



# EIP-AGRI

## Bridging Research & Practice



*Innovation in the Agri-Food sector*  
*8 November 2018*

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*Unit B2 – Research & Innovation*

# Outline

- *Our framework: two policies working in synergy with interactive innovation as a cornerstone*
- *Some examples*
- *A few words about the future*



# European Innovation Partnership for Agricultural Productivity and Sustainability





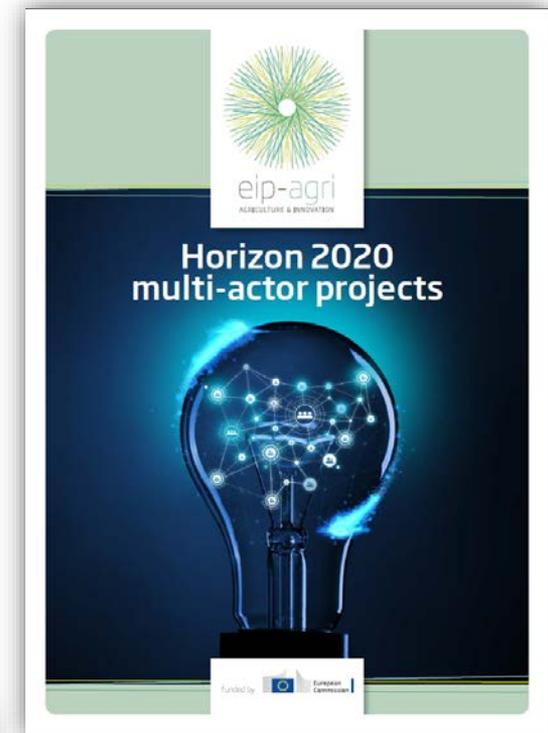
European  
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## *Interactive Innovation Model*



# Multi-actor approach

- The project must respond to real needs of those on the ground
- Adequate choice of actors with complementary knowledge
- Genuine & sufficient involvement of actors all along the project
- Produce practical knowledge easily accessible, understandable and applicable
- Dissemination at minimum through Agri EIP with practice abstracts

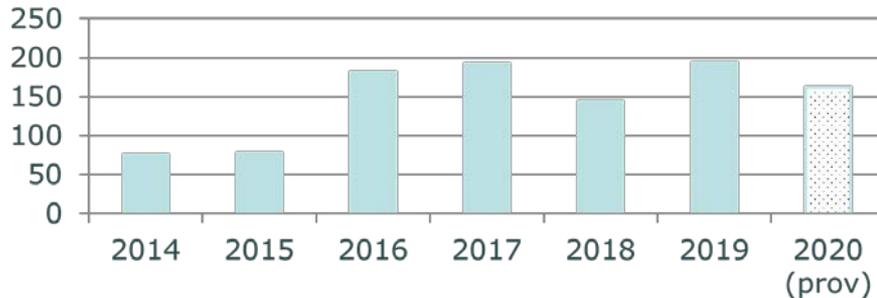




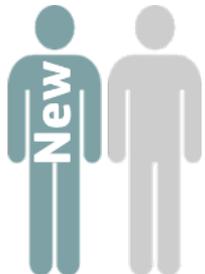
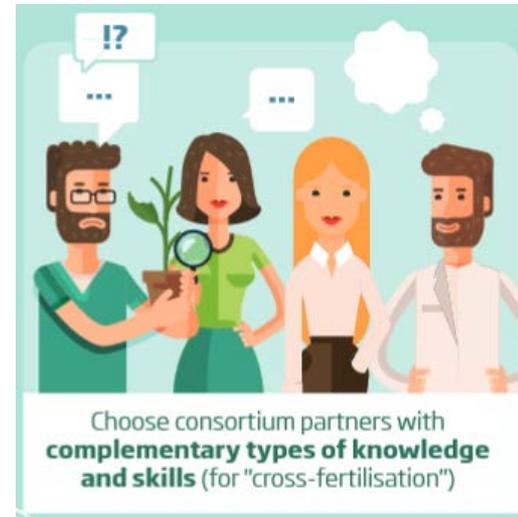
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# Multi-actor approach

Multi-actor approach under SC2 budget  
(EUR million - 2020 provisional)



**H2020= EUR 1 billion – 180 grants**



## More newcomers

48% newcomers in Multi-actor topics (+20% compared to classical SC2 topics)

## Co-created knowledge

Complementary types of knowledge  
→ innovative solutions...  
... better adapted to the field

# Connecting policies: the bigger EIP picture

CAP /Rural development  
(regional/national level)

  
(European projects)



- **Research projects**  
(knowledge base)
- **Multi-actor projects and thematic networks**  
(interactive innovation)

EIP  
network(s)

Spread  
the results



*Funding for:*  
**OG preparation**  
**OG projects**  
**Innovation support services**

**Involvement of OGs is strongly recommended**



**Unique EU knowledge repository  
of contacts and practice abstracts**

# EIP-AGRI – Where are we?

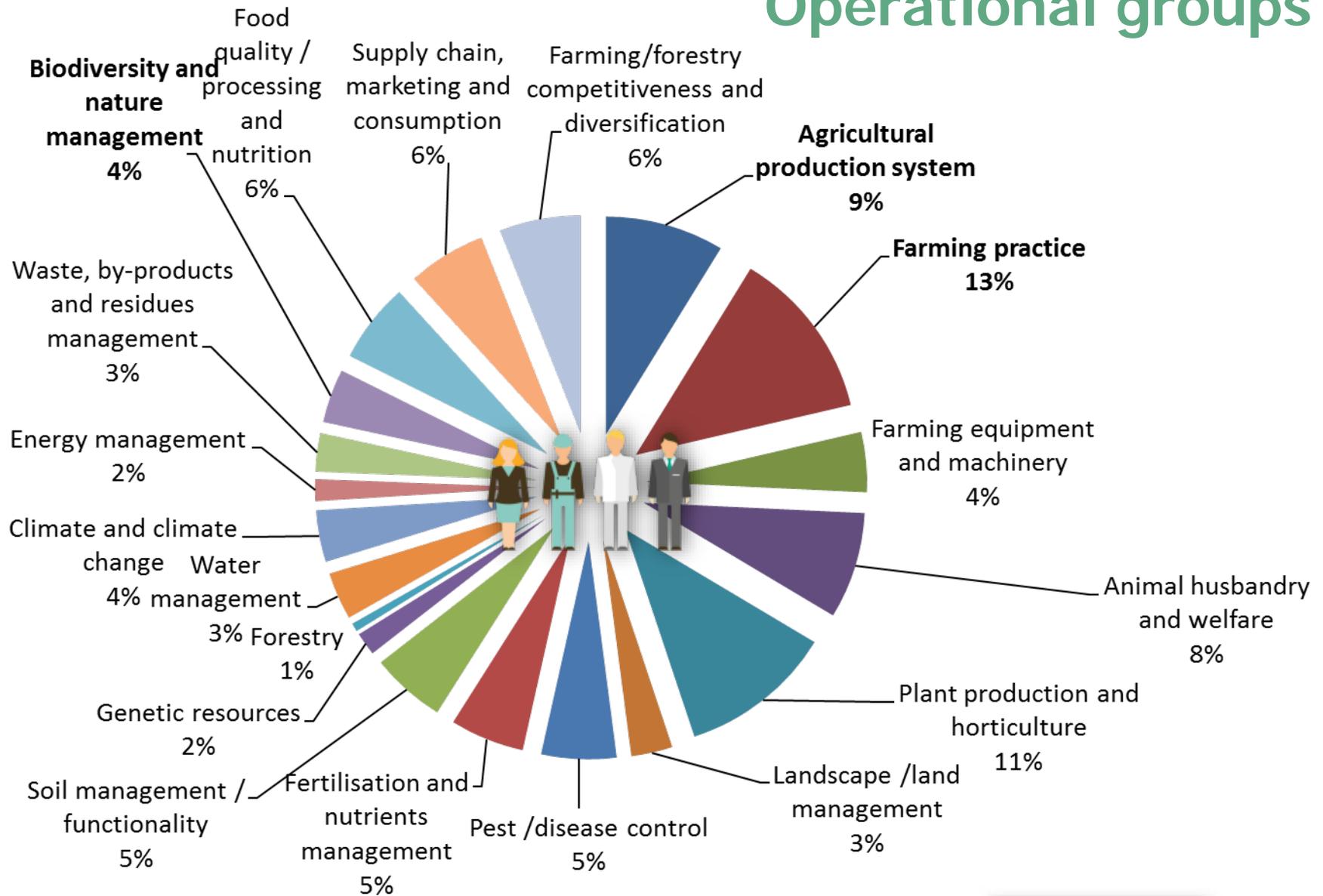
- ✓ *27 Member States, 98 rural development programmes implementing the EIP*
- ✓ *Around 3 200 OGs planned in 2014-2020; over 700 OGs already running*
- ✓ *Over 100 H2020 multi-actor projects ongoing, including 23 thematic networks*
- ✓ *A growing and thriving network*

An increasing volume of  
practice-oriented  
knowledge !

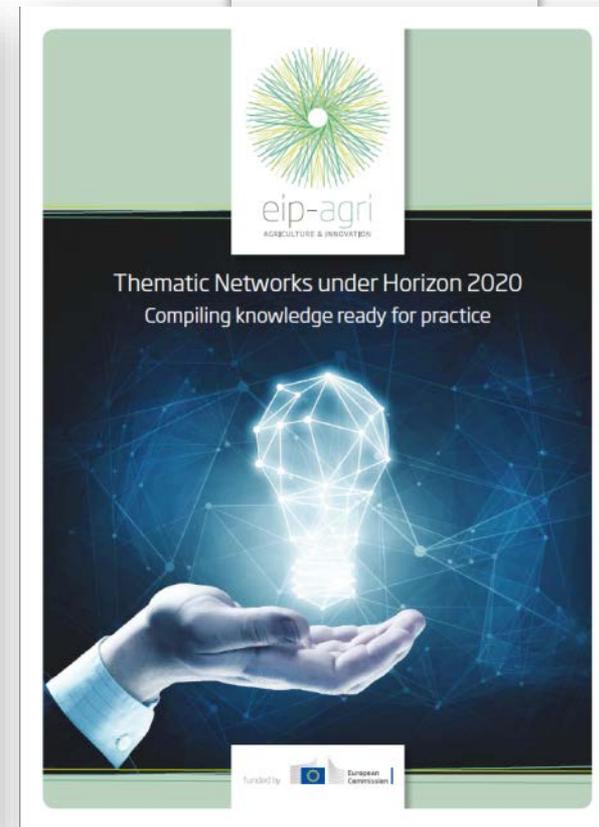
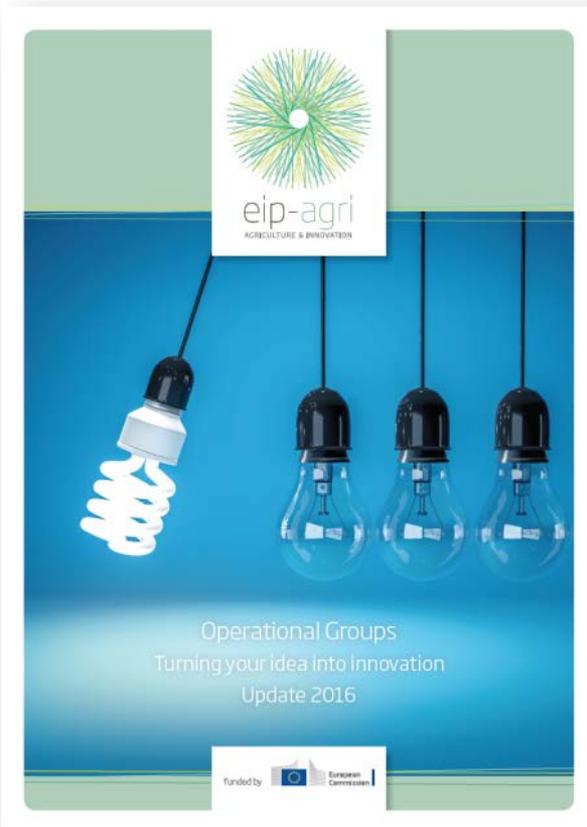


[www.eip-agri.eu](http://www.eip-agri.eu)

# Operational groups



# Interactive innovation in practice!



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



European Commission

# Agricultural and rural research under Horizon 2020 - Factsheets



## Why do R&I on public goods from agriculture and forestry matter?

Agriculture and forestry are unique sectors delivering alongside commercial products, societal public goods such as biodiversity, water regulation, landscape, erosion control, resilience to floods and climate change mitigation. The increasing value assigned by society to the environment, culture and heritage of rural areas can be a driver of their sustainable growth. This has manifested to a certain extent for public goods related to culture and heritage, e.g. tourism based on traditional landscapes or traditional food. However, the situation is less favourable for most environmental public goods.

Farmers and foresters are managing their EU land and, depending on practices used, need be sources of a wealth of environmental public goods to the benefit of rural areas. Research activities can help improve the design of the complex interactions in many production systems and ecosystems and should support the provision of goods and services, through the development of solutions, decision-supporting tools and the assessment of their non-market value.

### Public Goods under Horizon 2020 Societal Challenge



#### Key themes

Public Goods  
Biodiversity  
Land-use  
Forestry - Good



## Why do R&I on sustainable, circular and innovative value chains matter?

Sustainable, diverse and resilient value chains are a prerequisite for sustainable rural growth, for food security and for the sustainable use of biological resources. Food and non-food crops play a central role in an increasingly circular and dynamic system, represented by new consumer expectations, changing structures and coexisting technologies, use of new and innovative business models, generate higher returns for producers while leading to a higher quality of life for consumers. The delivery of a wider range of products and services has a role to play in strengthening the resilience of food systems and their efficiency, resilience and sustainability. It needs to help understanding food chain dynamics and the interaction between them and non-food products and non-food products. The need to diversify the energy sector to meet climate change goals is coupled with an increasing interest in renewable energy and an increasing interest in green chemistry. Addressing low-carbon, short-chain or circular delivery systems for innovative bio-based applications, using a systems approach for the provision of biomass for all uses, whilst preserving the diversity of ecosystem services.

### Sustainable, circular and innovative value chains under Horizon 2020 Societal challenge 2



#### Key themes

Value-chain approaches  
New bio-based business models  
Food chain sustainability - food safety  
Quality assurance - short food chains



## Why do R&I on agricultural and rural digital transformation matter?

Digital technologies have the potential to revolutionise agriculture by helping farmers work more precisely, efficiently and sustainably. Data-driven insights can improve decision-making and practices and help increase environmental performance while making the job more attractive to younger generations. Digital technologies also have the potential to offer consumers greater transparency as to how their food is produced. They offer opportunities to renew business models in value chains by connecting producers and consumers in innovative ways. Beyond farming, digital technologies are key to make rural communities more attractive,

smart and sustainable, reducing problems related to remoteness and improving access to services. Research and innovation are vitally important to facilitate and accelerate digital transformation in agriculture and rural areas for the benefit of European citizens and businesses. The EU has been active in the last years undertaking R&I activities in the ground for digital and data-driven European agriculture and rural areas. Interventions support the uptake of digital technologies, increased R&I investments to digital solutions and the crucial areas of socio-economic impacts of digitalisation.

### Digitisation transformation under Horizon 2020 Societal challenge 2



#### Key themes

Resource use  
Sustainability of  
Services in r



## Why do research and innovation on rural and farming policy matter?

Rural areas across the EU have undergone and are still undergoing profound changes, including the transition from agriculture towards an increasing number of services and services jobs, new activities and services in many areas, new activities and services, including tourism, leisure and recreation, manufacturing, food production and processing, digital services and networking services. Digital developments also offer a wide range of new business and networking opportunities. At the same time, rural areas are facing demographic and socio-economic challenges, the diversity of value added activities in rural areas is declining, and the primary production value is an important objective of rural policies for decades, the food chain - including concerns over food safety - and the increasing demand for bio-based products generated by the growing primary production needs to accommodate the increasing demand for all these needs while still ensuring the capacity of environmental, social and economic systems. The need to ensure the sustainability of rural areas to society is a challenge and knowledge change forces and knowledge input into the design of modern policies and programmes that address these challenges, using the most appropriate instruments and governance approaches.

### Rural policy under Horizon 2020 Societal challenge 2



#### Key themes

Food and nutrition-related policies  
Digital innovation - Modernising rural areas  
Rural development - Modernising rural policies



## Why do R&I on human capital and innovation systems matter?

The need to speed up innovation has been repeatedly emphasised in recent years and is now a core mission of the European Commission's communication on the future of food and farming. Because more people have been able to enter a sector that has been traditionally dominated by rural areas, the primary sector innovation in agriculture can play an important role in stimulating green and socially inclusive economic growth. In addition, human and economic capital and innovation systems that enable actors to perform in the primary sector innovation in agriculture beyond the primary sector innovation in agriculture can play an important role in stimulating green and socially inclusive economic growth. In addition, human and economic capital and innovation systems that enable actors to perform in the primary sector innovation in agriculture beyond the primary sector innovation in agriculture are essential to successful rural innovation.

### Human capital and innovation systems under Horizon 2020 Societal challenge 2



#### Key themes

Agriculture, fisheries and aquaculture  
Rural development - Modernising rural areas  
Rural development - Modernising rural areas



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# Some examples

## TERUNIC - Territory Economical, the Right Understanding (France)

- Understanding the impact of increased protein autonomy at farm and territorial level
- Farmers, advisors and researchers
- Crops, practices + an assessment tool  
« DEVAUTOP »
- Reduced protein dependency from 50% to 6% (local rapeseed cake)



<https://ec.europa.eu/eip/agriculture/en/find-connect/projects/terunic-étude-sociale-environnementale-micro-macro>  
<https://www.pole-agro-ouest.eu/projet-sos-protein/terunic/>

## **BRIDE** – Biodiversity regeneration in a dairying environment (Ireland)

- Towards result-based policy support
- Led by farmers for farmers, with ecologists and researchers
- Tailored habitat management plan
- Higher payments for higher diversity
- Local sense of identity and valuation



BRIDE Project  
*Farming with Nature*

Home

### New Project Rewards Farming with Nature in East Cork

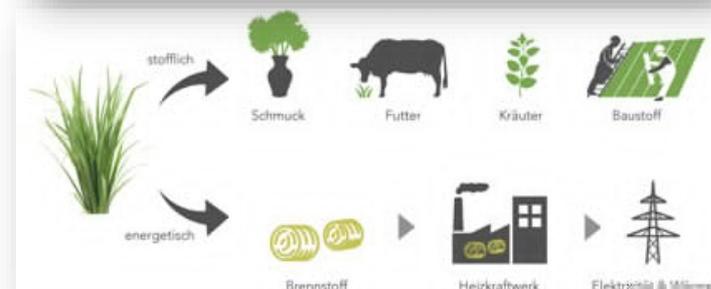
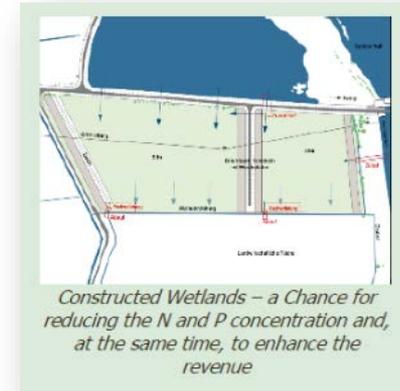


Performance-related payments for farmland wildlife

<http://www.thebrideproject.ie/>

## MEERGEWINN – Nutrient removal by the production of renewable resources in constructed wetlands (Germany)

- Growing innovative crops on constructed wetlands on the Baltic to clean water and create value: fodder, ornamentals, energy crops
- Led by Scientists with farmers and SME
- Testing practices with local farmers
- Creating value streams



[http://www.duene-greifswald.de/de/projekte.php\\_meergewinn.php](http://www.duene-greifswald.de/de/projekte.php_meergewinn.php)

<https://ec.europa.eu/eip/agriculture/en/news/inspirational-ideas-constructed-wetlands-water>

# Innobrotics (Austria)

- Fighting corn rootworms in sustainable ways
- Researchers and farmers
- Beetle control
- Testing existing and new plant varieties (alternative feed to corn)
- Farming practices
- Increasing crop rotation

## Innobrotics

**Innovation (innovation) and *Diabrotica virgifera* (western corn rootworm)**

AUSTRIA – THREE FEDERAL STATES (STYRIA, BURGENLAND AND CARINTHIA)

**Starting date - expected end date** | 01.01.2016 - 31.12.2018

<https://www.zukunftsraumland.at/projekte/1475>

### Operational Group

In recent years, the corn rootworm has spread rapidly in Austria and has caused great damage to many farms. Innovative solutions have to be found as quickly as possible in order to avoid further major losses in value. The main objectives of the project are: Research into sustainably effective, ecologically compatible beetle control measures; Screening of existing and testing of new plant varieties, which are an potential alternative feed to corn; The Implementation of the knowledge acquired in the project into the farming practices. An important benefit for the affected farms is the preservation of the value added by a high proportion of self-produced basic feed in the refining industry as well as the best possible substitution of the main crop corn by alternative crops such as millet, field bean and soybean. As a result, crop rotation and biodiversity in agriculture are significantly increased.



<https://www.zukunftsraumland.at/projekte/1475>

## **PRO-VITERRE:** Guidelines for better agricultural practices for soil conservation in the main hilly vine areas, in EmiliaRomagna (Italy)

- Comparing soil management practices across farms and assessing their impacts
- Researchers and many farmers
- Optimum use of inter-row grass
- Effect on organic matter, erosion and production



<http://www.pedologia.net/it/PRO-VITERRE/cms/Pagina.action?pageAction=&page=InfoSuolo.35&localeSite=it>

# EIP-AGRI Service Point

SHARING KNOWLEDGE - CONNECTING PEOPLE - TACKLING CHALLENGES

## SERVICES



Help agricultural innovations spread across Europe fast



Connecting Research & Practice

Connecting Scientists & Farmers

Connecting Within & Across European Countries



**And tomorrow?  
*Policies coming even closer  
together***

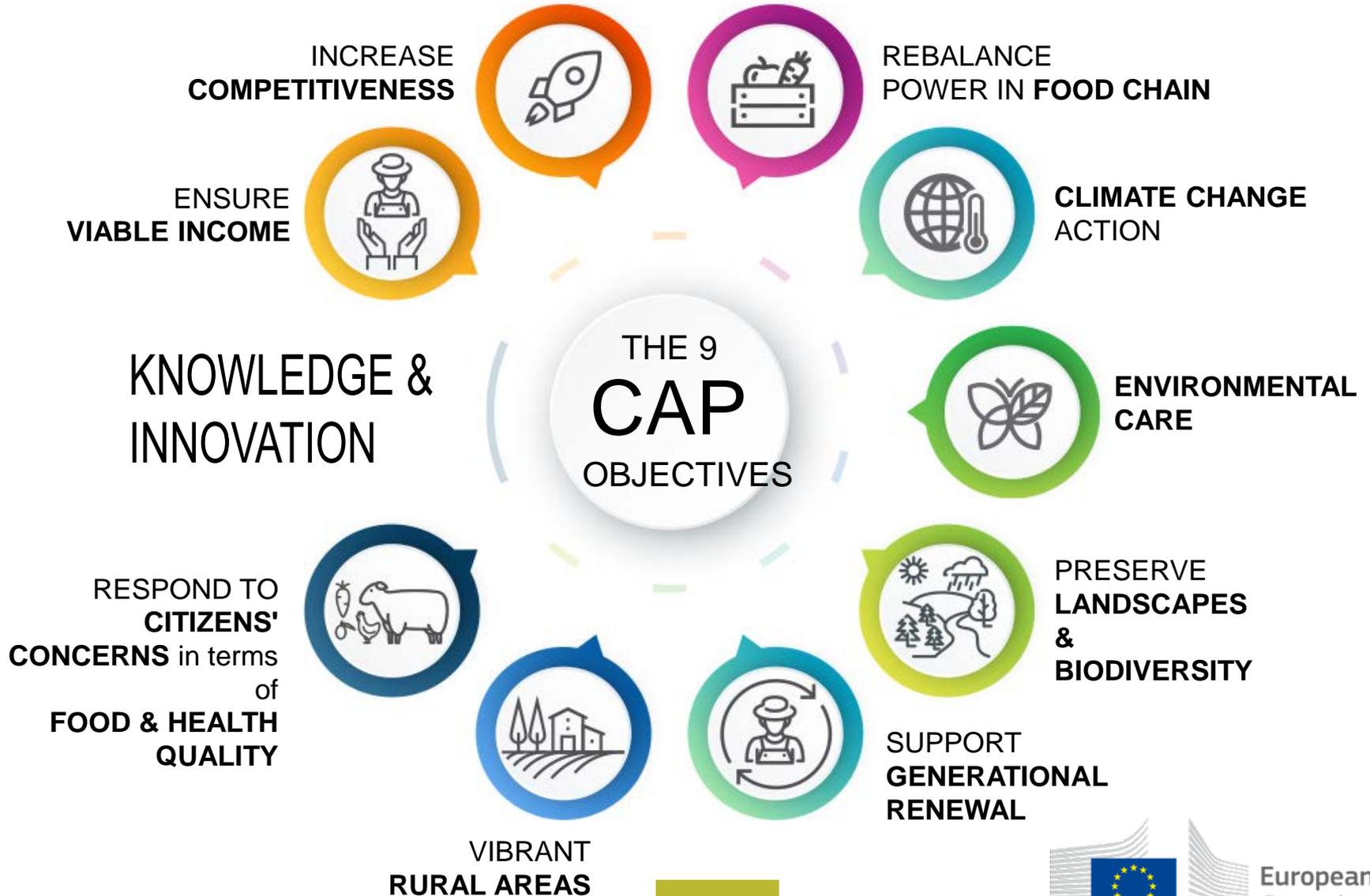
# Horizon Europe

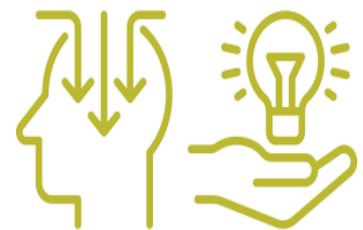
## Specific objectives of the Programme





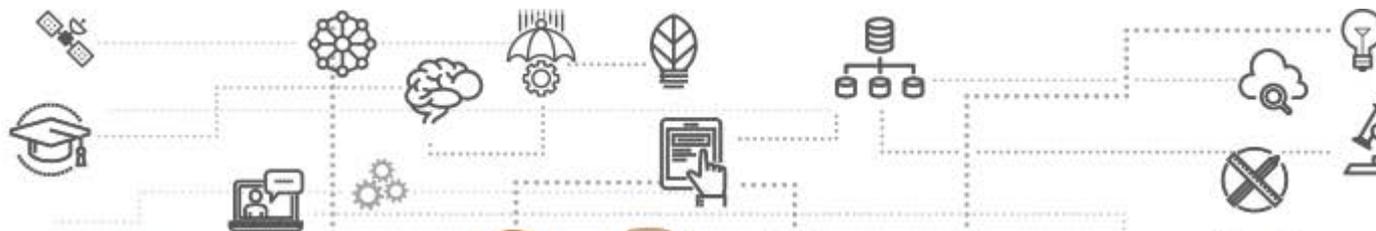
# THE 9 COMMON OBJECTIVES





# DEVELOPING A KNOWLEDGE-BASED AGRICULTURE

- ▶ **Cross-cutting objective** on knowledge, innovation and digitalisation
- ▶ Each **CAP strategic plan** will include a section on how to **stimulate the exchange of knowledge and innovation** & the development of **digital technologies** in agriculture
- ▶ Strengthening of the **Agricultural Knowledge and Innovation System**
- ▶ **Advice, training, innovation and knowledge support** in Rural Development
- ▶ **Specific budget of EUR 10 billion** in Horizon Europe for food, agriculture, rural development and the bio-economy.



▶ Continuation of the agricultural **European Innovation Partnership**



***Thank you for your  
attention!***

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**[www.eip-agri.eu](http://www.eip-agri.eu)**  
**Register today!**