



COMMON AGRICULTURAL POLICY

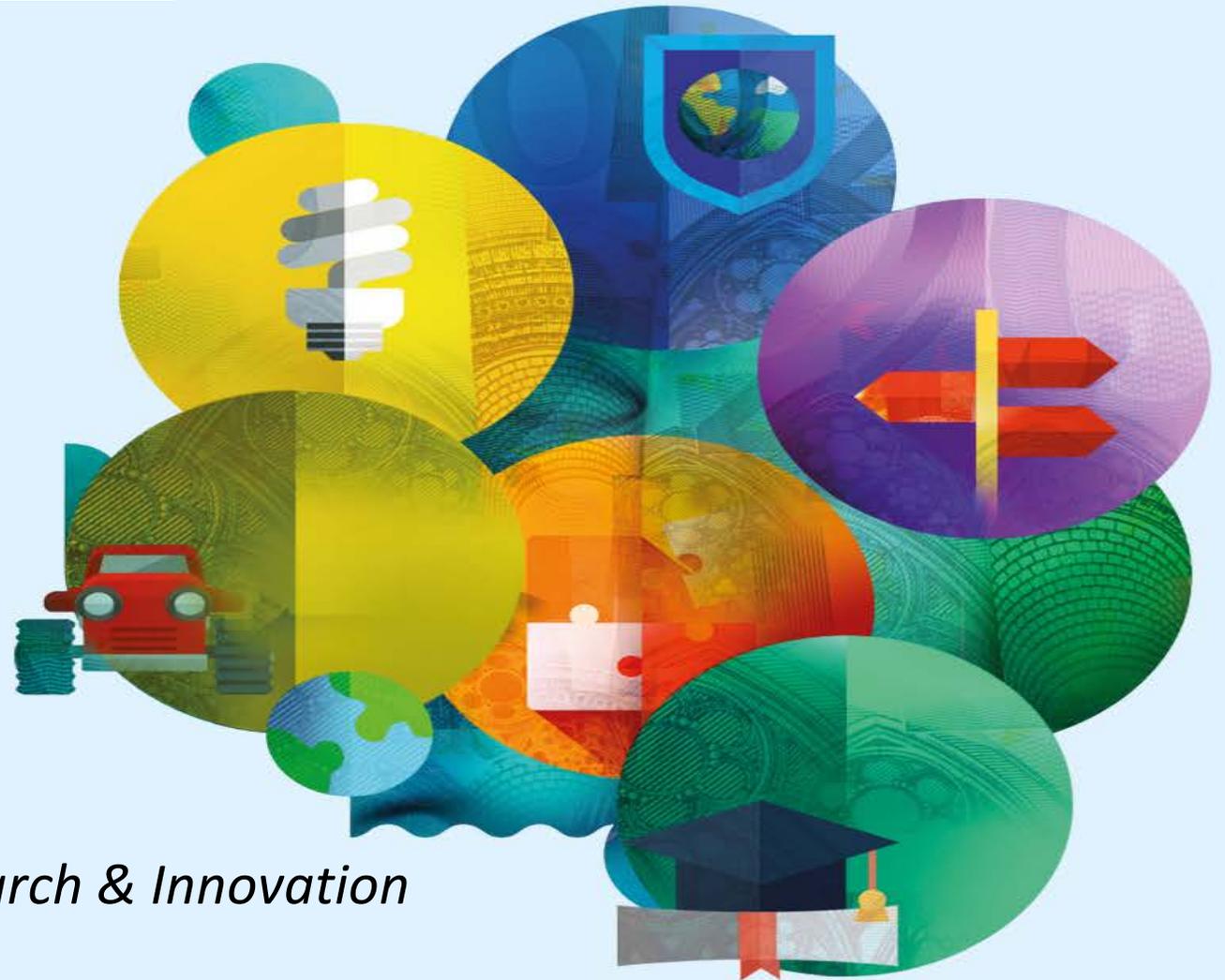
Post-2020

Legislative proposals

*AKIS, Farm advice
and Innovation Networking
CDG CAP – Bxl – 7 November 2018*

Inge VAN OOST - DG AGRI - Unit B2 – Research & Innovation

#FutureofCAP



AKIS and Farm Advice

Article 13, 71, 72, 102, 114

CAP Strategic Plan Regulation



Provisions on modernisation in the CAP Plan Regulation

**From funding innovative projects.....
.....to a whole innovation ecosystem**

Objectives of the CAP

General objectives (art. 5)

- *Smart, resilient and diversified agriculture ensuring food security*
- *Environmental care and climate action contributing to EU objectives*
- *Socio-economic fabric of rural areas*
- ***Cross-cutting objective: modernisation of the sector by fostering knowledge, innovation and digitalisation of agriculture and rural areas***

Objectives of the CAP

Specific objectives (art. 6), *all supported by the EIP*

- (a) support viable **farm income** and resilience across the Union to enhance food security;
- (b) enhance **market orientation** and increase **competitiveness**, including greater focus on **research**, technology and digitalisation;
- (c) improve the farmers' **position in the value chain**;
- (d) contribute to **climate change** mitigation and adaptation, as well as sustainable **energy**;
- (e) foster sustainable development and efficient management of **natural resources** such as water, soil and air;
- (f) contribute to the protection of **biodiversity**, enhance **ecosystem services** and preserve **habitats and landscapes**;
- (g) attract **young farmers** and facilitate business development in rural areas;
- (h) promote employment, growth, social inclusion and local **development in rural areas**, including bio-economy and sustainable **forestry**;
- (i) improve the response of EU agriculture to **societal demands** on food and health, including **safe, nutritious and sustainable food, food waste, as well as animal welfare**.

What is AKIS?

Actors and Knowledge flows

researchers

advisers

education

media

organisations

businesses



What is an Agricultural Knowledge and Innovation System (AKIS)?

What:

AKIS is the organisation and interaction of persons, organisations and institutions who use and produce knowledge and innovation for agriculture and interrelated fields.

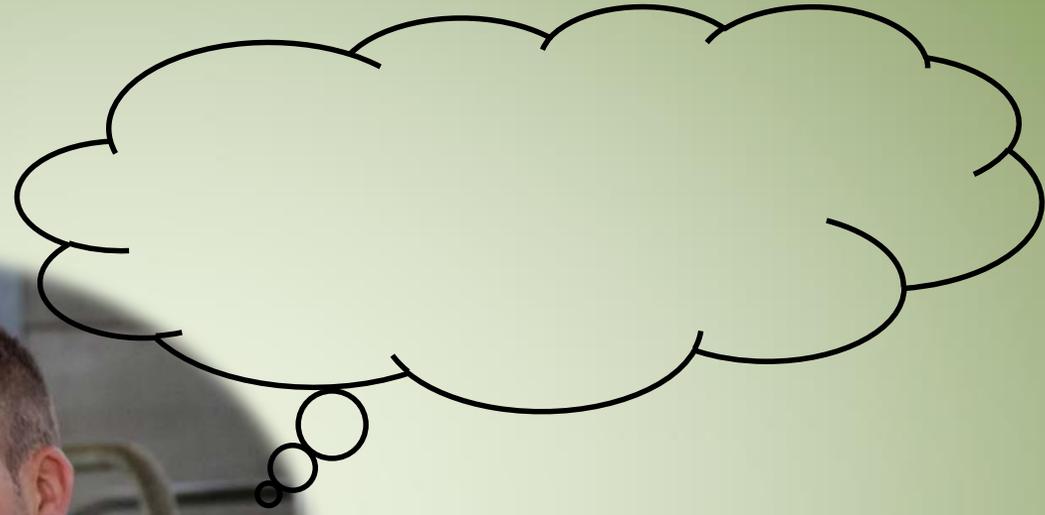
Who:

The main players of the AKIS are: farmers, advisors, researchers, (farmer) organisations, retailers, media, services, ministries...: they all produce and need knowledge!

Why:

The aim is to create a regional/national innovation ecosystem by enhancing knowledge flows between the AKIS players as well as strengthening links between research and practice.

What a farmer most needs...



is good AKIS

CAP post 2020 Commission Communication "The future of Food and Farming" on the future for advice and AKISs, explaining the rationale:

*“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.**”*

CAP post 2020 Commission Communication "The future of Food and Farming" on the future for advice and AKISs, explaining the rationale:

- *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/agri-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. Therefore a strategic AKIS plan will form a part of the CAP Strategic Plans to be approved.***

CAP Strategic Plans

Member States shall draw CAP Strategic Plans, setting targets, defining interventions and allocating financial resources, in line with the specific objectives and identified needs.

Content of the plans (art. 95)

- a) an assessment of **needs**;
- b) an **intervention strategy**;
- c) a description of elements common to several interventions;
- d) a description of the direct payments, sectoral and rural development **interventions** specified in the strategy;
- e) **target and financial plans**; (=> INDICATORS)
- f) a description of the governance and coordination system;
- g) a description of the elements that ensure modernisation of the CAP;**
- h) a description of the elements related to simplification and reduced administrative burden for final beneficiaries.

Integrated approach for modernisation, innovation and knowledge flows: Overview of relevant AKIS provisions (see detailed doc in EIP Seminar 17 Oct 2018)

https://ec.europa.eu/eip/agriculture/sites/agriculture/files/field_event_attachments/eip-agri_sem-spoletto-2018_supporting_doc_cap-post2020_inge_van_oost.pdf

Art 5
Cross-cutting objective of modernisation, knowledge sharing, innovation and digitalisation



Strategic approach to plan CAP interventions

Art 102 Modernisation in CAP Strategic Plans:
Well-functioning AKIS:
research + advisors + CAP networks +... working togetherand digitalisation

Tools = targeted CAP interventions to support the CAP strategy:

Art 72
Funding for knowledge exchange, advice and information

Art 71
Cooperation:
Funding for preparing and implementing EIP OG projects

Art 13
Details on Advice and Innovation support to be given

Art 114
Details on EIP and OGs,
Interactive innovation model

Art 113
CAP networks:
Fostering innovation and knowledge exchange

Art. 71, 72 and 113 are a key part of an integrated approach supporting modernisation, innovation and knowledge flows



Researchers **AKIS** Advisers



Education

Farmer

Businesses

at the centre of the integrated Agricultural Knowledge and Innovation System (AKIS) supporting modernisation, innovation and knowledge flows

Organisations

Media



Modernisation through CAP Strategic AKIS Plans

With respect to **modernisation** (art.102), the CAP Strategic Plans shall contain:

1. Their contribution to the cross-cutting general objective related to fostering and sharing of knowledge, innovation and digitisation, notably by describing:

- **The organisational set-up** of the Agricultural Knowledge and Innovation System =>**SWOT of current AKIS situation**
- How **advisors, researchers and CAP networks will work together within the framework of the AKIS**, and
- How **advice and innovation support services are provided**

2. A description of the strategy for the development of **digital technologies** in agriculture and rural areas



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

CAP Post 2020

CAP Strategic AKIS plans

(cross-fertilisation in SWG SCAR-AKIS + EIP Seminar Spoleto 17-18 Oct 2018)

advisors **research** **rural networks**

**Knowledge
& innovation**

Incentivising creativity by structuring knowledge flows between key actors

SWG SCAR-AKIS Exchange of views on how to improve MSs' Agricultural Knowledge and Innovation Systems : <https://scar-europe.org/index.php/akis-documents>

Art 13 and 72: Farm advice organised within the AKIS structures in CAP Strategic plans

- ✓ *Advising farmers and other beneficiaries of CAP support to be included in the CAP plans.*
- ✓ ***Advisors shall be integrated in the AKIS in an inclusive way, to be able to cover economic, environmental and social dimensions and to deliver up-to-date technological and scientific information developed by R&I***
- ✓ *Advisors must be **impartial** and be able to cover at least:*

- Conditionality
- EU legislation on biodiversity, water, air and use of pesticides
- Practices against antimicrobial resistance
- Risk management
- ***Innovation support, in particular for preparing and implementing Operational Group projects of the EIP AGRI***
- Development of digital technologies in agriculture and rural areas

Art 114. EIP Agricultural Productivity and Sustainability

*EIP–AGRI Operational Groups' innovative projects shall develop innovative solutions based on the **interactive innovation model**:*

1. **Focusing on farmers'/foresters' needs** while also tackling interactions across the supply chain where useful
(incl. development issues in rural areas, see CAP objectives g, h)
2. Bringing together partners with complementary type of knowledge such as ... in a targeted combination **as best suited** to the project objectives
3. **Co-deciding** and co-creating all along the project

Art 114. EIP Agricultural Productivity and Sustainability

- **Shall contribute to all specific objectives** of the CAP (Art 6) by stimulating innovation and knowledge exchange (= agric + rural)
- Make use of the "cooperation intervention" Art 71 (= broad type of activities)
- To incentivise innovation, *by way of derogation*, the maximum **EAFRD contribution rate for EIP OGs shall be 80 %** instead of 43%
- Member States may decide to **pay advances of up to 50%**
- The envisaged innovation may be based on **new but also on traditional practices in a new geographical or environmental context.** (was in the current innovation guidelines)
- Operational Groups shall **disseminate their plans** and the results of their projects, in particular through the CAP networks. (enabling earlier connections of OGs and better networking)



Overview of AKIS, advice and EIP in CAP post 2020

Relevant articles (see also reference to 2013-2020 articles/measures):

- 1. An more inclusive AKIS with better knowledge flows as part of MS' CAP Strategic Plan (Art 102 - new)*
- 2. EIP OGs supporting **all** CAP objectives (Art 114, replacing Art 53)*
- 3. EIP interactive innovation model defined (Art 114 - clarification)*
- 4. Impartial advice, all advisors inclusively integrated in AKIS (Art 13, new)
=> replacing FAS (system) by the AKIS (system)*
- 5. Innovation brokering and facilitation - supporting EIP OGs (Art 13, new)*
- 6. OGs use Cooperation intervention for funding OGs (Art 71 => M16)*
- 7. AKIS uses Knowledge exchange & information (Art 72 => M1 & M2)*
- 8. CAP networks at EU level and National/regional levels to support EIP and AKIS coordination activities (Art 113 => before: Art 52-57)*

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

What Post 2020 ?

Jean
Monnet
Father of Europe

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”

Strengthening AKISs – It is already happening.....

Examples of recent evolutions of strengthened AKIS, often induced by the EIP funding

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...

(A=advisors, R=researchers, N=networks)

How strengthening AKISs in countries? *(SWG SCAR-AKIS Athens, Tallinn)*

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

- 1. Enhancing knowledge flows and strengthening links between research and practice:** incentivise researchers for their impact beyond academia, e.g. in their careers, by making practice ready outputs, meet practitioners frequently/thematic events, organise on-farm demonstrations where farmers and researchers meet and talk, education for researchers on interactive innovation approaches etc
- 2. Strengthening farm advisory services within MS' AKISs:** capturing and sharing farmers' needs, acting as innovation brokers/facilitators, participating in and sharing knowledge from OG innovative projects, advisors' training and thematic events to update knowledge, cross-visits (learning peer-to-peer), spend time with researchers,...
- 3. Incentivising interactive innovation projects (OGs, H2020 MA):** help connecting actors, facilitating cross-border and transnational calls/knowledge exchange, establish innovation support services to develop projects and capture farmers' foresters needs and innovative ideas, support intergenerational renewal by experts' collaboration...
- 4. Support digital transition in agriculture:** EIP OGs on digital innovation, build and use repositories with agricultural data for multi-purposes, digital skills development,...

Innovation networking

Article 71, 72, 102, 113 and 114
CAP Strategic Plan Regulation



The Innovation Dimension of the future CAP network

Mission: *A platform providing for more exchange of knowledge in order to capture the results and added value of the policy at European level, particularly the Horizon Europe policy »*

Members: *Network of organisations and administrations, advisors, researchers and other innovation actors in the field of agriculture and rural development*

One of the 3 main supporting elements cooperating to provide input for countries' and regions' AKISs : *Advisors, research and CAP networks "will work together" within the framework of the AKIS. EIP OGs and Horizon MA projects will disseminate plans and outcomes through the CAP innovation networks in support of the AKISs.*

Art 113. EU and national CAP networks

Objectives:

- *increase involvement of stakeholders in the design and implementation of CAP strategic plans*
- *facilitate **peer to peer learning and interaction** among all stakeholders*
- ***foster innovation and support the inclusion of all stakeholders in the knowledge-building and knowledge-exchange process***
- ...

Tasks:

- *Collection, analysis, **dissemination of information/good practices***
- *Capacity building of MS administration and other stakeholders*
- ***Collecting and facilitating exchange of information** between stakeholders*
- ***Facilitating networking** of LAGs, EIP Operational Groups, etc.*
- *Preparation of future CAP plans*

Integrated approach for modernisation, innovation and knowledge flows: Role of the innovation elements of the CAP networks (EU-level, national level)

Art 5
Cross-cutting objective of modernisation, knowledge sharing, innovation and digitalisation



Strategic approach to plan CAP interventions

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Tools = targeted CAP interventions to support the strategy:

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CAP networks:
Fostering innovation and knowledge exchange

Learn from current networking: EIP seminar 18/10/2018



- How to get useful projects up and running?
- How to support and network OGs ?
- How to improve their impact?
- How to improve further collaboration?

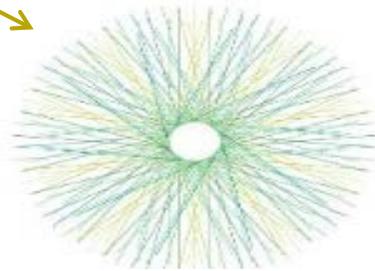
https://ec.europa.eu/eip/agriculture/sites/agri-eip/files/field_event_attachments/eip-agri_sem-spoletto-2018_margarida_ambar_types_of_networking.pdf

- An overview of various approaches already used to **support the networking and improve impact** of Operational Group (OG) projects was made on Day 2
- These type of events can form **part of the CAP Strategic Plans on AKIS (Art 102)**. It is useful to engage with various authorities and organisations (Ministries of Agriculture, Research, Innovation, Environment, advisory bodies, farmers' organisation and networks etc well in advance to collect ideas and to coordinate future actions => **form "AKIS coordinating bodies", be pro-active !!**
- If indeed well planned in advance, **such events could make use of funding from the interventions under Article 72, 71 or 112 => now is the time to brainstorm and plan ahead**

Funding for interactive innovation projects

Rural Development (regional/national level)

- Funding for setting up of an **“Operational Group” (OG)** : farmers, advisors, agribusiness, researchers, NGOs, etc)
planning an innovation project
- Project funding for the **Operational Group’s project**
- Supporting innovation support services



eip-agri
AGRICULTURE INNOVATION

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, enterprises, etc.... **“all along the project”**

Involvement of OGs is strongly recommended

Post 2020 R&I proposals “Horizon Europe”: Synergies and complementarity CAP - R&I policies

The future EU Research and Innovation Framework Programme (Horizon Europe) will make available € 10 billion for research and innovation in food, agriculture, rural development and the bio-economy.

The EIP-AGRI will continue to ensure the links and pool funding sources from Horizon Europe and rural development to foster competitive and sustainable farming and forestry.

How can CAP networks help strengthening innovation and knowledge exchange on all 9 CAP objectives?

1. Collecting and sharing outcomes of 3200+ EIP OGs
2. Collecting and sharing outcomes of 180 H2020 multi-actor projects +HE
3. Both continuing post 2020 and more project results coming – EIP website + knowledge reservoirs being prepared under H2020
4. **Connecting OGs with Horizon** projects gives great added value
5. All this material provides great input for **organising local knowledge exchange for all AKIS actors** (farmers, advisors, businesses, researchers,...): training for advisors and farmers, peer-to-peer events, website, e-learning etc
6. Organise **events to link and network AKIS actors** for future cooperation on certain themes. Discovering farmers' needs. Selecting and translating info. Make good use of targeted actions supported under Art 71 and 72 for such actions.
7. **Start now**, already testing future interventions and **brainstorm in AKIS coordination platforms**

CAP networking at EU and national/regional levels

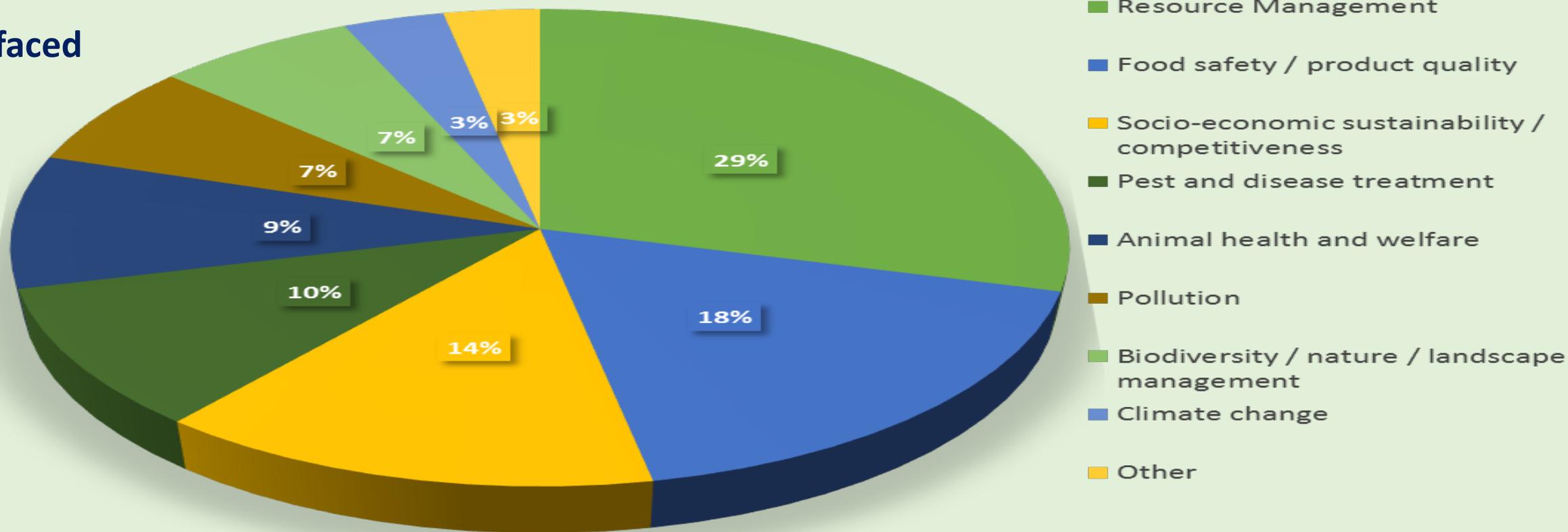
Supporting peer to peer learning and exchange of best practices



600 OG - 14 MS EIP OGs assessment – clustering analysis (data Feb 2018)

Type of agricultural challenge / opportunity

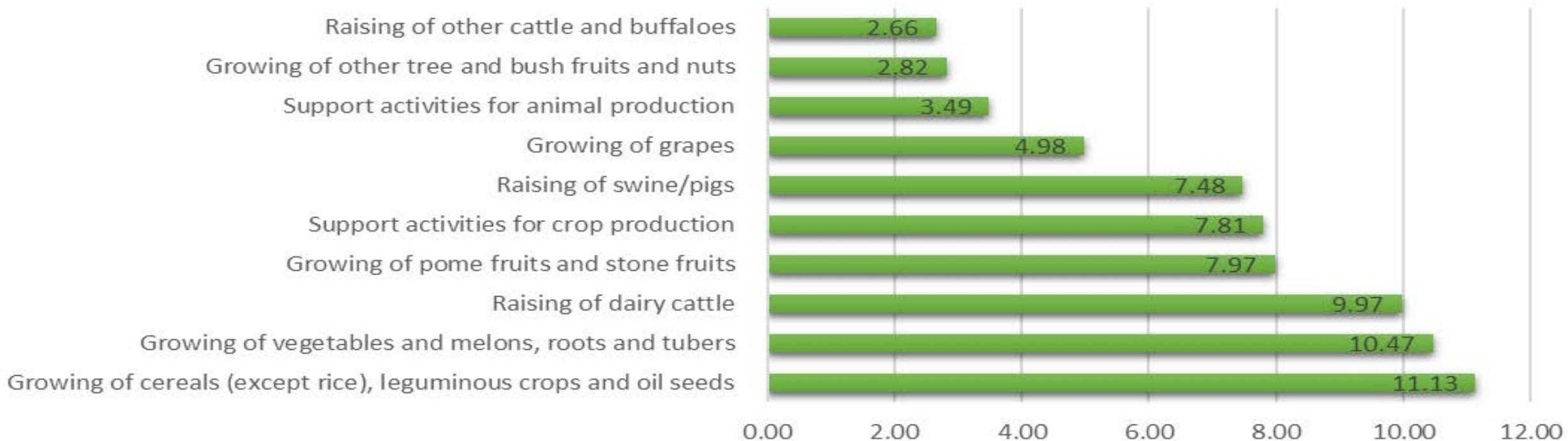
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600 OG - 14 MS EIP OGs assessment – clustering analysis (data Feb 2018)

Product / sector ranked by occurrence

% - TOP 10

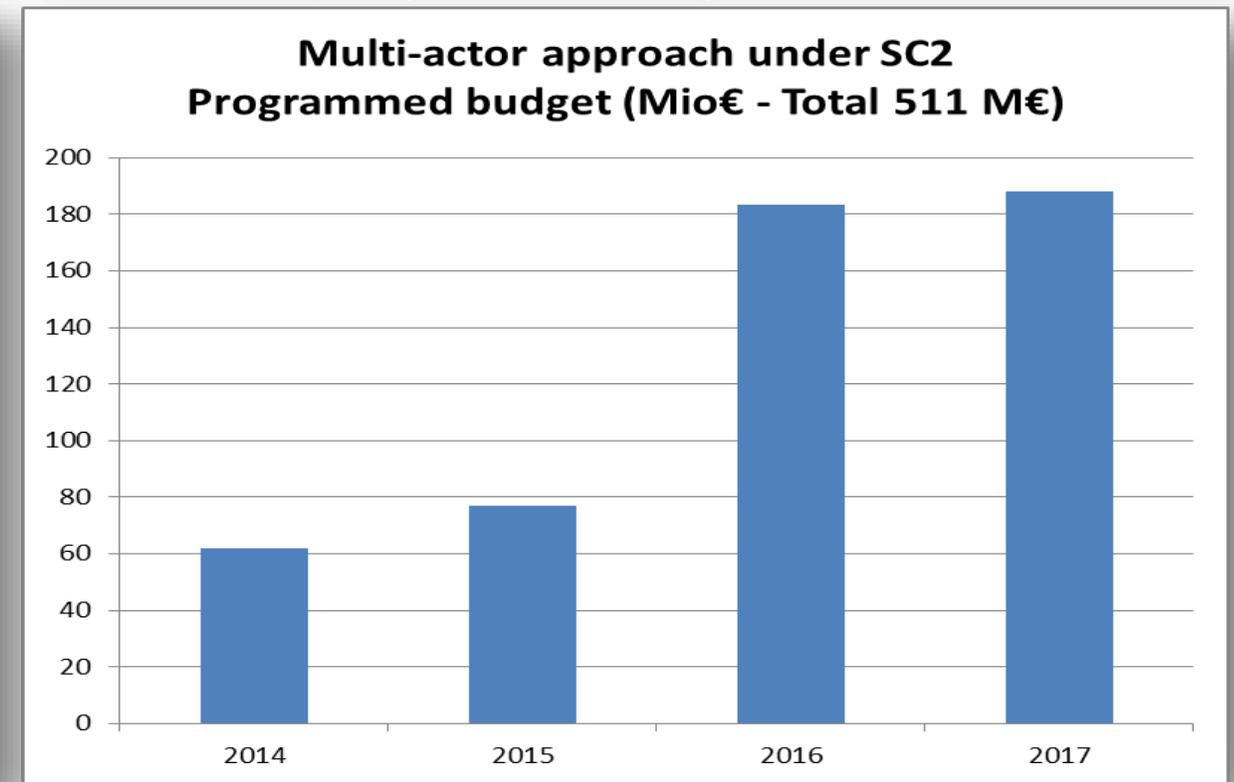
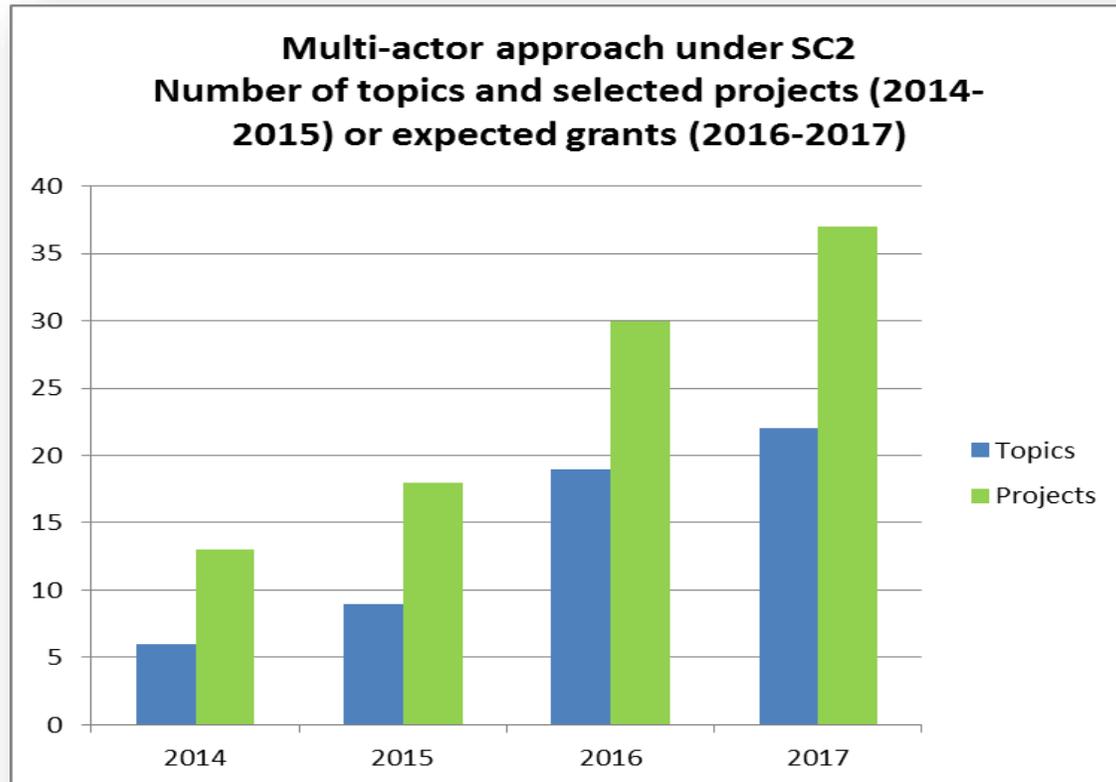


WPs 2014-2017: 500 mio Euro – 80 Multi-actor projects

WP 2018-2020: More multi-actor topics/projects

500 mio Euro – another 100 MA projects (incl TNs)

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





29 H2020 bottom-up Thematic Networks so far(1)

calls 2014-2016 – **a complementary set of themes (sectors)**

RUR 10 - 2016	CERERE	Cereals: organic/low input cereal food systems for biodiversity and quality (production, processing, marketing)
RUR 10 - 2016	Eu PiG	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	EuroDairy	Practice-based innovations in dairy farming: resource efficiency, Biodiversity, Animal care, and Socio-economic resilience
ISIB 2 - 2015	EUFRUIT	Fruit: cultivar development, minimize residues, storage and fruit quality, sustainability of production systems



29 H2020 bottom-up Thematic Networks so far(2) a complementary set of themes (cross-cutting themes) calls 2014-2016

RUR 10 - 2016	SKIN	Stimulating innovation and good practices in short supply chains
RUR 10 - 2016	AFINET	Agroforestry: sylvoarable and sylvopastoral systems' design, management and profitability
ISIB 2 - 2014	Agri-Spin	Innovation brokering methods
ISIB 2 - 2015	AGRIFORVALOR	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



Call 2017 H2020 bottom-up Thematic Networks so far(3)
another complementary set of 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



Call 2018 H2020 bottom-up Thematic Networks so far(4)
another complementary set of cross-cutting themes

DISARM	Reduction of antibiotic resistance in livestock farming
NUTRIMAN	Best practices for N/P nutrient management/recovery from un-exploited resources of raw materials (CE)
SuWaNu Europe	Re-use of treated wastewater in agriculture
BEST4SOIL	Best practices for the control of soilborne diseases
EURAKNOS	Widening existing thematic network outputs – building EU Knowledge Reservoir
Legumes Translated	Innovation in grain legume-supported cropping systems



H2020 bottom-up Thematic Networks

How? Learn from experience calls 2014-2018

A short film:

One of our thematic networks (Hennovation) explains how the interactive innovation model works in their project

<https://youtu.be/mVsW4--ex0M>

Helps to build capacity for AKIS actors on how to innovate together

Building an "EU AKIS"

*Speed up creativity and
practice application*

*Better connectivity and
quicker circulation of
information*



Future post 2020: Further info and context

Impact assessment on Modernisation

(made in preparation of the CAP Commission Proposal):

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=SWD%3A2018%3A301%3AFIN>

Document 3: encloses Annex 6 of the CAP Impact Assessment – promoting modernisation

1. Enhancing Agricultural Knowledge and Innovation Systems (AKIS) and strengthening links with research (page 105)
2. Strengthening of farm advisory services within the Agricultural Knowledge and Innovation Systems (page 108)
3. Enhancing interactive innovation (page 110)
4. Supporting digital transition in agriculture (page 113)

Future post 2020: Further info and context

- **EIP seminar on AKIS:**

<https://ec.europa.eu/eip/agriculture/event/eip-agri-seminar-promoting-creativity-and-learning>

- **EIP brochure on AKIS:**

<https://ec.europa.eu/eip/agriculture/en/publications/eip-agri-brochure-agricultural-knowledge-and>

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

https://ec.europa.eu/eip/agriculture/sites/agri-eip/files/policy_brief_on_the_future_of_advisory_services_scar_akis_06102017.pdf



The European Innovation Partnership (EIP)
„Agricultural Productivity and Sustainability“
Speeding up knowledge exchange and innovation



Thanks for your attention

Inge Van Oost – DG AGRI Unit B.2 – Research and Innovation