

The European Innovation Partnership (EIP) "Agricultural Productivity and Sustainability"

Speeding up innovation



Emilia Romagna Innovation Conference – Brussels – 11 April 2018

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1. The bigger picture of EIP-AGRI



Triple Systems approach

The EIP-AGRI in short

- 2010: <u>European Innovation Partnerships</u> want to speed up innovation through collaboration and **linking policies** and **instruments**: **IMPACT!!!**
- The EIP-AGRI was launched by DG AGRI in 2012: COM (2012)79
- The EIP-AGRI applies an overarching "Open innovation" concept based on the interactive innovation model (applied in <u>CAP</u> <u>Operational Groups and H2020 Multi-Actor projects</u>):

Collaboration between various actors to make **best use of complementary types of knowledge** (scientific, practical, organisational, etc) in view of **co-creation** and diffusion of solutions/opportunities **ready to implement in practice.**

EU wide EIP network linking actors: communication, partnering, dissemination, knowledge flows and collecting practice needs (Open science)

^{*} In line with the main recommendation of the 2015 Miles Scientific Committee on impact: 'more research into practice'



Interactive innovation: Cross-fertilisation is key for tackling complex challenges and developing opportunities for innovation

Du choc des idées jaillit la lumière

Nicolas Boileau, french philosopher, 17th century

- > Enlightenment comes when views collide
- > From the clash of opposing minds, new ideas arise





Funding for interactive innovation projects

Rural Development

(regional/national level)

- Funding for <u>setting up</u> of an "Operational Group"
 (OG): farmers, advisors, agribusiness, researchers, NGOs, etc)
 <u>planning an innovation project</u> (Art 35)
- Project funding for the Operational Group's project (Art 35).
- Supporting <u>innovation</u> <u>support services</u>



EIP networks MS/regions

Unique EU repository of contacts and practice abstracts

Horizon 2020 (European projects)

- Research projects, to provide the knowledge base for innovative actions
- Interactive
 innovation formats:
 multi-actor
 projects and
 thematic networks
 genuinely involving
 farmers, advisors,
 entreprises, etc....
 "all along the
 project"

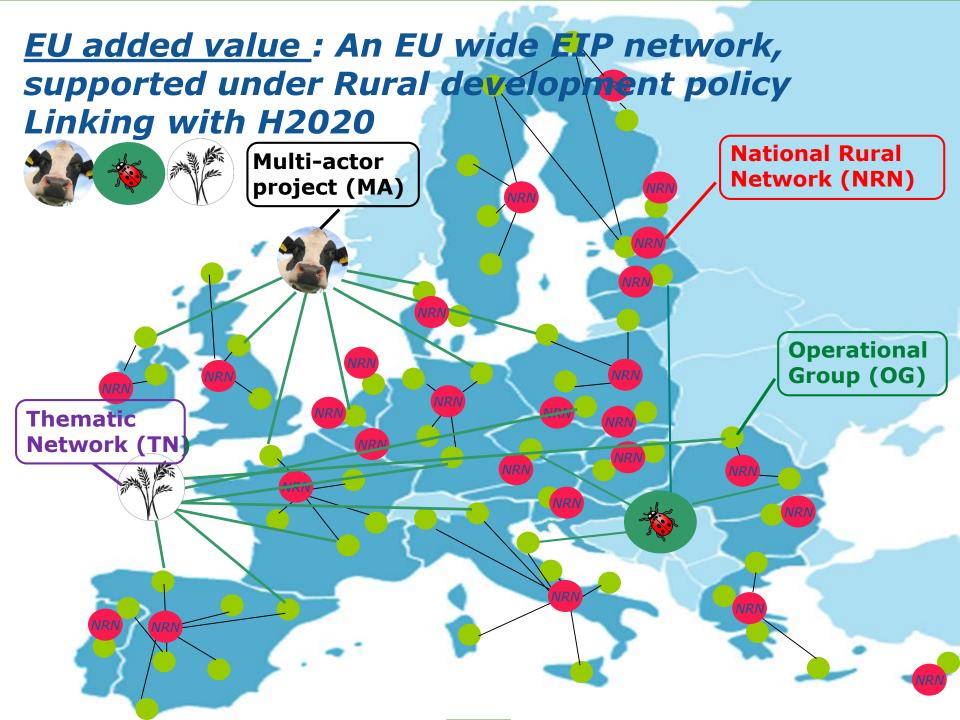
Involvement of OGs is strongly recommended



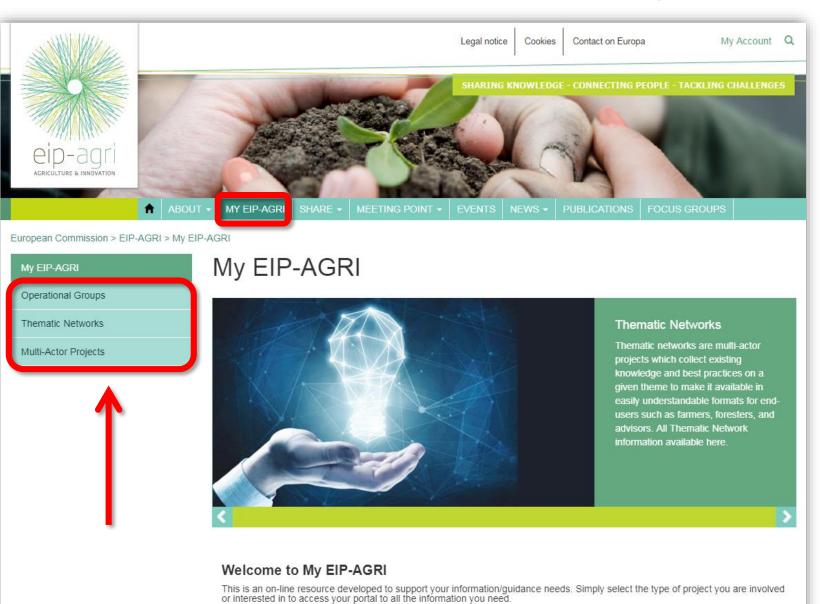
"I not only use all the brains that I have, but all that I can borrow"

Woodrow Wilson – President of the USA, 1913-1921





My EIP AGRI: tailored information at your fingertips





2. EIP-AGRI's Rural Development side

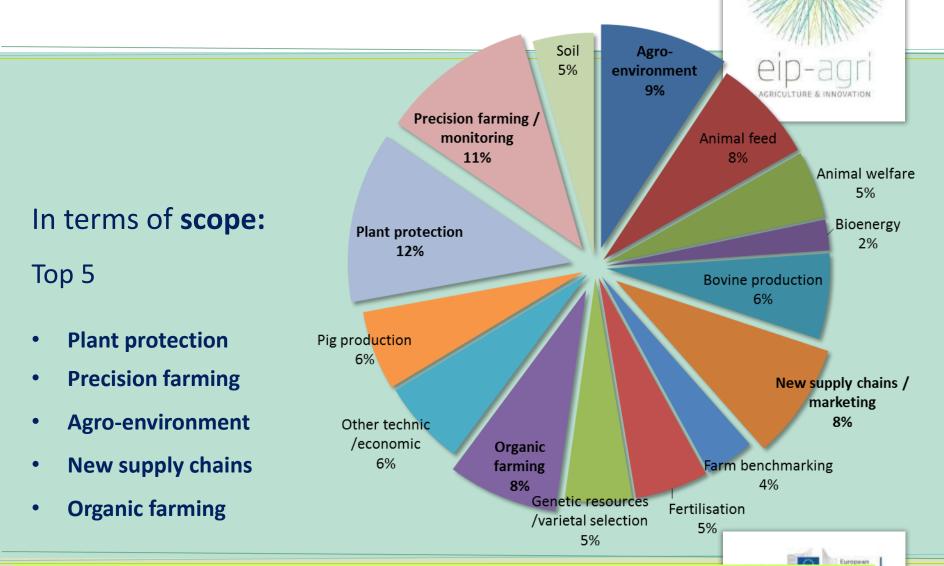




CAP: EIP Operational Groups 2014-2020

- The EIP implementation aims at a flexible and open system for the creation of a multiplicity of operational groups (OGs)
- 27 MS and 97 RDPs will be implementing the EIP in their 2014-2020 Rural Development programmes with regular calls for Operational Group projects during this period
- 3200 OGs planned in 2014-2020, with cooperation in innovative activities such as the development of new products or practices, pilot projects, supply chain cooperation, environmental projects or climate change actions, cooperation in biomass provision or renewable energy, forest management and much more
- The EIP provides unique opportunity for better cooperation projects thanks the supporting environment and through the (possible) funding of the preparation process of a project

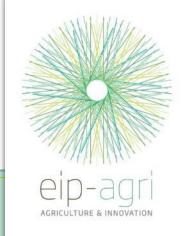
OG projects: first indications

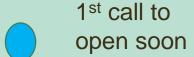


Calls for Operational Groups (OG)

(informal state of play 25 January 2018)









1st call now open



OG projects finished, selected and/or being evaluated





Innovation Support Services emerging:

- Brokering function (building a project and connecting partners)
- Coordination and facilitation of projects as an intermediate between partners
- Innovation advice (e.g. innovative investments)
- Innovation promotion
- Coaching farmers towards innovation (Innovation Prize)
- Brainstorming events and animation
- Dissemination of innovative results
- Connect with SME and other innovation services and funding





EIP-AGRI creating EU added value: 500 to 700 OG projects are being connected with other OGs and H2020 (speeding up since 2017)... Some examples:

EIP-AGRI Workshop: "Innovation in the supply chain: creating value together" (Feb 2018)

 44 OGs and 9 MA H2020 project networking on New business models and new ways of organising the supply chain, New products and processes

https://ec.europa.eu/eip/agriculture/event/eip-agri-workshop-innovationsupply-chain-creating

Various initiatives (events) being taken by MS and H2020 thematic networks to connect OGs:

- DE, HU, SI, EL, etc meetings inviting OGs from other countries
- H2020 Thematic networks are very active in making connections:
 e.g. Sheepnet, Eurodairy, Inno4Grass etc
- Cross-border OGs in Estonia





3. EIP-AGRI's H2020 Research and Innovation side





H2020 Multi-actor approach - Key elements

The most important principles:

- to focus on end-users' problems/opportunities and develop innovative solutions which cover real farmers/foresters needs.
- Co-creation: bring together a targeted mix of the most relevant partners with the complementary type of knowledge which helps solving problems and tackling opportunities e.g.: farmers, advisors, researchers, enterprises and/or other actors in project activities from the beginning till the end.
- End-users like farmers, foresters or businesses will be more motivated to use the project results, because they were incorporated in generating them and therefore feel "coownership"

Detailed requirements in H2020 WP 2018-2020 introduction p. 9 http://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-wp1820-food_en.pdf



H2020 Thematic networks: Compiling knowledge ready for practice

- Multi-actor 'coordination' projects
- Themes to be chosen **bottom-up**, contributing to a more competitive sustainable agriculture and forestry
- Themes must focus on the <u>most urgent needs</u> of agricultural or forestry production sectors
- Partners should summarise, share and present existing scientific knowledge & best practices that are not sufficiently known (and applied) by practitioners, in an easy understandable concise way ready for practice
- Disseminate through the **existing dissemination channels** most used by end-users + EIP network





23 H2020 bottom-up Thematic Networks so far (1) calls 2014-2016 – a complementary set of themes (sectors)

RUR 10 - 2016		Cereals: organic/low input cereal food systems for biodiversity and quality (production, processing, marketing)
RUR 10 - 2016		Pig husbandry: health management, precision production, welfare and meat quality
RUR 10 - 2016	Inno4Grass	Productive grasslands: profitability and environmental services
RUR 10 - 2016	SheepNet	Improving sheep productivity
ISIB 2 - 2014	Winetwork	Wine diseases: Grapevine Trunk Disease and Flavescence dorée
ISIB 2 - 2014	OKNetArable	Organic agriculture - arable crops
ISIB 2 - 2014	Hennovation	Animal welfare hens
ISIB 2 - 2015	4D4F	Data and sensor driven decision making on dairy farms
ISIB 2 - 2015	I HIROIDAIRV	Practice-based innovations in dairy farming: resource efficiency, Biodiversity, Animal care, and Socio-economic resilience
ISIB 2 - 2015	. FIIFKIII	Fruit: cultivar development, minimize residues, storage and fruit quality, sustainability of production systems

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23 H2020 bottom-up Thematic Networks so far (2) a complementary set of themes (cross-cutting themes)

RUR 10 - 2016	SKIN	Stimulating innovation and good practices in short supply chains
RUR 10 - 2016		Agroforestry: sylvoarable and sylvopastural systems' design, management and profitability
ISIB 2 - 2014	Agri-Spin	Innovation brokering methods
ISIB 2 - 2015	AGRIFORVALO R	Valorization of biomass side-streams from agriculture and forest
ISIB 2 - 2015	Smart-Akis	Smart Farming Technology: Management Information Systems, Precision Agriculture and Agriculture automation and robotics
ISIB 2 - 2015	HNV-Link	Support HNV farmlands through knowledge and innovation
WATER 4B - 2015	FERTINNOWA	Optimize water and nutrient use efficiency: dbase on innovative technologies and practices for fertigation of horticultural crops

A short film explaining how a thematic network works: https://youtu.be/mVsW4--ex0M



2017 H2020 bottom-up Thematic Networks (3) another complementary set of themes (cross-cutting themes)

ENABLING

Upscaling biomass production and pre- processing for bio-based value chains

INCREdible

Non Wood Forest Products: Cork, Resins and Edibles in the Mediterranean basin

NEWBIE

New Entrant netWork: Business models for Innovation, entrepreneurship and resilience

OK-Net EcoFeed

Organic Knowledge Network on Monogastric Animal Feed (pigs, broilers, hens)

PANACEA

Non-food Crops' penetration path

INNOSETA

Spraying Equipment best management practices

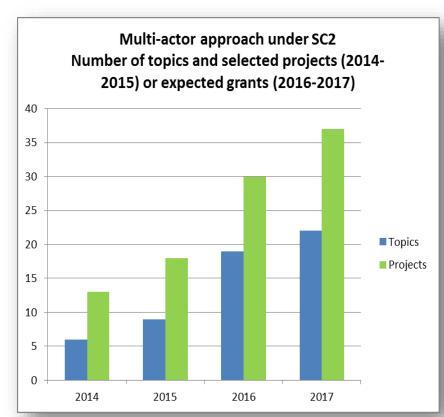


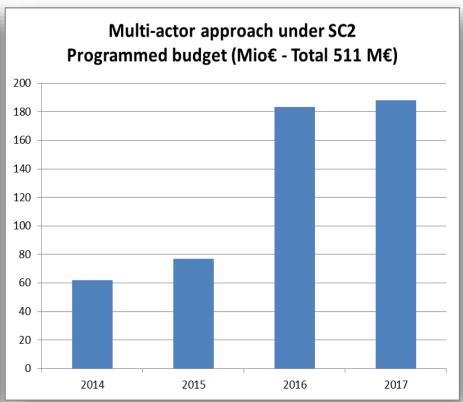
WPs 2014-2017: 500 mio Euro – 80 Multi-actor projects

WP 2018-2020: **500 mio Euro**

another 100 Horizon 2020 multi-actor projects (incl TNs)

=> 1 bio Euro H2020 Multi-actor projects in total in 7 years









4. Conclusions EIP evaluation study

Published February 2017, by 5 external contractors

https://ec.europa.eu/agriculture/sites/agriculture/files/external-studies/2016/eip-2016/eval en.pdf





Conclusions:

- The EIP is a unique funding for innovative opportunities, highly appreciated also, because of bottom-up + coverage of real needs/opportunities
- This is demonstrated by the vast majority of Member States having prioritised and programmed this new and voluntary measure
- The EIP flexibility allows it to be shaped to widely different circumstances and innovation infrastructure, tackling the gap between research and practice
- Where EIP networks and National Rural Networks have been active in MS, they have strongly promoted the EIP

Recommendations:

- Avoid watering down EIP's distinctive practical bottom-up approach
- Enable advance payments and innovation support services
- Create further networking, multiplication and linkages
 generating extra EU added value => connecting and widening EU
 AKIS (e.g. cross-visits, ...)



Jean
Monnet
Father of
Europe
Speech on
12/05/1954



"Ce qui nous arrête, c'est la peur du changement. Et pourtant c'est du changement que dépend notre salut"

"What stops us is the fear of change. And nevertheless, it is on change that our salvation depends"



4. Future of the EIP-AGRI: What do we have and where do we go?

EIP evaluation study:

https://ec.europa.eu/agriculture/sites/agriculture/files/external-studies/2016/eip-2016/eval_en.pdf

SWG SCAR-AKIS Policy Brief on the Future of Advisory Services:

on advisor's competences, interconnections and future more interactive roles, etc

https://ec.europa.eu/eip/agriculture/sites/agrieip/files/policy brief on the future of advisory services scar aki s 06102017.pdf

SWG SCAR-AKIS Exchange of views on how to improve MSs' Agricultural Knowledge and Innovation Systems

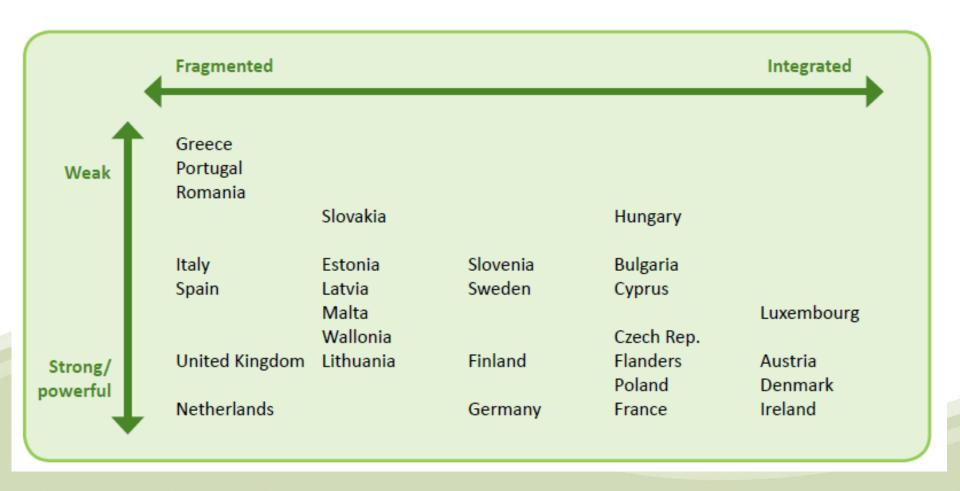
https://scar-europe.org/index.php/akis-documents



Characterising MS' AKISs



- An overview of MS' AKISs (PROAKIS, 2014, www.proakis.eu)
- => fragmented or integrated, strong or weak





Strengthening AKISs ? It is already happening...

EIP funding has induced recent evolutions of strengthened AKIS:

Examples Poland EIP network: A+N

- Hungary AKIS: R+A
- Ireland: R+A
- Slovakia: N + A
- France: R + A + N
- Wales Innovation Hub (EIP seminar May 2017):R+A
- Scotland Nov 2017 Innovation support service: R+A
- Etc...

(R=research, A=advisor, N=networks)





Knowledge & innovation

CAP Strategic AKIS plans

(cross-fertilisation in SWG SCAR-AKIS ongoing)

Incentivising creativity by structuring knowledge flows between key actors

research advisors rural networks





CAP post 2020 Communication "The future of food and farming": involves also the future for AKISs

"The European Innovation Partnership for Agricultural Productivity and Sustainability (EIP-AGRI) and the European Innovation Partnership on Water have proven their value in mobilising the agricultural sector for innovation. It has funded multi-participant pilot projects and is networking across Europe to make new knowledge generally available. Its success depends on the combined performance of advisors, agricultural training and educational systems, researchers and farmer organisations often referred to as the Agricultural Knowledge and Innovation System (AKIS) which operates very differently from one Member States to another. The role of the farm advisor stands out as particularly important. A modern CAP should support the strengthening of farm advisory services within the AKIS systems. This should become a condition for the approval of CAP Strategic plans."

Read the Communication:

https://ec.europa.eu/agriculture/sites/agriculture/files/future-of-cap/future of food and farming communication en.pdf



CAP post 2020 - The future of food and farming - involves also the future for AKIS

The rationale for these sentences is that the efficiency and effectiveness of advisory services can best be upgraded by improving their connections within the Agricultural Knowledge and Innovation Systems and sharing knowledge and innovative applications more intensively.

(See SWG SCAR-AKIS Policy Brief on the Future of Advisory services on advisor's future interactive competences, interconnections and roles) https://ec.europa.eu/eip/agriculture/sites/agrief eip/files/policy brief on the future of advisory services scar akis 06102017. pdf

To perform such an upgrade of advisory services, a **transition period is needed**. Such a transition AKIS plan will form a part of the **CAP Strategic Plans to be approved**.





CAP post 2020 Communication – The future of food and farming – Clarification memo on AKIS (2)

"How will this new approach function in practice?"

The **Union should set the basic policy parameters based on the objectives of the CAP**, ...the already agreed objectives and targets on for instance the environment, climate change (COP 21), and a number of sustainable development goals.

Each Member State should establish a "CAP strategic plan", which would cover interventions in both pillar I and pillar II. This plan will tailor CAP interventions to maximise their contribution to EU objectives taking better into account local conditions and needs, against such objectives and targets. At the same time, Member States would also have a greater say in designing the compliance and control framework applicable to beneficiaries (including controls and penalties).

....





CAP post 2020 Communication – The future of food and farming – Clarification memo on AKIS (3)

"How will this new approach function in practice?"

(continued)

These strategic plans would be prepared not in isolation but in the framework of a structured process and the Commission would assess and approve such plans. This would maximise the contribution of the CAP towards the EU priorities and objectives and the achievement of Member States' climate and energy targets. It would also enhance the EU added value and preserve a functioning agricultural internal market.

While Member States should bear greater responsibility and be more accountable as to how they meet the objectives and achieve agreed targets, the new approach will continue to **ensure a level playing field**, preserving the common nature and the two pillars of the policy. http://europa.eu/rapid/press-release MEMO-17-4842 en.htm





Why strengthening AKISs?

- Understand knowledge flows and the role of each part of the AKIS: start with a SWOT of existing AKIS and rethink connections (save money?)
- Create ways for better exchange between Ministries, institutes and organisations on needs and solutions
- Move from linear to interactive innovation models: co-creating, reflect how to incentivise?
- Public knowledge reservoirs, feeding into the existing dissemination channels most consulted by end-users in countries: increased sharing of practical knowledge, made attractive, easily understandable and accessible
- To benefit from all what is made available at EU level (set of demonstration farms and activities, 2 advisory networks, 38 thematic networks, many OGs and MA project infos,...)





How strengthening AKISs?

- 1. Enhancing knowledge flows and strengthening links between research and practice (e.g. creating an innovation environment, incentivise researchers for their impact beyond academia, demonstrations joining farmers and researchers, novel education approaches)
- 2. Strengthening farm advisory services within MS' AKISs: capturing and sharing farmers' needs, acting as innovation brokers/facilitators, participating in and sharing knowledge from innovative projects, advisors' training, cross-visits (learning peer-to-peer), spend time with researchers...
- **3. Incentivising interactive innovation projects** (OGs, H2020 MA) + help connecting, facilitating cross-border calls/exchange, put innovation support services in place to develop projects
- 4. Support digital transition in agriculture (repositories with agricultural data for multi-purposes, OGs on digital innovation,

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Having potential innovative knowledge is one thing, turning it into reality is another.

"The value of an idea lies in the using of it."

Thomas Alva Edison – inventor of the light bulb





Building an EU AKIS



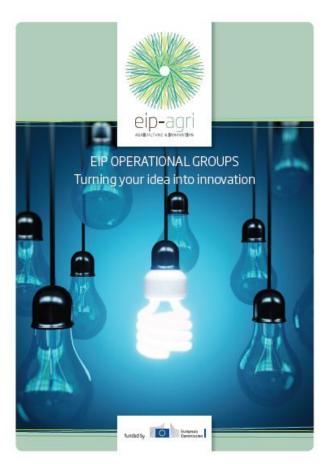


Where can you find more info?

- **EIP** brochure on multi-actor projects
- https://ec.europa.eu/eip/agriculture/sites/agri-eip/files/eip-
- **EIP** brochure on thematic networks & practice abstracts
 - http://ec.europa.eu/eip/agriculture/sites/agri-eip/files/eipagri brochure thematic networks 2016 en web.pdf
- **EIP** common format for practice abstracts
 - https://ec.europa.eu/eip/agriculture/en/content/eip-agri-commonformat
- Videostreamed seminar on drafting practice abstracts:
 - http://www.ncp-biohorizon.net/events?cmd=showDetail&id=33
- Brochure 'Collaborate to innovate OGs networking across the EU'
 - https://ec.europa.eu/eip/agriculture/en/publications/eip-agribrochure-operational-groups-collaborate



Innovation is: an idea put into practice with success!



Engage in a better connected
European AKIS:
To an
"Agriculture of Knowledge"

Thank you for your attention!

Inge.Van-Oost@ec.europa.eu

www.eip-agri.eu



Videostreamed presentation on Multi-actor approach and Thematic Networks in call 2016: (from 0:53:00 till 01:47:00) https://scic.ec.europa.eu/streaming/workshop-on-multi-actorapproach-and-thematic-networks-under-horizon-2020

Basic info + questions & answers

Workshop "Interactive innovation in motion: multi-actor projects and thematic networks under Horizon 2020" 24/11/2015:

Event page:

https://ec.europa.eu/programmes/horizon2 020/en/news/interactive-innovationmotion-multi-actor-projects-and-thematicnetworks-under-horizon-2020









Target **real-life needs**, **problems or opportunities**



Choose consortium partners with complementary types of knowledge and skills (for "cross-fertilisation")



including **farmers**, **foresters or other end-users** to benefit from their
entrepreneurial skills







Involve "multipliers" - people who can bring in practical knowledge and help disseminate the results in the long term



Set up a plan with a clear role for each of the different partners





Organise **knowledge exchange activities** between the partners





Bridge the gap between research and practice **by facilitating discussions**

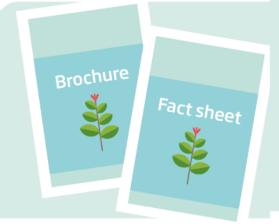
Involve interactive innovation groups such as **EIP-AGRI Operational Groups**

All partners must co-create and co-decide throughout the project









Produce practical information which feeds into the most common existing dissemination channels ...



... and write easily understandable **practice abstracts in the common EIP format**



More Operational Group examples

A selection of OG projects presented at past EIP-GRI events





EIP-AGRI Workshop Operational Groups: First experiences 20 – 21 April 2016

OPERATIONAL GROUPS
REPRESENTED AT THE WORKSHOP





EIP-AGRI Seminar

"Moving EIP-AGRI implementation forward"

10 - 11 May 2017

OPERATIONAL GROUPS
REPRESENTED AT THE SEMINAR

fundacity Commission



EIP-AGRI WORKSHOP

Organic is Operational

14-15 JUNE 2017

Some of the Operational Groups and Innovative projects represented at the workshop

