



# Subgroup on Innovation for agricultural productivity and sustainability

14<sup>th</sup> Meeting

14 June 2019

**REPORT**



The Subgroup on Innovation (Sol) met for the fourteenth time in Brussels (Belgium) on 14 June 2019.

The objectives of the meeting were:

- a) to analyse and discuss the proposals for new networking activities to be carried out in 2020;
- b) to provide feedback from recent networking activities and to present the upcoming events;
- c) to inform the members of the Subgroup about the 2019 edition of the self-assessment of the European Rural Networks;
- d) to provide information on the EU survey on Precision Farming Technologies.

### ***Latest updates on EIP-AGRI***

After a warm welcome, Kerstin Rosenow, Head of Unit DG AGRI B.2, presented the [latest updates on the implementation of the European Innovation Partnership for Agricultural Productivity and Sustainability](#). She particularly focused on:

- recent and future EIP-AGRI Focus Groups' meetings,
- upcoming Horizon 2020 thematic networks,
- the state of play on CAP post 2020 negotiations (in the area of AKIS, advice and innovation),
- the place of AKIS in the future CAP Strategic Plans,
- Horizon Europe.

Kerstin Rosenow drew specific attention to the **upcoming Horizon Europe research and innovation mission on 'soil health and food'** since applications for the mission board were still open. She mentioned that, in the light of this mission, the 2020 EIP-AGRI proposals for the activities related to soil management might be especially relevant and important.

### ***Shaping the work of the EIP-AGRI network for 2020***

The main focus of this Sol meeting was on discussing and **prioritising proposals for EIP-AGRI networking activities for 2020**. Magdalena Mach (DG AGRI) provided a [general introduction](#) to the clustering of ideas for next year's EIP-AGRI work programme. The proposals were collected prior to the meeting through a survey amongst the Sol members, and from other relevant sources (website, recent events, past proposals etc.). They were assembled in 4 clusters and 25 sub-clusters and sent to the participants in the form of a booklet before the meeting<sup>1</sup>.

The proposals were shortly presented in the plenary session, and put in the context of previous and future activities as well as H2020 or other EU projects. They were discussed throughout the day in 4 breakout groups. The conclusions were reported in the plenary session. The results of the group discussions can be found in **Annex 1**. These results will be further explored and – if needed – will form part of the agenda at the next Sol meeting.

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<sup>1</sup> Leftover proposals from last year and proposals that arrived too late will be taken into account at a later stage.

### ***Feedback on ongoing and future activities***

Margarida Ambar (EIP-AGRI Service Point) provided the participants with the feedback on the workshop “[Cropping for the future: networking for crop rotation and crop diversification](#)”, that took place in Almere (the Netherlands) on 4-5 June 2019. The workshop aimed at creating awareness and promoting the adoption of crop rotation and crop diversification, as well as providing networking opportunities for OGs and other innovative projects. The networking market place during the event was highlighted as very successful.

Pacôme Elouna Eyenga (EIP-AGRI Service Point) gave a short state of play concerning the upcoming [Agri Innovation Summit](#) , to be held in Normandy, France, on 25 and 26 June 2019.

Magdalena Mach (DG AGRI) informed the participants that in 2019 a new edition of the [self-assessment of the European Rural Networks](#) will take place. Sol members were kindly requested to complete the survey for this exercise before mid July. The results of the survey will be presented and discussed in the Rural Networks Steering Group meeting on 21 October 2019. An interactive session may be organised at the Assembly in December to discuss the final results, confirm and if necessary complete the recommendations put forward by the Steering Group. The self-assessment will be concluded with the publication of a report.

Finally, Andrea Furlan (DG AGRI, Unit D2) informed the participants about the [EU survey on Precision Farming Technologies](#) which was sent to all rural development managing authorities of the EU Member States. The project aims at providing data on the uptake of precision farming techniques across the EU farming community through 4 public surveys: a survey to farmers, a survey for the machinery sector, a survey to contractors and a survey to public administrations.

### ***Closure***

Alberto D’Avino (DG AGRI) thanked the participants for their valuable contributions and closed the meeting.

The next meeting of the Sol will take place on **Wednesday 16 October** in Brussels (Belgium).

**The detailed agenda of the meeting and all presentations can be found [on the EIP-AGRI website](#).**

## Annex 1: Results of the breakout sessions on the proposals for EIP-AGRI networking activities for 2020

Cluster 1: Capacity Building/AKIS	
The overview of collected proposals organised in cluster 1 can be found <a href="#">here</a>	
SUBCLUSTER 1.1 CAP	
<b>SHORT DESCRIPTION</b>	Two ideas were clustered under this topic. One idea was on how to create synergies between agri-environment measures and eco-schemes. The other idea was on how to structure networks at EU and national level to boost innovation.
<b>WHY</b>	It is important to create an environment that is conducive to innovation to make EU agriculture and forestry more sustainable and productive. EU Member States need to find appropriate measures to do this, and they would benefit from exchanges on good practices.
<b>FOR WHOM</b>	Very important for managing authorities to find good indicators, among other things. Farmers and advisers also need to be involved, to be sure that the measures will work as desired in practice.
<b>WHAT</b>	<p>For the EIP-AGRI networking activities for 2020, one group proposed that the topic should be <b>tackled together with ENRD</b>, especially because ENRD is planning an event on agri-environment measures.</p> <p>Another group proposed to focus specifically on <b>exchanges of good practices</b>, such as:</p> <ul style="list-style-type: none"> <li>- Bringing together good practices and EIP-AGRI results and discussing – at policy level - which instruments could be useful;</li> <li>- Discussing and exchanging on how to establish an innovative process in all EU Member States involving farmers to develop better measures;</li> <li>- Discussing and exchanging on how to use tools such as the LPIS (Land Parcel Identification System) and the new farm sustainability tools for nutrients to not just control, but to develop new useful knowledge for farmers;</li> <li>- Exchanging on and developing new and useful ways to share information between farmers, authorities and advisers.</li> </ul>

Cluster 1: Capacity Building/AKIS	
SUBCLUSTER 1.2 AKIS	
<b>SHORT DESCRIPTION</b>	Several proposals were discussed in this subcluster: how can AKIS be supported and further developed under the new CAP, how to transfer knowledge and create impact on the farms, how can AKIS contribute to the advancement of the Sustainable Development Goals (SDG's). The demonstration farms (subcluster 1.3) and the production of videos (subcluster 1.4) were considered to be linked to this subcluster.
<b>WHY</b>	AKIS is an important topic that each Member State has to deal with. There are still many questions among the EU Member States on this topic – on how to design it, the format, etc. There are different models in all Member States. The concept itself is also quite new for many. Most relevant groups do not know about their role in AKIS, let alone what it is. It is a <b>good timing</b> for EIP-AGRI to work on this topic, since EU Member States will be preparing their AKIS strategic plans.
<b>FOR WHOM</b>	It would be relevant/important for all AKIS stakeholders: NRNs (National Rural Networks), Managing Authorities, researchers, advisers, farmers, agribusiness, innovation brokers, and certainly also agricultural education, and the younger generations need to be involved.
<b>WHAT</b>	<p>For 2020 a <b>specific event</b> on this topic is considered relevant and important, and it could be followed by a <b>series of workshops</b> to share and exchange good examples, exchange on ways to strengthen AKIS to spark innovation in farming and forestry, link competence centres, link with advisers (many different systems in the EU).</p> <p>The need to <b>engage farmers</b> along the way and to keep them engaged was stressed.</p> <p>Since the goal of AKIS is improving knowledge flows, one group argued that it would be interesting to meet with other projects or gather projects that work on AKIS. In this regard, a <b>networking event</b> to gather projects and stakeholders would be good (sharing experiences and explaining, with an emphasis on being results-oriented).</p> <p>Two groups highlighted the need to pay attention to <b>public-private collaboration</b> instead of merely focussing on public institutions.</p> <p>In relation to the proposal of <b>AKIS and the SDG's</b>, one group argued that the FAO is dealing with this, whilst the other groups saw the need for training/education on SDG thinking and creating awareness.</p>

## Cluster 1: Capacity Building/AKIS

### SUBCLUSTER 1.3 DEMONSTRATION FARMS

<p><b>SHORT DESCRIPTION</b></p>	<p>A network of demonstration spaces: it is proposed to develop a programme of field visits to public and private holdings, which will develop actions to adapt the Montado /Dehesa system to new challenges, including those arising from climate change. The visits should include exchanges on technical and scientific content.</p>
<p><b>WHY</b></p>	<p>The proposal states that it will only be possible to mobilise the actors for the adoption of adaptation measures on their properties if awareness is raised about the expected risks. Strengthening cooperative work among different types of actors will be key.</p> <p>Demonstration farms are important as a bridge between farmers and the academic world. Transnational exchange between farmers is very valuable, especially on very specific questions. Farmers like to hear about other farmers' experience. This part is missing in the H2020 project FARMDEMO.</p>
<p><b>FOR WHOM</b></p>	<p>Farmers with questions for whom transnational exchange would bring possible solutions. Also advisers, scientists, policy makers, etc.</p>
<p><b>WHAT</b></p>	<p>The topic was discussed in two breakout groups. For both groups, demonstration farms should be part of a well-functioning AKIS and could thus be linked to subcluster 1.2 on AKIS.</p> <p>Regarding the proposal of a network of demonstration farms, one group discussed whether improvement of the network of demonstration spaces should be a <b>national task or an EIP task</b>, whether it would be an advisory or a scientific task.</p> <p>A demonstration space as such is not particularly innovative, however, the possibility of <b>virtual farm visits</b> was discussed. This can reduce costs and time investment and it can be more innovative: virtual visits through web meetings, live streaming, webinars. To be explored how virtual field visits can be made interactive. A <b>Focus Group</b> was proposed, especially investigating the possibilities of virtual field visits. The EIP-AGRI Service Point could maybe organise a kind of <b>transnational market place</b> or platform to facilitate these virtual visits.</p> <p>It could also be a Focus Group with a focus on <b>technology for virtual demonstration farms</b>. Or, one step further - <b>peer to peer</b>: how can farmers support other farmers - like an advisory service - and be paid for the service?</p>

## Cluster 1: Capacity Building/AKIS

### SUBCLUSTER 1.4 CAPACITY BUILDING

<b>SHORT DESCRIPTION</b>	It was proposed to organise a training of OGs on 'How to produce your own videos'.
<b>WHY</b>	Communication about projects is crucial. But the communication tools should not be limited just to videos. Using videos should be integrated in all EIP-AGRI activities. Making videos would be a cost-effective way of spreading the results and knowledge from the projects. It is important, especially for young farmers.
<b>FOR WHOM</b>	The focus should be on farmers as a target group but it is relevant/important for the whole EIP-AGRI network.
<b>WHAT</b>	<p>Most groups agreed that training is needed, or tutorials could be developed, but the question remains whether it should be organised by EIP or nationally. Depending on the level of ambition concerning the quality of the images, participants could find their own way on the internet to find instructions in their own language, or training sessions could be organised to 'train the trainers' on how to make attractive videos and on how to use the right key words to attract the viewers' attention.</p> <p>One group proposed to organise '<b>Farminars</b>' and have farmers film what they are doing / working on in their project to show to other farmers (<b>peer-to-peer</b>).</p> <p>Subcluster 1.3 and 1.4 have a common element, namely "<b>how can we use IT technology in sharing knowledge, capacity building or advisory services to farmers?</b>". An <b>event</b> could be organised on this topic, or a <b>Focus Group</b> on a specific element.</p>

Cluster 1: Capacity Building/AKIS	
SUBCLUSTER 1.5 COLLECTIVE AND COOPERATIVE APPROACHES	
<b>SHORT DESCRIPTION</b>	The proposals under this topic focused on how to encourage farmers' collaboration and cooperative models. One group focused their discussion on cooperation around farm data.
<b>WHY</b>	<p>It is important to make farmers more conscious of the importance of working together and acquiring a scale that allows them to have higher quality products with higher profits. In Eastern Europe, collaboration isn't really happening yet and it would thus be important to encourage farmers to join agricultural cooperatives. In this regard it is crucial to show and promote the benefits of collaboration in order to encourage farmers to cooperate.</p> <p>The benefits of collecting and sharing farm data and collaborating on data are not always clear to everyone involved. The issue of the security of the data and the fear of not knowing what will happen with the data and what are the consequences, are a reason why some farmers are hesitant to share their data. However, data is a key factor for increasing the sustainability, competitiveness and quality of the agricultural system for the future.</p>
<b>FOR WHOM</b>	It is important mainly for farmers and should be seen as a bottom-up process. However, in countries where collaboration or cooperative models/approaches aren't really taken up, it would also be important to involve other (AKIS) stakeholders, especially the advisory services in order to create an awareness and spread the idea/concept.
<b>WHAT</b>	<p>One group argued that it is not a priority for the EIP-AGRI work programme for 2020 and that the topic could rather be included in the planned Workshop on Small Farms. However, it could be interesting to look for good practices on how farmers cooperate in different countries. The concept of <b>multi-stakeholder cooperatives</b> was mentioned as innovative and interesting to look at.</p> <p>The other group that focussed the discussion on cooperation around data, expressed the need to show and promote the benefits of collaboration in order to encourage farmers to cooperate.</p> <p><b>New technologies to facilitate cooperation</b> between farmers or between farmers and other actors are needed.</p>



## Cluster 2: Sustainable management of natural resources

The overview of collected proposals organised in cluster 2 can be found [here](#).

### SUBCLUSTER 2.1 ECOSYSTEM SERVICES

<b>SHORT DESCRIPTION</b>	The topic specifically addresses the remuneration of ecosystem services, and the need to develop valuation methodologies. The proposed idea is about ecosystem services in the Mediterranean area, but according to Sol members the topic is important for the whole European Union so it should be looked at from a broader perspective.
<b>WHY</b>	Ecosystem services are becoming more and more important, also in the new CAP. Farmers who provide ecosystem services should receive some kind of remuneration. There is a need for a level playing field for the farmers that are contributing to the ecosystem services (so they aren't disadvantaged in comparison to other farmers). The capitalisation of the benefits that the ecosystem services provide is very important in order to make sure that the farmers do not lose part of their income. It is thus important to look at technologies for the valuation of the ecosystem services.
<b>FOR WHOM</b>	It is a multi-stakeholder topic. Consumers, farmers and forest owners, institutional bodies should be involved.
<b>WHAT</b>	<p>Communication about how agriculture provides ecosystem services is important. <b>Awareness raising</b> – both to farmers and to the public – is important.</p> <p>It was proposed to work around <b>true pricing</b> as a tool to value ecosystem services. There are good practices. EIP-AGRI could work on valuation systems, on evaluation systems, or on the <b>standardisation of approaches to true pricing</b>. The role of the EIP-AGRI network and how this can contribute to it is - for example - in showing good practices or in developing (e)valuation methods. There is a need for an umbrella perspective from the EU, a standardised approach in the different Member States.</p>

Cluster 2: Sustainable management of natural resources	
SUBCLUSTER 2.2 WILDLIFE AND FARMING	
<b>SHORT DESCRIPTION</b>	The topic addresses the combination of wild animals, reindeer, large carnivores with agriculture, and measures to prevent damage to farm level.
<b>WHY</b>	<p>This is a new topic, not really covered by H2020.</p> <p>There is a growing number of wild animals of different kinds on and around farms: dangerous animals like bears and wolves, herbivores like deer and wild boar, and animals that provoke other damage like badgers (holes) and beavers (blocking water courses). However, the combination of wildlife with agriculture may lead to conflict – in both ways, i.e. wildlife may cause harm to farmers, but some farming practices might also cause harm to wildlife. EIP-AGRI could explore how a good balance can be established.</p>
<b>FOR WHOM</b>	Farmers, nature organisations, advisers, etc.
<b>WHAT</b>	<p>One group proposed that for the EIP-AGRI networking activities in 2020 a <b>specific Focus Group</b> can be established on <b>how to combine wildlife with improving agricultural production</b>.</p> <p>The other group concluded that there is definitely a <b>lack of innovative approaches</b> to protect farms and their animals and this should be dealt with. There might be a need for examples from different Member States to <b>exchange good practices and ideas</b> on possible solutions or ways to deal with the issue. It was however not clear in the discussion whether the topic should be tackled by EIP-AGRI and the CAP or whether it is outside the scope of the EIP-AGRI network.</p>

## Cluster 2: Sustainable management of natural resources

### SUBCLUSTER 2.3 CLIMATE CHANGE

<b>SHORT DESCRIPTION</b>	<p>There were several proposals that can be divided in two main groups:</p> <ul style="list-style-type: none"> <li>- Help farmers to live with climate change as a fact (adaptation)</li> <li>- Agricultural methods that help prevent climate change further (CO<sub>2</sub> neutral or sequestration - mitigation)</li> </ul>
<b>WHY</b>	<p>Climate change is at the core of any discussion regarding sustainable agriculture and forestry.</p>
<b>FOR WHOM</b>	<p>This was not discussed.</p>
<b>WHAT</b>	<p>The topic was discussed in three breakout groups. It was a <b>broad topic</b> to discuss, with a lot of proposals. A lot has already been done on this topic. In this regard, one group proposed to rather <b>focus on the validation and the measurement of existing measures</b>. What is the impact of what has been already done, how can we validate this and give feedback to the farmers? This might be more research oriented. The validation and measurement is also important to (in)form the public opinion, and to be able to elaborate facts-based communication strategies. EIP-AGRI might offer support to develop suitable communication strategies.</p> <p>The other group proposed – given the amount of work that has been done on this topic – to organise an <b>event on climate change and agriculture</b> with the objective of collecting and disseminating good practices, create awareness (to society, farmers and policy) and promote innovation. EIP-AGRI could specifically look for <b>practices at farm level</b>, e.g. how to measure the impact of climate change actions on the farm level, tools for farmers and their benefits, such as labelling carbon footprint, energy efficiency (saving money), measures for risk management, etc.</p>

## Cluster 2: Sustainable management of natural resources

### SUBCLUSTER 2.4 AGRO-ECOLOGY/PESTS AND DISEASES

<b>SHORT DESCRIPTION</b>	The ideas proposed under this topic were on strategies for emergent pest and disease control at EU level, biological control of pests and diseases and on IPM strategies for a chemical-free agriculture.
<b>WHY</b>	There are new pests and diseases. They can be quite specific per region. However, especially with climate change, pests and diseases are 'travelling', that's why there is a need for expertise from elsewhere (other EU countries may be able to help). General value chain interest, based on customer demand to limit the use of pesticides and improve food quality.
<b>FOR WHOM</b>	Researchers, policy makers, advisers, farmers, EFSA (food safety), agribusiness, agricultural education
<b>WHAT</b>	<p>The topic was discussed in two breakout groups. One group focused the discussion on <b>biological control</b>. This has been mainly tested and used in greenhouses. Can these technologies be transferred to the open field? It would be interesting to <b>get an overview of what is available</b>, how to use, what would be best to use etc. Do these technologies fit into existing farm management, do they demand other types of farm management (completely or partially)?</p> <p>The other group mentioned that EIP-AGRI could consider to build upon <b>the results of the Summit on Agricultural Innovation in June 2019</b>, which is focusing on agro-ecology. In any case, in view of the rising demand from citizens/customers to limit the use of pesticides and improve food quality, and taking into account the need to create more resilient systems, it could be interesting to consider the <b>following elements while planning the activities for 2020</b>:</p> <ul style="list-style-type: none"> <li>- developing knowledge and exchanging experience in working with a systems approach;</li> <li>- specific issues in specific farming/forestry systems e.g. specific crops, fruit, forestry;</li> <li>- climatic zones, and new technologies for warning systems and early detection.</li> </ul>

## Cluster 2: Sustainable management of natural resources

### SUBCLUSTER 2.5 SOIL MANAGEMENT

<b>SHORT DESCRIPTION</b>	Two ideas were proposed. One idea was on data management and monitoring systems for land and soils. The other idea was on how to predict and prevent loss of agricultural land through landslides, especially in view of climate change.
<b>WHY</b>	<p>There is a need for good quality soils for agriculture and forestry, not just now, also in the future, and there are new technologies available – and also related to climate change: there is an opportunity for farmers to fix carbon, while improving their soils.</p> <p>Data on soil and soil management has been collected for ages. However, as knowledge on the functioning of soils has evolved, new data sets are needed. Soil management science has developed from nutrient management to a holistic approach of the soil which includes organic matter, soil life etc. Nowadays the aim is to use less fertilisers, stimulate biodiversity and meanwhile increase productivity (yield, quality). At the same time there are farmers that do not have the means to handle the data that is available, like land use, nutrients, whether on larger scale or on their own farm.</p> <p>Landslides are a problem in mountain areas, especially now that climate change is causing more severe and unpredictable storms; when farmland is washed away, this is irreversible and it may cause farmers to go out of business, so prevention is essential.</p>
<b>FOR WHOM</b>	Farmers, advisers, Managing Authorities, research, IT companies, innovation support and future generations
<b>WHAT</b>	<p>The topic was discussed in all four breakout groups. Soil management and monitoring is an important topic. It is <b>linked to other topics</b>, also to climate change. In one group it was proposed to consider the organisation of an <b>overview event</b> that looks at <b>soil management related to ecosystem services</b>.</p> <p>Some groups focused the discussion on <b>data on soil and soil management</b>. A number of ideas were discussed that could be relevant for EIP-AGRI:</p> <ul style="list-style-type: none"> <li>- There is already a lot of data, but <b>how to use the available data</b>? Who is using the data? How is it fed back to the farmers? How is it used to inform policy-making?</li> <li>- What innovations are available to collect data? How are we going to measure carbon sequestration in the soil and soil carbon emissions?</li> <li>- Work on <b>soil health indicators</b>: indicators have to be defined for soil management data. This could be an idea for a Focus Group. Better</li> </ul>

	<p>indicators will lead among others to lower fertiliser use and increased biodiversity. What would be useful <b>indicators for a holistic approach of the soil?</b></p> <p>Regarding <b>landslides</b> (2.5.2), the discussion was mainly about how to predict and prevent loss of agricultural land through landslides, especially in view of climate change. The following activities on the topic of landslides were proposed:</p> <ul style="list-style-type: none"> <li>- <b>Focus Group on preventing landslides</b>, recognising the starting points for landslides, preventive measures and good practices for soil retention in mountainous areas (including agroforestry, forestry) – this may be linked with monitoring.</li> <li>- Possible <b>follow up to Focus Groups dealing with soil organic matter</b> Soil monitoring, link with GAEC (Good Agricultural and Environmental Conditions), and the new EU monitoring tool on soil nutrient management.</li> </ul>
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## Cluster 2: Sustainable management of natural resources

### SUBCLUSTER 2.6 WATER MANAGEMENT

<b>SHORT DESCRIPTION</b>	Two ideas were discussed: the reuse of treated water in irrigation, and irrigation and biodiversity.
<b>WHY</b>	<p>Water management is part of the climate issue and differs a lot depending on the region in Europe. In the Mediterranean area there is a lack of water while in other countries the issue is not a lack of water but rather the water quality and the amount of nutrients in the water used for agricultural production.</p> <p>Irrigation is becoming relevant in other parts of the EU – leading to more need for exchange among EU Member States – and leading to more need for attention to the influence of irrigation on the environment, including biodiversity.</p>
<b>FOR WHOM</b>	Irrigation associations, farmers, NRNs, advisers, researchers, public authorities
<b>WHAT</b>	<p>The topic was discussed in three breakout groups. It is also related to other topics, such as climate change.</p> <p>One group approached the topic from the circular economy point of view and focussed specifically on the reuse of treated water as part of a bigger circular system. It is important to also look at the impact of reuse. In some Member States a <b>circular approach</b> is developed in 'industrial ecosystems' where different actors (not only agricultural actors) work in close collaboration to reuse side streams and set up a circular system. No specific activity was proposed. It was proposed to check what has or is being done by EIP-Water, PRIMA, etc.</p> <p>Regarding the idea about <b>irrigation and biodiversity</b> (2.6.2) the remark was made that it is more important to regenerate ecosystems instead of using irrigation and artificial systems to increase the natural biodiversity. <b>Regenerative agriculture</b> focuses on regenerating the ecosystems and going back to previous states or systems (for example concerning the capture and storage of water). In this context, the example of regions where desertification poses a risk was mentioned. The concept of regenerative agriculture is strongly linked to the topic of ecosystem services.</p> <p>The following proposals were made, although participants were not sure whether these should be tackled by EIP-AGRI:</p> <ul style="list-style-type: none"> <li>- the <b>effects of water on biodiversity</b> could be a topic for an event.</li> <li>- developing robust and scientific measures to <b>assess water footprints</b>.</li> </ul>

## Cluster 2: Sustainable management of natural resources

### SUBCLUSTER 2.7 FEED

<b>SHORT DESCRIPTION</b>	The proposal was to test and collect practices on fodder that provide a quality feed for animals, while supporting the environment and local development.
<b>WHY</b>	This was not discussed by the Sol members.
<b>FOR WHOM</b>	This was not discussed by the Sol members.
<b>WHAT</b>	<p>The topic on fodder was briefly discussed in two breakout groups. Although it is important, it is <b>not a priority</b> for EIP-AGRI for 2020.</p> <p>A lot of work has been done on this: FG and workshop on protein crops; FG on new feed; FG permanent grasslands; FG robust and resilient dairy farming.</p> <p>In one group it was mentioned that it would be better to look at it from a point of view of circular economy or circular agriculture than merely trying to optimise the feed production. In this regard the topic of innovative feed is very interesting but part of another discussion (topic 4.4) and already addressed in a previous FG.</p>

### SUBCLUSTER 2.8 GENETIC RESOURCES

<b>SHORT DESCRIPTION</b>	The proposal was on native and traditional farm animal breeds: ensuring a future for heritage livestock.
<b>WHY</b>	The topic has not received much attention during the group discussion, although it could be very relevant for small-scale farmers.
<b>FOR WHOM</b>	Small-scale farmers; farmers managing agricultural nature-protected land; consumers
<b>WHAT</b>	The topic on native and traditional farm animal breeds was discussed in three breakout groups. Two groups concluded that it is <b>not really a priority</b> for next year's EIP-AGRI programme. A third group, though, considered that the topic hasn't received a lot of attention, although it can be very important in the light of climate change, for small farming, for food quality e.g. creating value for old pig breeds. Old breeds which are stronger could become more profitable, have a positive impact on the landscape, and provide quality food.



## Cluster 3: Value chains/competitiveness (incl. bioeconomy, circular economy and food loss)

The overview of collected proposals organised in cluster 3 can be found [here](#)

### SUBCLUSTER 3.1 BEEF VALUE CHAIN

<b>SHORT DESCRIPTION</b>	Two proposals were clustered under this topic. One was to set up a thematic network on beef quality, to make the European beef industry more sustainable and competitive. The other proposal was more related to meat quality.
<b>WHY</b>	Meat consumption is increasingly being challenged due to environmental and human health implications. Although meat consumption is declining in many European countries, consumers ask for high quality meat, produced in a more sustainable manner. Therefore, the beef/meat sector needs to leverage all the tools at its disposal to ensure consumer satisfaction in an environmentally sustainable manner.
<b>FOR WHOM</b>	HNV farmers, chefs and culinary journalists, advisers, researchers, consumers, slaughterhouses
<b>WHAT</b>	<p>The topic was discussed in two breakout groups.</p> <p>One group concluded that it could be interesting to organise an activity focused on <b>how to increase the sustainability of the beef chain</b> and on <b>how to promote a sustainable beef value chain</b> in order to match with social expectations, social impacts, environmental issues, economic aspects. The focus should not be on industrial production systems.</p> <p>Another group adapted the original idea and gave specific attention to <b>low-carbon impact beef</b>, from areas where grazing also benefits landscape and biodiversity, and where growing crops is not an option. Cattle and sheep can graze in areas where crop production is not possible. Extensive grazing helps maintain mountain pastures and other biodiverse areas. For the 2020 programme, a <b>workshop on low-carbon impact beef</b> could be organised. The work done by OGs could be checked. Possible subtopics could be: innovative (virtual) fencing, defining consumer-level quality indicators, quality scheme at EU level.</p> <p>The topic could be linked to the 2019 workshop on small scale farming. It can also be related to some other topics, like climate change and ecosystem services.</p>

## Cluster 3: Value chains/competitiveness (incl. bioeconomy, circular economy and food loss)

### SUBCLUSTER 3.2 SHORT SUPPLY CHAIN (SSC)

<b>SHORT DESCRIPTION</b>	Three ideas were presented under this cluster: regional logistics for SSC, out of home consumption and its impact on products, distribution channels and primary production, and collaborative SSC and community-supported agriculture.
<b>WHY</b>	SSC generates a lot of environmental and socio economic advantages for producers as well as consumers and society as a whole.
<b>FOR WHOM</b>	This was not discussed by the Sol members.
<b>WHAT</b>	<p>The topic was discussed in two breakout groups. While the topic is very important, it is already covered in a Thematic Network (SKIN), a FG on innovative SSC, and other projects. It is <b>not really seen as a priority</b> right now.</p> <p>Nevertheless, a number of ideas were brought up:</p> <ul style="list-style-type: none"> <li>- Regarding the topic of <b>'out of home consumption'</b> it was mentioned that it is a challenge for small farms and cooperatives to adapt to this market. For some aspects (for example food for schools) there is also the issue of public procurement which is difficult to access for small farms. In this regard it could be interesting <b>to have an exchange</b> at EU level regarding these challenges and the access to this market.</li> <li>- It could be checked if <b>an update</b> is needed <b>of the FG on innovative SSC</b>.</li> <li>- Other ideas could be a Focus Group concerning the access to the new/different markets for farmers or a workshop for different actors in the supply chain.</li> </ul>

## Cluster 3: Value chains/competitiveness (incl. bioeconomy, circular economy and food loss)

### SUBCLUSTER 3.3 PRODUCT QUALITY

<b>SHORT DESCRIPTION</b>	Making more out of less - More income through quality
<b>WHY</b>	Reasons to take this up: <ul style="list-style-type: none"> <li>- Finding innovative ways to increase farm income while decreasing costs and improving the environment;</li> <li>- Consumer-orientation and economics (think `backwards` to implications of consumer demands for farming);</li> <li>- Promote genetic variety of crops and animals.</li> </ul>
<b>FOR WHOM</b>	Consumers, farmers, legislators, research (including those working on genetic variety), marketing, culinary expertise
<b>WHAT</b>	<p>This topic was only discussed in one group. There were some doubts on how to deal with this topic, and with what focus. Should the topic be broadened to <b>farm quality</b> instead of product quality? Or should we rather talk about <b>product differentiation</b>? What is "quality"? What about the consumers' perspective (consumer-orientation and economics)?</p> <p>The group didn't propose a specific EIP-AGRI activity for this topic. It could maybe be explored as a possible topic in the WS on small scale farming.</p>

## Cluster 3: Value chains/competitiveness (incl. bioeconomy, circular economy and food loss)

### SUBCLUSTER 3.4 BIO ECONOMY

<b>SHORT DESCRIPTION</b>	A broad spectrum of proposals have been submitted ranging from the use of plant residues and industrial crops to raising awareness on the use of plastic.
<b>WHY</b>	Especially plastic is a relevant issue. There's a need for innovation, particularly for packaging. There is a need to look for alternatives to plastic which are competitive.
<b>FOR WHOM</b>	This was not discussed by the Sol members.
<b>WHAT</b>	<p>This subcluster was discussed in three breakout groups. The importance of the topic is growing, as is the knowledge about it. The topic is very broad and came with 7 proposals with a broad range.</p> <p>'Plastics' is currently a relevant theme. One group focused specifically on this topic and on the importance of <b>reducing the use of plastics</b>. There is a need for innovation, particularly for <b>packaging</b>. There is a need to look for <b>alternatives</b> which are competitive. There's an opportunity to use the sub products/by-products from agriculture and forestry to replace plastic.</p> <p>Another group mentioned that the focus for future activities should be on the whole process, i.e. the complete value chains and not only the production side or the consumption side or an intermediary step. One of the ideas mentioned in the group was '<b>new non-food crops on marginal lands</b>' or '<b>new alternative crops on marginal lands</b>' with an emphasis on all stages of the process and not just one part and also avoiding competition with food production.</p> <p>One group focused the discussion on <b>new industrial crops</b> and their use in the bio economy and discussed whether it is relevant to <b>organise a Focus Group</b> that could give an overview of all types of industrial crops: should they be grown only in marginal lands? What do they need in terms of climate, soil? Do they fit in multi/intercropping systems? What is the use/application of the product and residues?</p>

## Cluster 3: Value chains/competitiveness (incl. bioeconomy, circular economy and food loss)

### SUBCLUSTER 3.5 POST HARVEST/FOOD LOSS

<b>SHORT DESCRIPTION</b>	Technical ways to minimise food loss.
<b>WHY</b>	This was not discussed by the Sol members.
<b>FOR WHOM</b>	This was not discussed by the Sol members.
<b>WHAT</b>	<p>This subcluster was discussed in three breakout groups. It was mentioned that there was already a FG on food loss (at farm level) and EIP-AGRI could focus on a good dissemination of the report of this FG, or follow up on this FG before organising a new one.</p> <p>One group focused on the <b>link between consumers and producers</b>. Data collection at consumer level is important in order to know how farmers can adapt to consumers' needs and in order to link consumers more to the production side. There is a need for linking consumers to what's left on the field, also to create awareness of the issue. There is also the question on how farmers can adapt to consumers' needs throughout the year and how supply chains can be organised to consumers' needs. In this regard the whole supply chain should be taken into account, also including the supermarkets. An exchange of examples and good practices could be interesting, for example a <b>workshop</b> to inspire people and exchange ideas.</p>

## Cluster 3: Value chains/competitiveness (incl. bioeconomy, circular economy and food loss)

### SUBCLUSTER 3.6 MARKETS – NICHE PRODUCTS

<b>SHORT DESCRIPTION</b>	Two ideas were clustered under this topic: 'food for the elderly' and 'Mediterranean food products'.
<b>WHY</b>	There are a lot of (new) market opportunities in the development of niche products due to different diets and consumption patterns (for example the increase of single households).
<b>FOR WHOM</b>	Catering, markets, farmers, public catering, different consumer groups, marketing research, public procurement, health insurance companies?
<b>WHAT</b>	<p>This subcluster was discussed in three breakout groups.</p> <p>For one group the topic was <b>not a priority</b> for EIP-AGRI in 2020.</p> <p>Another group suggested to <b>broaden the topic</b> and organise a <b>workshop</b> on “<b>production for different consumer groups</b>” (the elderly, migrant community, etc.).</p> <p>The other group commented that there are a lot of (new) market opportunities in the development of niche products due to different diets and consumption patterns (for example the increase of single households). An <b>exchange on what's already happening</b> around niche products in Europe (for example different Operational Groups that deal with these topics) would be interesting. There could be a focus on the production side, but also industries are an important element. Creating added value, meeting consumers' demand, new characteristics of food (for example an increase in omega 3) are all aspects that could be included.</p>

## Cluster 3: Value chains/competitiveness (incl. bioeconomy, circular economy and food loss)

### SUBCLUSTER 3.7 NEW FARM BUSINESS MODELS

<b>SHORT DESCRIPTION</b>	Start new businesses on farm locations, exploring the enabling environment for business creation on farm.
<b>WHY</b>	This was not discussed by the Sol members.
<b>FOR WHOM</b>	This was not discussed by the Sol members.
<b>WHAT</b>	<p>The topic of new farm business models was discussed in three breakout groups and all groups agreed that the topic should <b>not be included in next year's programme</b>.</p> <p>In one group it was concluded that the topic of new farm business models is interesting, but not the concrete idea that has been proposed (which is <b>outside the scope</b> of the activities of the EIP-AGRI network).</p> <p>Another group also had doubts on how to address this within EIP-AGRI. They proposed to include it in the workshop on small farming. If to be addressed within EIP-AGRI, the group suggested a workshop on new income streams for farmers, such as insects, fish etc.</p>

## Cluster 4: OTHER IDEAS

The overview of collected proposals organised in cluster 4 can be found [here](#)

### SUBCLUSTER 4.1 FARMERS WELFARE

<b>SHORT DESCRIPTION</b>	Health and wellbeing of farmers and farm workers, and the integration of safety culture and risk management in family farm enterprises.
<b>WHY</b>	Farming is one of the most hazardous industries worldwide. The health and safety of all those working in agriculture is an important topic that hasn't been addressed within EIP-AGRI. Mental health is also important, but still a very sensitive topic to address amongst farmers. Not much is known about innovations in dealing with mental health and social behaviour.
<b>FOR WHOM</b>	Farmers, advisers, health professionals, NRNs, MAs, digitisation-related agribusiness and health businesses
<b>WHAT</b>	<p>The topic was discussed in all four breakout groups. Opinions were mixed. Two groups considered this to be an important topic that could be included in next years' programming, whilst the other two groups didn't consider the topic a priority for EIP-AGRI.</p> <p>One group saw this topic as <b>very important</b> and they discussed issues such as health and wellbeing of farmers, foresters and farm and forest workers; integration of health and safety culture; attention to mental health. Innovative approaches are needed and are possible. It links with digitisation and robotisation. The group proposed to organise a <b>workshop to collect and share innovative practices</b>.</p> <p>Another group stressed its importance as a <b>multi-actor topic</b> addressing both farmers and family farms but also advisory actors. There might be an opportunity for a <b>Focus Group</b> identifying risks, providing solutions, showing good practices and examples. The topic has not been tackled until now. It should not only focus on the physical aspects, but also on the psychological issues that farmers and their family face. It could also include advisory systems, tools to help and learning from examples. The creation of a <b>network of experts</b> could also be interesting.</p> <p>Two groups concluded that the topic was <b>not a priority</b>. One group discussed about rephrasing it to "work-life balance" or, look at organisational innovation and labour organisation at the farm level. Since there are already some activities going on, an exchange of practices could be interesting. But the question occurred whether it is sufficiently innovative. The group decided that the topic as such is not really an EIP-AGRI priority. The other group recognised the importance of the topic and mostly discussed mental health issues. However, there was doubt whether it is an EIP-AGRI topic.</p>



## Cluster 4: OTHER IDEAS

### SUBCLUSTER 4.2 DIGITISATION OF AGRICULTURE

<b>SHORT DESCRIPTION</b>	Several related ideas were clustered under this topic: 'digital experimental fields', optimising the efficiency of chemical nitrogen in arable and grassland farming, the idea for a FG on emerging opportunities for optimising farmer-centric experimentation, farm data to develop smart solutions.
<b>WHY</b>	This was not discussed by the Sol members.
<b>FOR WHOM</b>	Farmers, agricultural education, advisers, developers, SMEs
<b>WHAT</b>	<p>The topic was discussed in all four breakout groups.</p> <p>One group mentioned that the proposals are already being addressed and are thus not considered a priority for now. The group members said, however, that there is a <b>need for a better follow up of past events</b> regarding this topic.</p> <p>Another group had a long discussion on the different proposals. There were already a lot of activities related to these proposals. However, there might be an option for the 2020 programme to work on robotics. <b>Robotics for mountainous areas</b> could be one example of a specific topic that is not easily addressed by the industry, yet is important for different EU countries: it may help improve productivity, sustainability and also the safety of mountain farming, and farmer welfare. <b>A one-day seminar/workshop on robotics</b> may be organised, with webinar and livestreaming. It could include showcases and demonstrations.</p> <p>Another group suggested that most of the proposals could be <b>included in the 2020 Seminar on digital skills</b>. Age divide, gender divide, education are important aspects.</p> <p>One group had a long discussion on <b>farm management with data collection and using data</b>. Farmers are reluctant to use data. It might be interesting to organise a training for farmers to take up farm management using and collecting data. Farmers need more knowledge on block chain technologies to understand data better. Farmers might see more advantages if data could be used for warning systems. <b>No specific EIP activity</b> was defined for this.</p>

## Cluster 4: OTHER IDEAS

### SUBCLUSTER 4.3 RURAL WOMEN AND DIGITAL SKILLS

<b>SHORT DESCRIPTION</b>	Three related ideas on women in agriculture, ITC and technology.
<b>WHY</b>	Women play an important role in agri-innovation. The use of technologies and ICT will be increasingly important, also for women.
<b>FOR WHOM</b>	This was not discussed by the Sol members.
<b>WHAT</b>	<p>The topic was discussed in all four breakout groups. It is an important topic, at least to raise awareness about. Some groups suggested that it could be integrated <b>in the workshop on small farming</b>, or in <b>the 2020 seminar on digital skills</b>. Others mentioned that maybe this is more a Rural Development topic in general, rather than a specific EIP-AGRI issue.</p> <p>Another group stressed that there is a general gender gap, so the focus should not be specifically on digital skills but on the general topic of women in agriculture. They also mentioned that there is a <b>mini-paper from the Focus Group</b> on 'New entrants into farming' titled 'Gender issues among new entrants' so it might be interesting to take this into account.</p>

Cluster 4: OTHER IDEAS	
SUBCLUSTER 4.4 NEW PRODUCTION METHODS	
<b>SHORT DESCRIPTION</b>	This topic dealt specifically with vertical farming.
<b>WHY</b>	Vertical farming can involve producing food indoors, with crops grown on a series of stacked levels in a controlled environment. Benefits include the need for much smaller areas of land (higher density in production) and less waste production and water use than in traditional cultivation methods. This creates opportunities for farms, especially those that are closer to urban areas (so, to consumers) where farms are usually smaller.
<b>FOR WHOM</b>	This was not discussed by the Sol members.
<b>WHAT</b>	<p>The topic on vertical farming was discussed in three breakout groups.</p> <p>In one group it was mentioned that vertical farming is more linked to semi-urban or urban areas. It might be interesting to explore how this can work for rural farmers. There was a discussion about vertical farming: is it really new? Is it a niche? The group concluded that it is <b>not so relevant</b> for coming year's EIP programme.</p> <p>Another group argued that vertical farming is still in development phase so it is considered <b>too early for now</b> as a topic for an activity.</p> <p>Although one group was not sure whether it is a priority for EIP-AGRI 2020, they thought the topic was very interesting and relevant not only for cities – it's also possible, and actually done in empty farm buildings. The topic is also relevant for rural development strategies. Extreme vertical integration: farmers can for instance grow herbs in restaurants and supermarkets, shortening the supply chain, and creating opportunities for new business models.</p>
SUBCLUSTER 4.5 PUBLICATION	
<b>SHORT DESCRIPTION</b>	The proposal was <b>not clear</b> and therefore <b>not discussed</b> .