic ones.

Speaker Highlights

A Glimpse of Speakers

Watch video interview on the event website.



Paola Migliorini,
President of Agroecology Europe

The Summit emphasised that co-creation of innovation is a process, it is not just a result. Some key words that came out during the workshops were social innovation, rethinking interactions, new economies ...

Thematic Session 1

"How to reduce external inputs to increase farm autonomy?" showed the importance of the multi-stakeholder approach, the focus on farmers in order to put in place the right tools, more self-governance. Technologies have also been much discussed. The main theme of the exchanges was the reduction of chemical fertilizers and the new methods to be found to lead this reduction, especially at the territorial level. The posters focused on the multi-actor approach, and also on technology and reduction of fertilisers, but there was very little presence of transformative approach: the process that implies the redesign of the food system and the integration of both horizontal and vertical diversification of production systems within sustainable food systems.

Thematic Session 2

"What production systems for the sustainable management of natural resources?" highlighted the appetite for participatory approaches and cooperation. Conservation approaches (soils, biodiversity, resilience) from gene to system level have been much discussed, but not the agricultural landscapes as a whole. A question that needs to be asked is how to move from conservation to regeneration of new and more adapted landscapes. Natural biodiversity / wild biodiversity and its interactions has not been much discussed in the workshops, including cultural biodiversity (farmers' knowledge). In relation to wild / cultivated biodiversity, most posters showed participatory approaches, but the approach was mainly on conservation strategies (genetic diversity, species, etc), few spoke of landscape and territorial approaches. It came out clear from the discussions that more efforts are needed to improve diversification of systems at all levels.

Thematic Session 3

"How to successfully integrate agroecology with citizens and territories, downstream and consumers?" was ultimately aimed at building new relationships. The tools for this are already available (CSA, farmers' markets, agritourism, farm visits and experience on farm, ...), but they require some financial resources and energies to be developed. Economic actors must be integrated into exchanges and projects. In general, the socio-economic level has not been addressed enough, and the cultural biodiversity element should be included in the discussion.



Watch video interview on the event website.



Sébastien Windsor,
President of ACTA (Coordination of French Technical Agricultural Institutes) and of the Chamber of Agriculture of Normandy

The main interest gained from the workshops and visits was the exchange, the sharing of enthusiasm between the various actors present. It gives you energy to carry your projects. It emerged from these workshops that the multi-stakeholder aspect is found at several levels of the innovation chain (TRL): applied, fundamental research ...

Interactive innovation has been widely discussed. Its main interesting feature is that farmers also participate in innovation and this is key in order to come up with the right innovations. In France, there is a lot of compartmentalization between the disciplines and the actors, the EIP-AGRI comes to change that. The core of the methodology is to focus on a common project to move forward together.

The importance of having results from Horizon 2020 projects to feed the projects of the Operational Groups was mentioned in the workshops. There is demand for exchanges and desire to seek solutions in other operational groups, especially from other parts of Europe.

It is absolutely crucial to involve economic actors in research projects in order to succeed. There is also a need to attract start-ups, cooperatives, and competitiveness clusters.

Digitalisation has also often emerged during exchanges, first as a tool for analysis and data exchange. For this to be a good tool, data and knowledge exchange must be liberalised, also in order to increase transparency.

Watch video
interview
[on the event
website.](#)



Christian Huyghe,
Scientific Director Agriculture
of the National Institute of Agronomic Research

Exogenous innovations are key to change practices and systems. The change of landscape in the region hosting the AIS 2019 is an example: Normandy is today a region of pastures. However, 150 years ago the region had very few, even no meadows. The pastures developed because the new railway made it possible to transport perishable goods to the French capital to feed the Parisian population. It is important to investigate the forces of change and include exogenous elements like in this example.

To encourage innovation and change in practices and systems, policies and public support are needed. The EU Common Agricultural Policy is critical to promote change in the farming sector. The inclusion of new partners in the system is another essential driver of change. Citizens or consumer associations may be such new partners. The use of digital technologies facilitates their inclusion in order to facilitate exchanges. Multi-actor approaches, such as the EIP-AGRI Operational Groups and the living labs, may facilitate the co-creation of solutions considering both private and public goods. They may lead to a diversity of outcomes, such as grounded knowledge, business and ownership of partners. Many EIP-AGRI projects carry the bases for such new networks.

The workshops highlighted unanimous support for systemic approaches and the importance of the spatial scale. Systemic approaches are popular, but the projects are local. This calls for a reflection on how to extract generalised lessons from local EIP-AGRI projects. Important aspects such as the fixed elements of the agricultural landscape (hedges, trees, forests ...) and their governance need more in-depth discussion.

A theme that was widely discussed in the workshops is the management of risks and hazards inherent to innovation. Innovations contributing to system resilience must be a target. This issue must be managed with counselling and risk-taking training. It is necessary to move beyond approaches that focus only on the production side of the agri-food chain and leaves aside the downstream, the consumer and the citizen. They hold part of the solutions for more resilient agri-food systems. These new players must be integrated in the discussion, their demands taken into account since they are the real drivers of change.

Paradigm shift and change in mind-sets of all players were considered essential in all the workshops. The digital transformation has been identified as a clear innovation driver and a key resource for change.

Finally, 3 important paradoxes spotted in the workshops that need to be worked on are:

- *Diversity and diversification vs complexity and risk aversion*
- *Economies of scale vs finding locally adapted solutions*
- *Rural vs urban: all the issues discussed at the summit are directly relevant for urban citizens, who account for 80% of EU population.*



Field Visits

Presentation of the 8 field visits during the Agro Innovation Summit 2019

N°1

AgroEcoLif – Evaluation of agroecological crop management techniques which can be applied to fibre flax production (EIP OG)

Field visit:
farm parcel located on a farm in La Haye-de-Calleville:
about 45km from Lisieux

France produces 85% of the World's fibre flax. The departments of Eure and Seine-Maritime represent 52% of this production.

Fibre flax requires few chemical inputs. Nevertheless, pests and lodging are difficult to handle without chemical control. The main aim of the AgroEcoLif project is to develop alternatives to chemical control.

This project is led by ARVALIS (Agricultural Techniques Institute) and three cooperatives. The project is studying the overall consistency of fibre flax management techniques through the use of agronomical approaches, biocontrol and mechanical weeding.

The objective of this Operational Group (composed of the project partners) is to achieve a high yield level and sufficient fibre quality. The economic outcomes and the level of chemical control dependency are measured in comparison with those of conventional farming crop management techniques.

N°2

Milk resilience – a study of the socioeconomic resilience of dairy farms in Normandy (EIP OG)

Field visit:
Chamblac
about 30km from Lisieux

This project aims to develop the sustainability of cattle farming. Several Operational Groups and a network of pilot-farms were created at different scales in order to foster the sharing of knowledge, references and tools between farmers, experts and scientists in different countries.

This project is a regional spinout of the European project Euro-Dairy, funded by the Horizon 2020 programme aiming to boost cooperation at the regional, national, and transnational level, through networking and the sharing of tools and knowledge.

This group is composed of pilot farms, engineers, technicians and cattle farming advisers.

The project has two main focuses: "Efficient use of resources" and "Biodiversity" for the development of agroecological practices.



N°3

Collective Dryer "Plaine Pays d'Auge": a partnership between cattle farmers and cereal growers to add value to alfalfa and manure (EIP OG)

Field visit:
about 50km from Lisieux

This project, developed by 15 cattle farmers and 5 cereal growers, aims to foster collective action on the use of leguminous fodder and the creation of a solar dryer to add value to hedgerows. It relies on a triple management of resources: introducing alfalfa in the crop rotation as a source of protein, using manure as an organic amendment for soils and using the shredded wood of hedgerows to supply extra power to the solar dryer. Alfalfa reduces the need for chemical inputs, is an agronomical approach for soils and reduces the need for the weeding.

The project aims to reduce the dependency on external supplies by fostering a local collective approach between cattle farming and cereal growing. The objective is to reinforce the partnership through a lasting contract. The organisational aspect of this project is very innovative.

N° 4

Carbon N Caux (EIP OG)

This project is exploring and examining various sustainable agricultural practices in order to achieve a positive carbon footprint: carbon sequestration and understanding the interactions between carbon and nitrogen in the soil.

Field visit:

**farm in
Gommerville:
about 57km
from Lisieux**

The aim is to develop a more self-sufficient system so as to limit the use of inputs and maximise the use of resources.

The group is composed of 17 farms. They will develop a tool to calculate a farm's carbon footprint. The region for this study, Pays de Caux, is known for its intensive agriculture, soil erosion and crusting. With 11 priority catchment basins, this agricultural region also faces significant water management challenges.

The group expects to find ways to maintain soil fertility and water quality, in order to improve the transferability and sustainability of farms.



N° 5

“Creation and facilitation of an innovative and operational network of Normandy forest areas” and “Normandy Original Forestry Innovations and Adaptations Network” (EIP OG)**Field visit:**

**a forest located
in Saint-Germain-
de-Livet:
about 10km
from Lisieux**

Forests in Normandy are currently faced with several challenges: adaptation to climate change, sustainability, additional value for wood for industrial purposes, sanitary issues, energy transition (wood energy, carbon sequestration), multifunctionality (hunting, hiking) ... In order to tackle these issues, the partners of the two projects are carrying out discussions and activities including:

Predictive mapping of forest plot in order to help foresters select forestry species taking into account adaptation to climate change

Implementing and facilitating a regional network of forest territories to enable dialogue and collective actions in conjunction with foresters, researchers, local authorities, schools and environmental advocacy groups

Douglas and Nordmann first management: creation of references, implementation of a demonstration network for new forestry species, implementation of demonstration tests of dynamic juvenile forestry and the comparison of different formats.

N° 6

Economic and Environmental Interest Grouping “Biodiversity to raise farmers’ awareness about good practices and gain a better understanding of ecosystem services”**Field visit:**

**55 hectares
arable land,
located in
OUILLY-le-Tesson
– about 44km
from Lisieux**

The project objective is to bring together the skills of beekeepers, farmers and academics to foster the presence of auxiliary and pollinator insects. This is achieved by adding specific landscape features in farmed areas such as melliferous flower strips, in relation with other landscape features such as hedges. The project will evaluate the benefits of these landscape features using smart objects (beehives, drones).

Bringing farmers and beekeepers together in a common project raises awareness amongst farmers about biodiversity and enables them to have a better understanding of ecosystem services.

The partnership with an agricultural school contributes to raising awareness amongst future generations of farmers and other agriculture stakeholders. Various actions are planned in this project: good practices guide, integrating the observations in training programmes, communicating to local stakeholders and the general public.

N°7

Queen Mathilda

“Reine Mathilde” (Queen Mathilda) is an innovative, multi-stakeholder and structuring project for the organic dairy sector. Its aim is to make Normandy a pilot region for the production and processing of organic milk by supporting farmers on the environmental issues. The objectives of the project are to develop the organic dairy sector by fostering and facilitating the converting to organic agriculture in Normandy and reinforcing the sector by innovating for the competitiveness and sustainability of cattle farms. To reach these goals, the project aims to:

federate the stakeholders to develop and communicate together on matters such as food self-sufficiency

develop regional expertise on organic dairy production through the creation of references from the tests on fodder producing agriculture and environmental approaches.

The interest of the project lies in the partnership between conventional and organic farmers, advisers, veterinarians, scholars and students.

*Field visit: farm
in Tracy Bocage:
about 78km
from Lisieux*

N°8

Association for Agroforestry Dynamics in Normandy (Economic and Environmental Interest Grouping)

This project aims to increase agroforestry dynamics in the region by setting up a stakeholder network for sharing experiences and knowledge (including a bee health protection group, beekeepers union, regional association for the study and improvement of soils, three agricultural colleges, forestry cooperatives, cooperatives). Agroforestry systems associate the three founding components of agroecology: economic, social and environmental performance. In addition to improving agricultural yield which can be seen in certain agroforestry systems, the multifunctionality of agroforestry ensures a financial gain for the forester through the sale of wood or improving beekeeping activities and fruit cultivation. The field visit will be on a test parcel used for training courses.

*Field visit:
farm parcel
near Neubourg
agricultural school:
about 50km
from Lisieux*



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Short and full report, videos, projects and documents are available on the AIS 2019 website

<https://www.reseaurural.fr/Sommet-agri-innovation-2019>

EIP website:

<https://www.reseaurural.fr/le-partenariat-europeen-pour-linnovation-agri>

<https://ec.europa.eu/eip/agriculture/en/about>