



# Subgroup on Innovation for agricultural productivity and sustainability

8<sup>th</sup> Meeting

*8 June 2017*

**REPORT**



## Introduction

The Subgroup on Innovation met for the eighth time in Brussels on 8 June 2017. The **programme of the meeting** was focused on three topics:

- I. Shaping the thematic work for 2018
- II. EIP-AGRI Focus Groups
- III. On-going activities: information and follow-up

The meeting aimed at collecting ideas for the work program of the EIP-AGRI network for 2017, particularly while discussing the potential thematic work. Informing the Subgroup members on the *status quo* and activities related to EIP Focus Groups, and on the on-going activities were also part of the objectives of the meeting.

Before starting Session I DG AGRI raised the attention of the members of the Subgroup about the obligatory registration in the Transparency register for all members of the Subgroup: the member organisation of the Subgroup on Innovation were kindly requested to keep their registration valid at all times. An explanatory note was included in the welcome pack for the meeting.

## Session I "Shaping the thematic work for 2018"

The session aimed at collecting ideas for future activities of EIP Network.

Previously to the meeting, all Subgroup members were invited to present their ideas via an online survey, which were later collected by DG AGRI and organised according to the type of the contributing organisation (MAs, NSU/NRNs, Advisory Service Providers, Research institutes and EU-wide organisations). All inputs were clustered according to 4 main themes: (i) Resource Management, (ii) Farm Resilience, (iii) Food & non-food chains, circular economy and climate action and (iv) Knowledge and Innovation Systems, capacity building & outreach. One or two Subgroup member representing each one of these 5 types of entities were invited to prepare the inputs received and launch the discussion in the meeting. All contributions concerning digitisation, as well as the ones received via the EIP-AGRI website (suggestions for Focus Groups), will be discussed at the next meeting on the 13th October.

This session was organised in two rounds of discussion with breakout groups, and another one for reporting back to the plenary.

In the first round, breakout groups were organised according to the 5 types of the organisations represented in the Subgroup (MAs, NSU/NRNs, Advisory Service Providers, Research institutes and EU-wide organisations). On the second round, the discussion groups were organised according to the 4 main themes and Subgroup members were free to join whatever group they preferred.

While in the first discussion round, groups were asked to analyse, reflect and add detail or reformulate the inputs received, in the second round members were requested to narrow down and rank all the ideas in their group.

As a result of this whole session, an analytical summary of the priority topics identified for networking activities in 2018 has been prepared and is incorporated in this report ([Annex A](#)).

## Session II "EIP-AGRI Focus Groups"

After a short introduction to the session, Willemine Brinkman presented some information on the state of play of EIP Focus Groups (FG) and the follow-up to FG assessment ([this presentation can be accessed here](#)).

Then, information regarding the launch of calls for experts for three new FG was also provided by three speakers:

- FG 26 'Moving from source to sink in arable farming' – Anikó Seregélyi
- FG 27 'Circular horticulture' – Sirpa Karjalainen
- FG 28 'Enhancing production and use of renewable energy on the farm' – Alberto Davino

[All three presentations can be accessed here](#)

## Session III On-going activities: information and follow-up

The objective of this session as to inform Subgroup members about on-going activities and to discuss possible follow-up activities. Thus, there were four presentations concerning two past EIP events and two other regarding up-coming events:

Inge van Oost presented the main outcomes of the EIP seminar 'Moving EIP-AGRI implementation forward' (Athens, 10-11 May 2017) and promoted a discussion on possible follow-up;

Fabio Cossu provided some feedback on the EIP seminar "Digital Innovation Hubs for Agriculture" (Kilkenny, 1-2 June 2017);

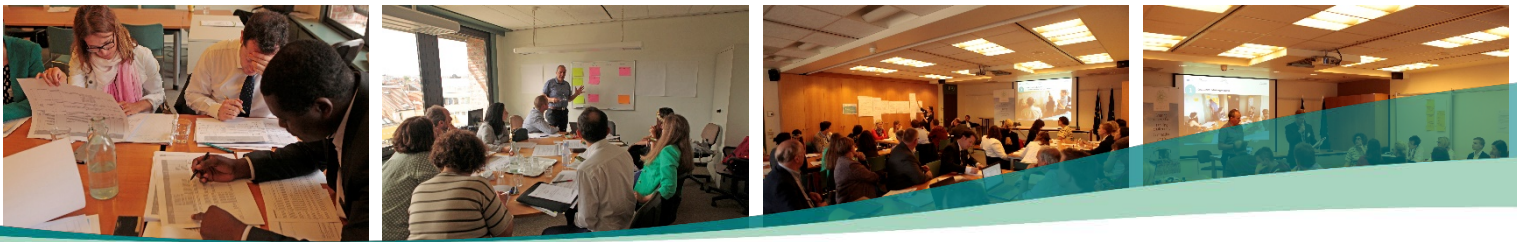
Maria de São Luis Centeno and Antonella Zona provided information about the preparation of the Agricultural Innovation Summit and the 9th meeting of the Subgroup on Innovation (Oeiras, 11-12-13 October 2017);

Willemine Brinkman presented an update on the preparation of the EIP workshop "Organic is operational" (Hamburg, 14-15 June 2017).

[These presentations can be accessed here](#)

## Next steps and closing

Rob Peters closed the meeting announcing that the 9th meeting of the Subgroup will be dedicated to the fine-tuning of the ideas for future activities discussed today, to be complemented by the discussion of the follow-up to the digitisation activities carried out by the EIP-AGRI network so far.



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

The next meeting of the Subgroup on Innovation will take place Friday 13 October in Oeiras, Portugal.

# Annex A: Analytical summary of the priority topics identified for networking activities in 2018

## Introduction

This paper provides a summary of the priority topics identified by the Subgroup on Innovation (Sol) during its 8<sup>th</sup> meeting for future activities of the EIP-AGRI network.

The process for identifying the priority topics followed three steps:

- a) SUBMISSION: 58 topics were submitted before the meeting by Sol members through a questionnaire;
- b) GROUP DISCUSSION – 1<sup>st</sup> ROUND: the suggested topics, clustered in 4 themes (see table below) were presented and clarified during discussions in 5 groups – each group selected a maximum of 2 topics per theme.
- c) GROUP DISCUSSION – 2<sup>nd</sup> ROUND: the topics selected during the first round were further discussed within 4 thematic groups; each group ranked the topics; the 5 topics with the highest ranking were then presented to all the Sol members during a plenary session.

THEMES ( <i>N.B.: topics relating to digitisation were not discussed</i> )
1) Resource Management;
2) Farm Resilience;
3) Food & non-food chains, circular economy and climate action;
4) Knowledge and Innovation Systems, capacity building & outreach

The 5 priority topics identified under each of the four themes are listed in the table below. A short description of the approach suggested for addressing the topic and the type of activity proposed is included, based on the 2<sup>nd</sup> round of group discussions. The initial inputs related to the 20 priority topics (as submitted by Sol members through the questionnaire) are attached in [annex 1](#).

Records are kept of the topics that were not selected as priority topics.

PRIORITY TOPICS FOR FUTURE AIP-AGRI network ACTIVITIES (excluding digitization) As identified by the Subgroup on Innovation at its 8th meeting of 8/6/2017			
RESOURCE MANAGEMENT	1.1	Soil quality	workshop
	1.2	Sustainable wood production	workshop
	1.3	Climate adaptation strategies for small farms	workshop
	1.4	Water quality	Focus group
	1.5	New feed for livestock	Focus group
FARM RESILIENCE	2.1	Non chemical weed management	Focus group
	2.2	Technologies for protection from frost damage	Focus group
	2.3	Plant diversification for food safety in overseas departments and territories	Focus group
	2.4	Involve farmers' schools in EIP concept or EIP activity	Focus group /Workshop
	2.5	Mountain farming sustainability & competitiveness	Focus group
FOOD&NON-FOOD CHAINS, CIRCULAR ECONOMY &	3.1	Biomass from agricultural supply chains: logistics and creating markets	Focus group
	3.2	New business models based on data as currency	Workshop/ Focus group
	3.3	Consumer involvement in agri-food innovation	Workshop/ Seminar
	3.4	Repositioning the fruit&vegetable sector within its nutrition and health assets	Focus group /Workshop
	3.5	Reducing food waste	Focus group /Workshop
K&I SYSTEMS, CAPACITY	4.1	EIP implementation	Seminar/workshop
	4.2	Role and functioning of advisory services	Workshop/seminar
	4.3	Putting OG results into practice	Workshop/seminar
	4.4	Business innovation incubators and accelerators	Seminar

# 1. Resource management

## 1.1. Soil quality

### Proposed approach:

The group identified 2 possible ways of addressing soil quality:

- a. Looking at a specific theme on soil quality, to be defined: one suggestion was to focus on the organic matter of soil in Nordic/Baltic areas; another topic that was considered important by the group was soil erosion, especially in areas with permanent crops.
- b. Looking more horizontally to soil quality: Share sustainable new farming practices for many objectives (erosion, compaction, organic matter, soil life, ...).

### Proposed activity:

As there were already 2 Focus Groups on organic matter (Soil organic matter in Mediterranean soils and grazing for carbon) and a lot of Operational Groups are coming up on this theme, the suggested format is a WORKSHOP.

### Notes:

The topic proposed is based on the elaboration from the group following three different proposals submitted following the first round of discussion in groups (see annex)

## 1.2. Sustainable wood production

### Proposed approach:

The group identified 2 possible topics for addressing wood production:

- a. Sharing innovative methods on timber production, like maximising timber production in sustainable silviculture.
- b. How can we turn monoculture forests into multiculture forests?

### Proposed activity:

As there are already 2 ongoing focus groups on very similar topics (Sustainable biomass mobilisation and forest practices and climate change), the suggested format is a WORKSHOP on the dissemination of good practices.

#### Notes:

The topic proposed is based on the proposal "Selection System – application of permanently sustainable silvicultural systems in common forestry management" (see annex)

### 1.3. Climate adaptation strategies for small farms

#### Proposed approach:

The idea of the group is to look at a system approach to be used by small farms to adapt to climate change, namely at practical strategies, tools and examples. Elements to be included are farm design, cultivation systems and mechanization. The specific needs of some type of small farms, like in mountainous regions could be looked at as well.

#### Proposed activity:

As the topic is quite broad the suggested format is a WORKSHOP.

#### Notes:

The topic proposed is based on the elaboration from the group following two different proposals submitted following the first round of discussion in groups (see annex)

### 1.4. Water quality

#### Proposed approach:

The group identified 2 possible ideas for addressing this topic:

- a. To look at territorial approaches for tackling water quality in agriculture.
- b. Tools at farm level to improve nutrient efficiency

The group attributed more importance to the proposal regarding the territorial approach. A lot of efforts been done at farm level, like working on practices to reduce the leaching of nutrients to the water, but now more and more approaches on a territorial level are gaining interest. Sharing good examples and exploring new approaches should be addressed.

#### Proposed activity:

The suggested format is a FOCUS GROUP.

#### Notes:

The two options proposed are based on the two proposals in annex.



## 1.5. New feed for livestock

### Proposed approach:

The key element identified by the group is: How can new types of feed like insects, food waste and other organic material be used for the feeding of livestock and how should livestock be adapted to these feed inputs, to make the livestock efficient and robust? It would be good to look at whole feed chain. An important issue will be feed safety and contaminants in the feed.

### Proposed activity:

The suggested format is a FOCUS GROUP.

### Notes:

The topic proposed is based on the elaboration from the group following two different proposals submitted following the first round of discussion in groups (see annex)

## 2. Farm Resilience

### 2.1. Non-chemical weed management

#### Proposed approach:

#### Key question:

The Focus Group should explore strategies for non-chemical weed management, such as

- Crop diversification, crop rotations, intercropping, cover cropping, lining mulches
- Adapted tillage regimes, especially with low or no-tillage
- Adapted crop management , such as late planting, using varieties of different maturity classes, promoting competition between crops, companion plants and weeds
- Mechanical weeding, weeding robots, precision farming, advanced tools for recognizing weeds (i.e. cameras) that allow for selective mechanical weeding.
- ICT/IoT tools for prediction of weed emergence

#### Motivation:

(Conventional) agriculture is under pressure to reduce the use of herbicides, because of their environmental and health impact (see for example the recent debates on the authorisation of glyphosate). In addition, herbicide use costs are increasing. One of the reasons for this is increasing herbicide resistance of weeds. Due to the rise of extreme weather events, the effectiveness and efficiency of herbicides has reduced in the last 10 years. In organic farming, which does not use herbicides, weeds are one of the biggest problems affecting quantity and quality of yields Hence, there is a need to invest in preventive strategies and mechanical weed control methods.

#### Proposed activity:

Focus Group

#### Notes:

This topic was the best ranked. Topics covered could include: tillage, crop management, mechanical weeding, ICT Tools and greening. It has links with previous Focus Groups such as IPM in Brassica, Precision Farming and Organic Farming.

## 2.2. Technologies for protection from frost damage

### Proposed approach:

Existing frost protection methods are no longer adequate and there is a need for innovation and solutions in this field

### Proposed activity:

Focus group

## 2.3. Plant diversification for food safety in overseas departments and territories

### Proposed approach:

- How does plant diversification contribute to the overseas territories' food safety and self-sufficiency?
- What are the major constraints and leverages to its development?
- Besides banana and sugarcane, which food productions should be favored and promoted?
- What research questions should primarily be addressed?
- What are the best environment-friendly and cost-effective production practices, including plants associations and companion plants, which should be disseminated?
- What are the methods and key actors to be mobilised for this purpose?

### Motivation:

Overseas territories largely depend on imports for their livelihood. Subsistence farming is threatened by commercial productions such as banana and sugarcane, which occupy the major part of arable land. This issue is all the more relevant in overseas departments, that these mostly small islands are.

Overseas territories are also subjected to severe pests and diseases pressure that can considerably reduce yields. Neighboring countries of overseas territories have also different legislation in terms of phytosanitary uses and lower labor costs that can favor a production at a lower cost and therefore induce competition in terms of price and safety of products.

### Proposed activity:

Focus Group

## 2.4. Involve farmers' schools in EIP concept or EIP activity

### Proposed approach:

It is important for young people in schools and universities to go out and learn from the field.

Young students should be clear target group.

This issue always coming back but it doesn't go anywhere, nothing is being done

Examples and exchange of good practices are needed

Agricultural education should become more central to EIP

### Proposed activity:

A workshop. A focus group could collect examples first, then followed by a bigger event

## 2.5. Ensuring the sustainability and competitiveness of mountain farming

### Proposed approach:

Mountain agriculture is characterized by extensive low input and low output farming systems, oriented towards specific productions of high quality. Agriculture often represents the basis of the local economy and is closely inter-related to other sectors. Because of the geographical constraints to farming leading to increased costs, work productivity is on average lower by 28% in mountain areas compared to less favoured areas and by 40% compared to low lands. Therefore, the share of innovative good practices is needed in order to ensure the survival of the mountain agriculture to ensure the sustainable development of mountain areas and the public goods they provide to all the society.

### Motivation:

Mountain agriculture represents 18% of agricultural holdings, 15% of agricultural utilised area and 15% of agricultural workforce in Europe. Therefore, it's important to ensure the share of good practices on the mountain agriculture to have a stronger mountain farming sector in Europe from which we can all benefit.

### Proposed activity:

Focus Group

**Notes** This topic can be linked with topics such as marginal areas (wider than mountain), marginal land use, high quality local products, pastoralism

## 3. Food & non-food chains, circular economy and climate action

### 3.1 Biomass from agricultural supply chains; logistics and creating markets

#### Proposed approach:

The group identified 2 possible angles dealing with biomass – they could possibly be combined:

- a. Building new markets for (farm) residues – so farmers are paid, rather than having to pay for waste disposal; issues to be discussed include logistics, quality, standardisation
- b. Sustainable biomass production at farm level: how to combine biomass production with soil quality improvement and climate change adaptation?

#### Proposed activity:

Focus group

#### Notes:

This topic was based on two proposals which were combined and together they were ranked first – please see Annex 3.

### 3.2. New business models based on data as a currency

#### Proposed approach:

The initial idea proposed was a Focus Group looking at the following questions:

- a. Who can derive value from the data collected at production level?
- b. What model can allow non-farmer actors to pay for the data collected on the farm?

The group discussed this and then proposed that a workshop where the data sharing workshop results would be shared and further discussed could also be a good approach.

#### Proposed activity:

Focus group or an event bringing together all the actors involved, including for instance Operational Groups developing new business model.

## Notes:

It was stressed that the data revolution is really a revolution which will completely change the business environment. It was therefore suggested that it would be very useful to bring in companies which are already developing or working with such new business models using data as a currency, for instance in other sectors or other continents, eg USA.

### 3.3. Consumer involvement in agri-food innovation

#### Proposed approach:

To help producers find ways to better adapt their farm business to the markets it was proposed to explore the following questions:

- a. How to generate feedback from consumers, and improve transparency in the agri-food chain?
- b. What working models exist? For instance the REKO circles in Sweden and Finland

#### Proposed activity:

A workshop or seminar to provide inspiration.

### 3.4. Repositioning the fruit and vegetable sector within its nutrition and health claim assets

#### Proposed approach:

To help develop or and disseminate farmer strategies to inform markets and consumers on the health benefits of fruits and vegetables and to respond to market/consumer signals, using new evidence and new technologies. Questions to address could include:

- a. How to better position the fruit and vegetables sector in a very competitive market, and to reverse the decline in consumption, by highlighting the health benefits?
- b. How to assist the sector to fully benefit from the new regulatory framework on health claims?

#### Proposed activity:

Focus group or workshop

## Notes:

Also see the details in the fiche in Annex 3

## 3.5. Reducing Food Waste in Europe

### Proposed approach:

To find innovative ways to reduce food waste, focusing on fresh fruit and vegetables and meat – also looking at how the production stage influences food waste along the entire chain for instance:

- a. At the production stage – finding solutions such as growing crop varieties with better storage properties
- b. At the level of the supply chain: better planning and organisation; better storage facilities, and better processing methods
- c. Consumer level: change of purchase, consumption, eating habits

### Proposed activity:

Focus group, or possibly a workshop to involve actors all along the supply chain

## Notes:

Possible links with biomass and supply chain topics; also see the details in Annex 3

## 4. Knowledge and Innovation Systems, capacity building & outreach

### 4.1. EIP implementation

#### Proposed approach:

The group discussed and voted on two themes which everybody agreed that could be merged: "Implementing EIP & Transnational cooperation" and "Simplification on EIP implementation".

As a result, this topic would then focus on three issues:

- a. Simplification – administrative processes, bureaucracy, more flexibility and adaptability, in line with the flexible approach of Measure 16
- b. Impact evaluation – need to know how to measure the impact of the innovation projects on the economy and employment in the sector
- c. Transnational cooperation – promote and improve OGs capacity to apply for Horizon projects

#### Proposed activity:

The suggested format is an event, WORKSHOP or SEMINAR (a follow-up to the seminar in Athens).

#### Notes:

The topic "Implementing EIP & Transnational cooperation" got 3 points and "Simplification on EIP implementation" got 11 points, which altogether makes this the most voted in this session (see annex).

The group had an "ambassador" for most of the topics, which was someone who had already discussed that same topic in round 1 and was interested in the issues at stake.

### 4.2. Role and functioning of advisory services

#### Proposed approach:

The group discussed several issues related to the need to upscale rural professionals to meet the needs of farmers and SMEs.

As a result, the main agreed approach would be to focus on the role and functioning of advisory services:

- within AKIS (Agricultural knowledge and innovation systems)
- in respect to EIP



#### Proposed activity:

The suggested format is an event, WORKSHOP or SEMINAR.

#### Notes:

This topic got 8 points (see annex).

### 4.3. Putting OG results into practice

#### Proposed approach:

The group discussed and voted on two themes which everybody agreed that could be merged: "From prototype to market" and "Scaling up of Operational Groups results – How to make innovation happen?".

As a result, this topic would then focus on two issues:

- a. Upscaling OG results – how to reach and be successful in the market and how to capitalize OG results, making them available on a large scale from the technical point of view?
- b. Supporting firms to take over OG results - how can we support firms to produce the innovation tested in the OG and so to make it available for all farmers?

#### Proposed activity:

The suggested format is an event, WORKSHOP or SEMINAR.

#### Notes:

The topic "From prototype to market" got 4 points and "Scaling up of Operational Groups results – How to make innovation happen?" got 3 points, which altogether makes this the third most voted in this session (see annex).

The group had an "ambassador" for most of the topics, which was someone who had already discussed that same topic in round.

### 4.4. Business innovation incubators and accelerators

#### Proposed approach:

The group discussed on the role of incubators and accelerators in promoting innovation in agriculture.

Main proposed approach would focus on 3 points:

- a. getting guidance on how to set up and run incubators and accelerators
- b. how to finance them through RDP budget
- c. sharing best practices

#### Proposed activity:

The suggested format is a SEMINAR.

#### Notes:

This topic got 2 points (see annex).

The group had an "ambassador" for most of the topics, which was someone who had already discussed that same topic in round.

## Annex 1. Initial proposals from the members of the subgroup on innovation on Resource management related to the 5 identified priority topics

### 1. Soil quality (3 proposals)

Initial title:
Maintenance of natural resources - agriculture as a tool / mechanism to maintain biodiversity, soil and water
Proposal from:
National Rural Networks and Managing Authorities
Explanation :
<p><b><u>Key question:</u></b></p> <p>How could the agriculture be used as an active tool to maintain natural resources?          How can the farmers be intrigued to actively participate in such projects with very targeted substance?          How to reconcile agriculture with active nature protection approach?          How could we monitor the results?</p> <p><b><u>Motivation:</u></b></p> <p>Nature protection as well as soil, air, water protection issues are coming to the forefront of the European Common Agricultural Policy. For the CAP after 2020 these issues will be just gaining on the importance. If we want to capture some of the ideas that are now coming to the forefront thanks to environmental organisations in EU, we need to start thinking on how to bridge or reconcile the agricultural goals with those of the environmentalist. In Slovenia, difficult debates on these topics are going on. The same is in the other parts of the EU.</p>
Type of activity (seminar, workshop, focus group)
Focus Group

Initial title:
<b>Soil organic matter</b>
Proposal from:
<b>National Rural Networks and Managing Authorities</b>
Explanation :
<p><b><u>Key question:</u></b></p> <p>The narrower focus could be on the organic matter of soil specific to Nordic/Baltic region. This focus is mainly based on the fact that there has already been a similar initiative targeted to the Mediterranean region)</p> <p><b><u>Motivation:</u></b></p> <p>Soil is the key resource for agriculture.</p>
Type of activity (seminar, workshop, focus group)
<b>Focus Group</b>

Initial title:
<b>The study for soil erosion and desertification especially causing by human agricultural activities in olive, viticulture, one-year crops, etc</b>
Proposal from:
<b>National Rural Networks and Managing Authorities</b>
Explanation :
/
Type of activity (seminar, workshop, focus group)
<b>Focus Group</b>

## 2. Sustainable wood production

Initial title:
<b>Selection system - application of permanently sustainable silvicultural systems in common forestry management.</b>
Proposal from:
<b>Advors</b>
Explanation :
<p><b><u>Key question:</u></b></p> <p>Clear-felling system in contrast of selection system - natural and technological assumption.  Identifying of forest stand which are suitable for changes of technological system.  Which are the usefull silvicultural (also tending) operations during changes of tree species composition?  Strong forests in weakened (or changed) climatic conditions?  Soil denuding as main factor of defforestation during clear cutting.  Professional road building, contiguos road facilities.  Increasing of forest diversity, tree species, keeping amount of dead trees and wood in crops (nesting of birds, life sites for insect, growing of seedlings, water conservation, ...).  Retaining of soil water and minimalisation of floods.  Changing of Norway Spruce monocultures into more variable tree species stand.  Supporting ot technical equipments in low-economic countries for better crops availability.  Environmental, estetic and else multiple role of stands - practising selection system.  Decreasing of discrepancies between foresters and environmentalist.</p> <p><b><u>Motivation:</u></b></p> <p>Soil erosion, soil losses and floods are the main problem observably by common people. These problems cause as result of clear-felling system, road building and forest crops decay (especially Norway spruce - bark beetles calamities). Dead wood removing cause losses of animals habitat. Selection system has lot of advantages like permanent covering of soil by tree sheet, absence of afforestation cost, evidence of every tree layer and optimal climatic condition for plants growing. However, necessary is rebuilding of stands, its trees species composition, age and volume structure. It have required clear political definition of those possibilities for technical and technological equipments using, forest ownership definition and new management system funding. Using of selection system in suitable outposts,regions and climatic conditions is really important step to multifunctional role of forests. And good public utility tool to make a better light and reasoning to forest management and work of foresters.</p>
Type of activity (seminar, workshop, focus group)
<b>Focus Group</b>

### 3. Climate adaptation strategies for small farms (2 proposals)

Initial title:
<b>Interaction between sustainable family farming and climate change</b>
Proposal from:
<b>EU wide organisations</b>
Explanation :
<p><b><u>Key question:</u></b></p> <p>1. Family farming impacted by climate change: it is necessary to understand how the climate change affects family farming, enabling comparisons with industrial farming, and learning from best practices on how to tackle with this issue.</p> <p>2. The role of Family farming in the adaptation and mitigation of climate change: there is increasing scientific evidence for the important role sustainable family farming, including peasant farming, can play in delivering food quality, food sustainability, and a range of wider ecosystem and social services for Europe. But more efforts should be made in understanding the role of sustainable family farming in the adaptation and mitigation of climate change</p> <p><b><u>Motivation:</u></b></p> <p>Family farming is the most common operational farming model in Europe and thus of great importance in the EU. The majority of the EU's 12 million farms are family farms, passed down from one generation to another, and contribute to the socio-economic and environmental sustainability of rural areas (<a href="https://ec.europa.eu/agriculture/family-farming_en">https://ec.europa.eu/agriculture/family-farming_en</a>).</p> <p>It is necessary to understand how sustainable family farming systems are affected by climate change and learn also from their resilience/adaptation to climate change; their links to short food supply chains, their benefits to rural communities; their broad ecological benefits.</p> <p>Family farmers and peasants practicing sustainable agriculture are an essential part of the climate solution. Farming systems that build soil, recycle nutrients and water, reduce chemical inputs and enhance biodiversity offer the greatest potential for a resilient food and farm future. Local and regional food systems are essential for climate change adaption.</p>
Type of activity (seminar, workshop, focus group)
<b>Workshop</b>

Title
<b>Farming with Biodiversity</b>
Explanation (Including keywords and motivation)
<p><b><u>Key question:</u></b></p> <p>The smart use of (functional) biodiversity can make agriculture more sustainable and reduce chemical inputs. It brings benefits in terms of higher production efficiency, product quality and yield stability. Greater resilience can be achieved by using local communities of species (local crop varieties and wild species). Sound biodiversity management can reinforce the self-defence capacity of plant and animals. The workshop should bring together Operational Groups and other innovative projects exploring how can we make best use of the diversity within and between crops and animals, and of the natural biodiversity at field, farm and landscape levels. The workshop should also look into appropriate forms of organisation in terms of farm design, cultivation systems, mechanisation and cooperation between farmers and other actors at landscape level.</p> <p><b><u>Motivation:</u></b></p> <p>The use and protection of (functional) biodiversity links up with at least 3 priorities of the "Strategic Approach to EU agricultural research &amp; innovation", namely: resource management, healthier plants and animals and integrated ecological approaches.</p> <p>Biodiversity is a priority for Operational Groups in several regions e.g. Catalonia (Spain), Rhineland-Palatinate (Germany).</p> <p>Functional biodiversity was prominent in the last Horizon 2020 Work Programme, e.g. in the calls SFS-02, SFS-28-2017 and RUR-06-2016.</p> <p>Finally, reserving ecosystems and biodiversity is a key priority in the Rural Development Regulation.</p>
Type of activity (seminar, workshop, focus group)
<b>Workshop</b>

## 4. Water quality (2 proposals)

Initial title:
<b>Territorial approaches for protecting and restoring water quality in agriculture</b>
Proposal from:
<b>National Rural Networks and Managing Authorities</b>
Explanation :
<p><b><u>Key question:</u></b></p> <p>The focus group could investigate the available knowledge on efficacy and efficiency of territorial approaches and pathways for improvement. In particular, the focus group could look at existing innovative practices and identify practices to further disseminate and new practices to develop. Areas of innovation to be studied could include in particular institutional and social aspects, technical components (diagnostics, identification of actions on the basis of the diagnostics), and types of actions implemented (for example : farm-level or agrifood chain-level, land tenure management, etc).</p> <p><b><u>Motivation:</u></b></p> <p>The water and agriculture nexus is of particular importance and presents significant challenges. During the DG ENV – DG AGRI meeting of Member States senior decision makers on Agriculture and sustainable water management in the EU on May 8th, 2017 in Brussels, participants highlighted the potential to stimulate innovation in the agricultural sector to support the achievement of good water status objectives. The EIP provide a great opportunity towards this goal. Two EPI activities on the water quality and agriculture nexus are thus submitted for consideration. Territorial, or local, approaches are of particular interest as they are a promising avenue to achieve water quality and agricultural sectoral objectives. Already, a number of EPI operational groups focus on the agriculture and water quality nexus at the territorial level. Innovations in this type of approaches should be capitalised and expanded.</p>
Type of activity (seminar, workshop, focus group)
<b>Focus Group</b>



Initial title:
<b>Linking water quality objectives and agricultural practices at the farm-level</b>
Proposal from:
<b>National Rural Networks and Managing Authorities</b>
Explanation :
<p><b><u>Key question:</u></b></p> <p>The focus is on investigating control tools and indicators that can be used at the farm level to improve the understanding of linkages between agricultural practices and water quality and to identify actions to improve water quality. In particular, the focus group could look at existing innovative practices and identify practices to further disseminate and new practices to develop. Areas of innovation to be studied could include in particular :</p> <ul style="list-style-type: none"> <li>• control tools and indicators to describe and assess agricultural practices at farm level that are relevant to water quality, linkages of these control tools and indicators to the quality of the whole water body</li> <li>• cost and conditions for using them</li> <li>• pathways for using them : certification schemes, regulatory approaches, voluntary schemes...</li> <li>• pathways to promote farmers involvement and to support a fruitful dialogue with stakeholders through the use of these tools.</li> </ul> <p><b><u>Motivation:</u></b></p> <p>The water and agriculture nexus is of particular importance and presents significant challenges. During the DG ENV – DG AGRI meeting of Member States senior decision makers on Agriculture and sustainable water management in the EU on May 8th, 2017 in Brussels, participants highlighted the potential to stimulate innovation in the agricultural sector to support the achievement of good water status objectives. The EIP provide a great opportunity towards this goal. Two EPI activities on the water quality and agriculture nexus are thus submitted for consideration. Getting a clear picture of agricultural practices at the farm-level and their impacts on water quality is key to adapt farming practices and to establish a fruitful dialogue with stakeholders. Yet, this understanding can usually be grasped only in a partial manner, which makes identifying relevant measures and getting stakeholders onboard difficult. As a consequence, public stakeholders might resort to standardized measures on agricultural practices, even if they are not optimal, rather than building measures on the basis of farmer initiatives or building measures which are results oriented.</p>
Type of activity (seminar, workshop, focus group)
<b>Focus Group</b>

## 5. New feed for livestock (2 proposals)

Initial title:
<b>Feed Security: Efficient feed chains for safe animal products</b>
Proposal from:
<b>Researchers</b>
Explanation :
<p><b><u>Key question:</u></b></p> <ul style="list-style-type: none"> <li>- How can we improve the efficiency of feed chains by optimising nutrient utilisation by the animal, by replacing feed resources that can be used for human consumption directly and by reducing losses? <ul style="list-style-type: none"> <li>- Which technologies and knowledge are needed for a better use of human inedible and/or local feed resources and creating new chains of alternative feed resources and by-products of the food chain, thereby reducing wastes?</li> <li>- What are the most important actual and emerging hazards in animal feed and (new) feed resources, which should be monitored and controlled?</li> <li>- How to improve the protein and energy autonomy of the animal production sector ?</li> </ul> </li> </ul> <p><b><u>Motivation:</u></b></p> <p>European agriculture faces an increasing demand on food, feed and renewable biomass production. This growing demand must be met in a sustainable way under conditions of climate change. This requires innovative approaches that go far beyond current practice. There is a strong demand for new opportunities to improve the efficiency and safety of feed chains by optimising nutrient utilisation by the animal, reducing losses, better use of human inedible and/or local feed resources and creating new chains of alternative feed resources and byproducts of the food chain, thereby reducing wastes.</p> <p>This includes:</p> <ol style="list-style-type: none"> <li>1. Optimization of nutrient utilization within raw material sources across industries, as a driving force to develop new processes and technologies.</li> <li>2. Models (based on consequential LCA) to determine the trade-offs in environment-socioeconomic impact when decisions are made concerning the use of by-products and alternative resources</li> <li>3. New and innovative models on the nutrition of farm animals which are expected to significantly contribute to a further reduction of energy and nutrient losses, better quality of animal product and better use of alternative resource</li> <li>4. Understanding the genetics of feed efficiency</li> <li>5. Implementing Feed Safety Securing Systems (GMP+) for all existing and new resources to ensure toxicant or pathogen pollution in the feed/food chain</li> <li>6. Developing autonomy: alternative grassland strategies, alternative feed crops and proteins sources, better use of by-products &amp; local sources, logistics to improve collection of waste streams, new feed evaluation techniques to estimate quickly and at low cost the feeding value of new feed, technological treatment of feed ingredients to improve feeding value.</li> </ol>
Type of activity (seminar, workshop, focus group)
<b>Focus Group</b>

Initial title:
<b>Efficient and robust animals</b>
Proposal from:
<b>Researchers</b>
Explanation :
<p><b><u>Key question:</u></b></p> <p>Define robustness and efficiency;Identify key areas to improve livestock efficiency and robustness,in relation to integrated herd management(health,welfare,feed,housing,breed);Identify novel(ideally easy to measure)phenotypes for efficiency and robustness;Develop practical management and feeding options to improve efficiency and robustness,including the use of local feed resources;Develop practical options to incorporate efficiency and robustness in breeding programmes,including use of local breeds;Develop practical options to increase efficiency and robustness by improving animal health and welfare conditions;Compare efficiency and robustness of livestock in different production systems:intensive vs extensive production systems;Identify species/breeds/strains that are favorably adapted to diverse production systems:intensive pasture-based systems vs confinement;Identify species/breeds/strains that are favorably adapted to extreme environmental conditions:marginal lands,climate change</p> <p><b><u>Motivation:</u></b></p> <p>The livestock sector is an important component of the bio-economy in Europe.It is a goal to contribute to the increasing demand for livestock products,which is expected to double worldwide in the next 40years,to provide a balanced diet.This includes access to essential nutrients,such as essential aminoacids in animal protein.This will make livestock sector even more important to the European bio-economy.Agriculture has hitherto been able to meet the increasing demand for food products for a growing,wealthier population.An average farmer produces 300%greater output today than in 1950.Current production systems for meat(especially pork and poultry)and milk are far more efficient compared with the 1950's.However,current(intensive)animal production systems are a source of concern for the environment and animal welfare.Thus,sustainable animal production in the future requires greater efficiency in the use of resources such as protein,energy,water to reduce environmental footprints,while achieving optimal animal health and welfare with robust animals.Efficient and robust animals are vital.It is desirable that animals convert allocated feed to food products efficiently,produce minimal wastes and emissions to the environment,stay healthy,maintain good welfare status,are robust with regard to environmental perturbations such as climate change and other stressors.In the future,70%of the additional animal production is predicted to come through technological innovations and advancements</p>
Type of activity (seminar, workshop, focus group)
<b>Focus Group</b>

## Annex 2. Initial proposals from the members of the subgroup on innovation on "Farm Resilience", in order of priority as ranked by the subgroup members

### 1. Non-chemical weed management

Title
<b>Non-chemical weed management</b>
Explanation (Including keywords and motivation)
<p><b>Key question:</b></p> <p>The Focus Group should explore <b>strategies for non-chemical weed management</b>, such as</p> <ul style="list-style-type: none"> <li>• <b>Crop diversification, crop rotations</b>, intercropping, cover cropping, lining mulches</li> <li>• <b>Adapted tillage regimes</b>, especially with low or no-tillage</li> <li>• <b>Adapted crop management</b>, such as late planting, using varieties of different maturity classes, promoting competition between crops, companion plants and weeds</li> <li>• <b>Mechanical weeding</b>, weeding robots, precision farming, advanced tools for recognizing weeds (i.e. cameras) that allow for selective mechanical weeding..</li> </ul> <p>* <b>ICT/IoT tools for prediction of weed emergence</b></p> <p><b>Motivation:</b></p> <p>(Conventional) agriculture is under pressure to reduce the use of herbicides, because of <b>their environmental and health impact</b> (see for example the recent debates on the authorisation of glyphosate). In addition, herbicide use costs are increasing. One of the reasons for this is increasing <b>herbicide resistance of weeds</b>. Due to the rise of extreme weather events, the effectiveness and efficiency of herbicides has reduced in the last 10 years. In organic farming, which does not use herbicides, weeds are one of the biggest problems affecting quantity and quality of yields Hence, there is a need to invest in preventive strategies and mechanical weed control methods.</p> <p><b>Discussion:</b></p>
Type of activity (seminar, workshop, focus group)
<b>Focus Group</b>

## 2. Technologies for protection from frost damage

Title
<p><b>Technologies for protection from frost damage</b> Moved to farm resilience from a different theme</p>
Explanation (Including keywords and motivation)
<p><b><u>Key question</u></b></p> <p>Passive frost protection can minimize risk, decrease the probability or severity of frosts and freezes, or cause the plant to be less susceptible to cold injury. These practices include site selection, variety selection and multiple cultural practices but even if farms do everything to prevent damage as a result of climate change damage occurring more and more extensively. We have some technological solution in active protection. Active management comes in three basic areas: the addition of heat, the mixing of warmer air from the inversion layer under radiation frost conditions, or the conservation of heat from the plant. But the amount of spend time, energy and money on one of these techniques doesn't always equal the reward. Climate change and deviations from normal tempratunih Search in text especially in early spring fruit farmers present technology does not offer resistance. We need new approaches, sustainable, affordable and feasible with less labor</p> <p><b><u>Motivation</u></b></p> <p>Through EIP AGRI network we can integrate current knowledge, experience and research with potential practical solutions, and the initiation of the problem among researchers.</p>
Type of activity (seminar, workshop, focus group)
<p><b>Focus group</b></p>

### 3. Plant diversification for food safety in overseas departments and territories

Title
Plant diversification for food safety in overseas departments and territories
Explanation (Including keywords and motivation)
<p><b>Key question:</b></p> <ul style="list-style-type: none"> <li>- <b>How does plant diversification contribute to the overseas territories' food safety and self-sufficiency?</b></li> <li>- What are the <b>major constraints and leverages</b> to its development?</li> <li>- Besides banana and sugarcane, <b>which food productions should be favored and promoted?</b></li> <li>- What research questions should primarily be addressed?</li> <li>- What are the <b>best environment-friendly and cost-effective production practices</b>, including plants associations and companion plants, which should be disseminated?</li> <li>- What are the methods and key actors to be mobilised for this purpose?</li> </ul> <p><b>Motivation:</b></p> <p>Overseas territories largely depend on imports for their livelihood. Subsistence farming is threatened by commercial productions such as banana and sugarcane, which occupy the major part of arable land. This issue is all the more relevant in overseas departments, that these mostly small islands are.</p> <p>Overseas territories are also subjected to severe pests and diseases pressure that can considerably reduce yields. Neighbouring countries of overseas territories have also different legislation in terms of phytosanitary uses and lower labour costs that can favor a production at a lower cost and therefore induce competition in terms of price and safety of products.</p>
Type of activity (seminar, workshop, focus group)
<p><b>Focus Group</b></p> <p>FG questions: How to include neighbouring countries of overseas territories?</p> <p>Focus on individual species or production ecosystems? Eg alternatives to monocultures</p>

## 4. Involve farmers' schools in EIP concept or EIP activity

Title
Dissemination actions of EIP Agri involving actively farmers schools to boost innovation in the agricultural sector
Explanation (Including keywords and motivation)
<p><b><u>Key question:</u></b> Dissemination should help to bridge the time gap between research, innovation projects, new EU policy (e.g. EIP agri) and farming practice and education in farming; New dissemination tools should boost innovation in the farming sector an integrate innovation and new EU policy issues (e.g. eip agri) actively in farmers education and training. They should rise awareness to eip agri actions in farmers schools, The EIP Agri network activity could train innovation support providers how to involve next generation of farmers actively in EIP agri processes, innovation result dissemination and uptake in practice.</p> <p><b><u>Motivation:</u></b> Improving dissemination of EIP Agri actions and results is an important task in 2018 for all involved actors. Rising awareness to innovation actions and results should reach the farming sector as quick as possible. The EIP-Agri Network could identify suitable tools how to better involve future generation of farmers in innovation processes and hereby boost innovation. Suitable project dissemination tools could rise awareness and enable peer to peer learning as it is mentioned in the Cock declaration 2,0. In fact it could better and quicker bring innovation into practice.</p> <p><b><u>Notes:</u></b> It is important for young people in schools and universities to go out and learn from the field. Young students should be clear target group. This issue always coming back but it doesn't go anywhere, nothing is being done  Examples are needed  Agricultural education should become more central to EIP</p>
Type of activity (seminar, workshop, focus group)
Perhaps a workshop or seminar Or a focus group to collect examples first

## 5. Selected topic for future activities of the EIP Network in 2018:

Title
<b>Mountain farming sustainability &amp; competitiveness</b>
Explanation (Including keywords and motivation)
<p><b>Key question:</b> Mountain agriculture is <b>characterized by extensive low input and low output farming systems</b> , oriented towards <b>specific productions of high quality</b>. Agriculture often represents the <b>basis of the local economy</b> and is closely inter-related to other sectors. Because of the geographical constraints to farming leading to overcosts, work productivity is on average lower by 28% in mountain areas compared to less favoured areas and by 40% compared to low lands. Therefore, <b>the share of innovative good practices is needed in order to ensure the survival of the mountain agriculture</b> to ensure the sustainable development of mountain areas and the public goods they provide to all the society.</p> <p><b>Motivation:</b> Mountain agriculture represents 18% of agricultural holdings , 15% of agricultural utilised area and 15% of agricultural workforce in Europe. Therefore, its important to ensure the share of good practices on the mountain agriculture to have a stronger mountain farming sector in Europe from which we can all benefit.</p> <p><b>Discussion:</b> Very specific opportunities.</p>
Type of activity (seminar, workshop, focus group)
<b>Focus Group</b>



Annex 3. Initial proposals from the members of the subgroup on innovation on Food & non-food chains, circular economy and climate action, in order of priority as ranked by the subgroup members

## 1. Biomass from agricultural supply chains: logistics and creating markets (2 proposals)

Title
The logistics and improvement of biomass from agricultural residues
Explanation (Including keywords and motivation)
<p><b>Key question:</b></p> <p><b>The role to be played by straw, pruning and food industry residues as raw material on biomass.</b> Links with the effort towards a circular economy, bioeconomy and energy transition.</p> <p><b>The logistic of biomass,</b> Logistic centers and interactions with existing facilities in the rural areas dealing with food raw materials</p> <p>Problems linked with sustainability, quality and standardization</p> <p>Solid Biomass, Biogas and Biofuels</p> <p><b>Motivation:</b></p> <p>Most of the activities so far linked with biomass in the EIP, were in the scope of forest biomass or energy crops. However in Sardinia EIP event, <b>the potential of agricultural residues was highlighted.</b> There are <b>some barriers</b> currently, technical and non technical that should be <b>addressed by multidisciplinary expert panel.</b> The Focus group are the best fitted tool to that. It could be feed with information from already running H2020 project AGROinLOG and other like SUCELLOG.</p> <p>Discussion: eg olive oil pits or residues from cities can be taken into account, markets for new products. Biomass could be an extra activity on the farm. Project an internet market for agricultural residues in Finland. Markets and logistics should be looked at the same time.</p>
Type of activity (seminar, workshop, focus group)
Focus Group

Title
<b>Bioeconomy: Sustainable biomass production at farm level</b>
Explanation (Including keywords and motivation)
<p>What are the conditions to produce biomass and in the same time improved soil fertility? What are the good practices in order to avoid nutrient loss and to improve carbon in soil when you produce biomass for energy or materials? What could be the good management tools?</p> <p>Bio-economy development could led to negative impact on soil quality and climate : biomass exports can very different from food export (in terms of volume, elemental composition,...). It is crucial to assess correctly impact of such exports on farming system. An EIP-AGRI network event could be a good way to raise this issue and share references and good practice.</p> <p>Climate change – risk and threat for sustainable production methods and all agricultural sector in short and long term:</p> <ol style="list-style-type: none"> <li>1. Attention to the development and installation of innovative technologies into agricultural sector.</li> <li>2. Bio-economy development is an option for farmers</li> </ol>
Type of activity (seminar, workshop, focus group)
<b>Focus Group</b>

## 2. New business models based on data as a currency

Title
<p><b>Digital : New business models based on data as currency</b></p>
<p>Explanation (Including keywords and motivation)</p> <p>Who can derive value from the data collected at production level</p> <p>What model can monetise the data / allow non-farmer actors to pay for the data collected</p> <p>How could farmers benefit from selling their data when using digital tools – what new business models exist or are being developed?</p> <p>Background: Low uptake of digital tools in agriculture as a high up-front investment is required. Meanwhile the data revolution is a real revolution which is transforming the business environment.</p> <p><i>During the discussion, it was suggested that an event could be useful - such as a workshop involving:</i></p> <ul style="list-style-type: none"> <li>- <i>Operational Groups working on new business models using farm data</i></li> <li>- <i>All relevant actors in the chain</i></li> <li>- <i>Companies already doing this in other sectors or on other continents</i></li> </ul> <p><i>At such an event, the results of the data sharing workshop in Bratislava should also be shared</i></p>
Type of activity (seminar, workshop, focus group)
<p><b>FOCUS GROUP - OR WORKSHOP (see discussion points above)</b></p>

### 3. Consumer involvement in agri-food innovation

Provisional title
<b>Consumer involvement in agri-food innovation</b>
Explanation (Including keywords and motivation)
<p><b>Key question:</b> Market and Product development through interaction with consumers need new models. New technology and infrastructure investments can enhance the process of innovation in the agrifood chain. Transparency, direct feed-back systems, testbeds and living labs can be Tools to foster the interaction between different actors in the chain including logistics needed to, in a competitive way, match the demand.</p> <p><b>Motivation:</b> Very relevant for different actors in the agrifoodchain to be competitive and effective in the Product and market innovation system. Matching new consumer demand early in the development process, possibility to get relevant input to make a higher precision. Interaction between actors in the chain is crucial to meet new needs and the primary production level can play a new role in fast adaption to new demand.</p> <p><b>Notes:</b> Consumer voice in food and farming</p> <p>How to improve transparency in the agri-food chain, and generate feedback from consumers to help producers adapt to the market more easily, and faster.</p> <p>Use examples such as the REKO groups in Sweden and Finland, which facilitate direct contacts between producers and consumers through facebook groups</p>
Type of activity (seminar, workshop, focus group)
<b>Workshop/ seminar</b> – to provide inspiration

## 4. Repositioning the fruit and vegetables sector within its nutrition and health claims assets

Title
<p>Repositioning the fruit and vegetables sector within its nutrition and health claims assets</p>
Explanation (Including keywords and motivation)
<p>How build awareness about health issues with fruit and vegetables consumption – a health message Producing fruits and vegetables without residues</p> <ul style="list-style-type: none"> <li>• How to position better the fruit and vegetables sector in a very competing food environment?</li> <li>• How to reverse the decline of consumption build on awareness of the health benefits of consuming fresh fruit and vegetables?</li> <li>• How to assist the sector to take the full benefit of the new regulatory framework on claims and have better consumer insight on messages that would contribute to a sustainable growth of the consumption and drive consumers into a healthy diet, rich in fruit and vegetables.</li> </ul> <p>The topic would aim reviewing and consolidate existing and new studies and information on nutrition and health properties of fruit and vegetables, inventorying scientific studies available to sustain health or nutrition claims and identify gaps in research that prevent new claims to be submitted and available for the sector Building a pan-European database to facilitate access to EU authorized health and nutrition claims for the sector.</p> <p>Importance of set up without further delay a message for the attention of consumers that would underline the health benefits of a diet rich in fresh fruit and vegetables. These messages should be put to the use of our sector for communication and information to the consumers at large without any restrictions.</p> <p>Conducting consumer’s research to enhance communication strategies for the sector to take the most benefit of its nutritional and health benefits.</p> <p>How to increase healthy food –</p> <ul style="list-style-type: none"> <li>• How to make use of knowledge gained from different technologies which may include, among others, genomics, transcriptomics, metabolomics and proteomics to develop and implement tools to deliver constant and predictable fruit quality and levels of health promoting compounds to European consumers?</li> </ul>
Type of activity (seminar, workshop, focus group)
<p>FG / workshop</p>

## 5. Reducing Food Waste in Europe

Title
<b>Reducing food waste</b>
Explanation (Including keywords and motivation)
<p><b>Key question:</b></p> <p>The Focus Group should consider <b>how food loss and food waste can be reduced</b></p> <ul style="list-style-type: none"> <li>• At the <b>level of production</b>, e.g by growing varieties of crops that have better storage properties</li> <li>• At the <b>level of the supply chain</b>, through better planning and organisation of it, better storage facilities and better processing methods</li> <li>• At the <b>level of the consumer</b>, through change of purchase, consumption and eating habits</li> </ul> <p>The Focus Group should <b>focus on fresh food</b> (fruit, vegetables, meat).</p> <p><b>Motivation:</b></p> <p><b>Lost and wasted food accounts for about 30% of global agricultural production.</b> Reducing this food wastage is an essential strategy for increasing sustainability in the global food system, as it would reduce the pressure to increase yields or to expand cropping areas to feed the growing global population. Also, food waste in the supply chain is an economic loss, so reducing it is a win-win.</p> <p>Reducing food waste is now high on the political agenda. The <b>European Parliament has recently issued a resolution calling on the EU to halve food waste by 2030.</b> Also the European Court of Auditors said that a more coordinated effort to reduce food waste is needed and that the European Commission needs to step up efforts. The EIP-AGRI should help making progress in this important issue.</p> <p><b>Discussion:</b> link with biomass. There are many tools to reduce food waste but the chain is important. You can also work with short supply chains. Could be more a workshop so you can involve the whole value chain.</p>
Type of activity (seminar, workshop, focus group)
<b>Focus Group</b>

## Annex 4. Initial proposals from the members of the subgroup on innovation on Knowledge and Innovation Systems, capacity building & outreach, in order of priority as ranked by the subgroup members

### 1. EIP implementation

#### 1.a "Implementing EIP & Transnational cooperation"

Title
<b>Implementing EIP &amp; Transnational cooperation</b>
Explanation (including keywords and motivation)
<p><b>Key issues:</b></p> <ul style="list-style-type: none"> <li>➤ Objective: exchange experiences, knowledge and practices</li> </ul> <p>Share good practices for the implementation of OG projects; share good practices to follow and bad examples to avoid when implementing OG</p> <ul style="list-style-type: none"> <li>➤ Three main points:</li> </ul> <ol style="list-style-type: none"> <li>1. Simplification of processes in innovation projects How to reduce bureaucracy? How to simplify administrative management of innovation projects, namely OGs? How to make the projects more flexible and adaptable? The bureaucracy and the complexity of processes, linked to the uncertainty of the different levels of control (both at national and EU level), bring as a consequence that initiatives become concentrated in entities / companies specialized/experienced in this complex management, diverting from the objective of focusing these actions on farmers. Administrative burden can kill innovation and reduce the efficiency in the use of funding.</li> <li>2. Impact evaluation in innovation projects How to measure the impact of the innovation projects on the economy and employment in the sector? Impact must be measured to understand the cost-benefit relation of the use of funds and analyse how to improve the projects quality and the selection criteria in order to have good projects that actually have impact on the sector. Need to understand which models exist to measure these impacts in a simple way.</li> <li>3. Transnational Cooperation in EIP-AGRI Many of our EIP-actors want to know how they can apply for transnational EIP-projects. Therefore, an event on "How to apply for Horizon projects" for OGs (not for MAs) would be beneficial.</li> </ol> <p>(In 1<sup>st</sup> round from group 'MAs &amp; NRNs 2')</p>
Type of activity (seminar, workshop, focus group)
<b>Workshop</b>

## 1.b "Simplification on EIP implementation"

Title
<p><b>SIMPLIFICATION ON EIP IMPLEMENTATION</b> Administrative issues related to the implementation of 16.1 and 16.2 interventions</p>
<p>Explanation (Including keywords and motivation)</p> <p><b>Key issues:</b></p> <p>Question that is emerging from RDP MAs: how to reconcile a "Flexible" Approach of Measure 16, often recalled in several EIP events, with the rigidity of the EU Regulation rules and procedural aspects? An example: how to manage the possibility of a change in the composition of the OG partnership during the project's life with the fact that the appropriateness of that partnership was the subject of evaluation and selection criteria?</p> <p>RDP Actions 16.1 and 16.2 are, by their very nature, different from interventions historically funded by the Rural Development Regulation and are characterized by a margin of greater unpredictability and the need for greater flexibility in many administrative aspects. The issue seems to be secondary, but it is likely to "bury" the OG projects from the bureaucratic / administrative point of view. One example which affects all OGs: the lack of advanced payments for EIP OGs, compared to similar programmes like Horizon 2020.</p> <p>Simplification is not only achieved through the adoption of simplified costs. For instance, the preparation of a specific document coming from an EIP FOCUS GROUP such as "Guidelines for simplifying the procedural aspects of EIP in Measure 16" could be of enormous help for the RDP MAs.</p> <p>Probably also sharing among RDP Managing Authorities and Payment Agencies, through the EIP NETWORK, examples of "good practices on administrative simplification" at EU level would be useful to widen the point of view.</p> <p>It would be also extremely interesting to compare EU tools/actions similar to EIP OGs (such as SME Instruments, Horizon Thematic Network, Horizon Multi Actor Projects, ...) by verifying their feasibility for EAFRD.</p> <p>(from group 'MAs &amp; NRNs 1' in 1<sup>st</sup> round)</p>
Type of activity (seminar, workshop, focus group)
Follow up to seminar in Athens



## 2. Role and functioning of advisory services

### "Role and functioning of Advisory Services"

Title
<p><b>Role and functioning of Advisory Services</b></p> <p>Merging of topics: Upscaling rural professionals to meet the needs of farmers and SME's (1) AKIS in the EU (5) Pilots for cross-border activities for Innovation support services (6)</p>
Explanation (Including keywords and motivation)
<p><b>Key issues:</b></p> <ul style="list-style-type: none"> <li>➤ Focus on EU AKIS with a focus on rural professionals and advisors</li> <li>➤ Focus on the role and functioning of advisory services:             <ul style="list-style-type: none"> <li>• within AKIS</li> <li>• in respect to EIP</li> </ul> </li> </ul> <p>(from group 'Advisers' in 1<sup>st</sup> round)</p>
Type of activity (seminar, workshop, focus group)
<p><b>Workshop or seminar</b></p>

### 3. Putting OG results into practice

#### 3.a "From prototype to market"

Title
<b>From prototype to market</b>
Explanation (Including keywords and motivation)
<p><b>Key issues:</b>            Innovation needs to be put in practice.            Many of those who now work in OGs are not aware that they need to plan for market entrance, commercialization, etc. The knowledge about what you have to plan in the innovation process should be spread among those who work as brokers and in support service positions.            Main question: what are the main challenges when you want to be successful on the market with your innovation?</p> <p>(from group 'MAs &amp; NRNs 2' in 1st round)</p>
Type of activity (seminar, workshop, focus group)
<b>Workshop / seminar</b>

### 3.b "Scaling up of Operational Groups results – How to make innovation happen?"

Title
Scaling up of Operational Groups results – How to make innovation happen?
Explanation (Including keywords and motivation)
<p><b>Key issues:</b></p> <p>Successful EIP solutions and their integration with EU funds (and possibly also with national funds): Starting from the EIP, we need an "integrated policy on innovation" among EU Funds in Europe.</p> <ul style="list-style-type: none"> <li>• How to really capitalize the EIP OGs results and make them available on a large scale from the technical point of view?</li> <li>• How to "launch" the EIP solution into "mainstream" economic/industrial cycle?</li> <li>• How to use and combine different EU/national funds to finance or support the firms that can produce, on a large industrial scale, the innovation successfully tested in the EIP OGs, and so to make them available for all the farmers? (... such as a prototype machinery that proved to work well or a new environmental innovative technique such as in the field circular economy, etc.).</li> </ul> <p>We need to launch a debate at EU level on 2 issues:</p> <ol style="list-style-type: none"> <li>1. How to best integrate the current EU funds to make the best use of the EIP OGs successful results (on this aspect we can exchange ideas and good practices among the RDP MAs, Member States etc.)</li> <li>2. In the 2021-2027 programming period: EIP OG can become, such as CLLD, a multifund approach initiative? (e.g.: a Focus Group can be launched on this aspects).</li> </ol> <p>Analysis of best practices and high innovative projects detection carried out by ongoing EIP OGs:</p> <ul style="list-style-type: none"> <li>• Identification of best practices related to EIP OGs as well as best practices in the management of calls</li> <li>• Identification of best practices related to the dissemination and awareness raising of EIP OGs results</li> <li>• Identification of high innovative value proposals for EIP OGs</li> </ul> <p>(from group 'MAs &amp; NRNs 1' in 1st round)</p>
Type of activity (seminar, workshop, focus group)
Workshop

## 4. Business innovation incubators and accelerators

Title
<p><b>Business innovation incubators and accelerators.</b></p> <p>These are structured environments in which farm and non-farm businesses are stimulated to innovate, to get access to markets and to be financed by risk bearing capital</p>
Explanation (Including keywords and motivation)
<p><b>Key issues:</b></p> <p>These type of organisations are getting more and more active in agriculture and food, but the traditional knowledge and advisory system hasn't taken this on board yet, nor is there an EU platform were these initiatives can learn from each other and more systematically take advantage of the funds and networks that are available under CAP.</p> <p>How to organise innovation while creating synnergies?</p> <p>Very few accelerators are financed through CAP, even though the whole vocabulary of innovation is adopted more and more in the national RDPs. We should innovate in the way we organise innovation in agriculture and food.</p> <p>Some members indicate that they want more hands on guidance on how to set up and run incubators and accelerators. There is also the issue of how to finance them through RDP budgets.</p> <p>There's a need to share best practices.</p> <p>It would be nice to invite several incubators and accelerators to the Lisbon conference on innovation.</p> <p>(from group 'Research' in 1st round)</p>
Type of activity (seminar, workshop, focus group)
<p><b>Seminar</b></p>