



# Horizon 2020 Work Programme for Research & Innovation 2018-2020

**Food security, sustainable agriculture and forestry,  
marine, maritime and inland water research and the  
bioeconomy**

## Agricultural research beyond 2020

#InvestEUresearch

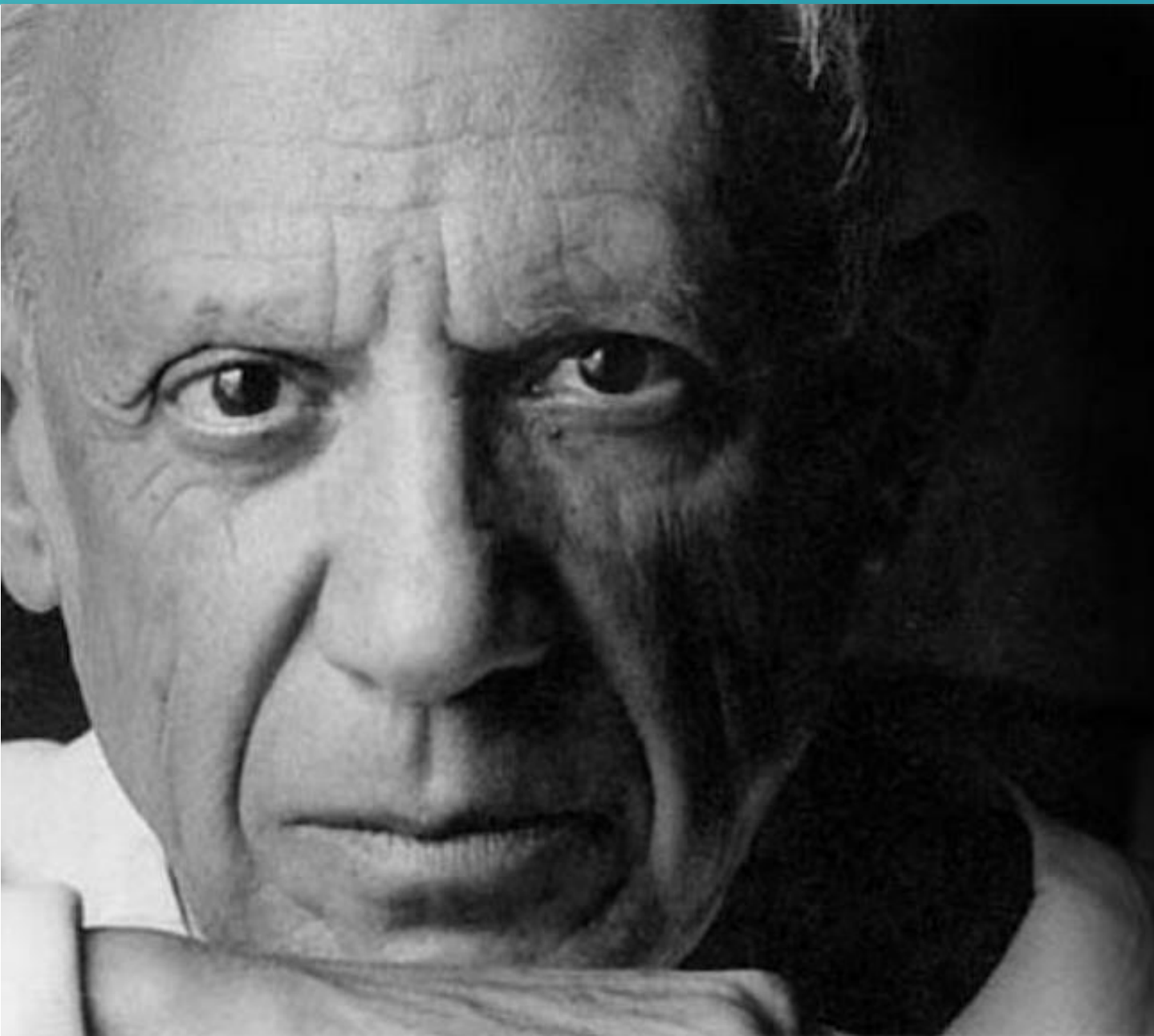


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Research and  
Innovation





*Our goals can only be  
reached through the  
vehicle of a plan. There  
is no other route to  
success.*

*–Pablo Picasso*



# We have a plan

**Why? (Challenges)**

**What? (Priorities)**

**How? (Implementation approaches)**



# Why?



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# Strategic approach to EU agricultural R&I - 2016



**ensure food and nutrition security in the long term**



**address the environmental sustainability and resilience of competitive land-based primary production for food and non-food systems**



**boost the sustainable growth of rural territories**



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# Our most prominent challenges for 2021-2027



**Climate**



**Biodiversity**



**Circularity**



**Health**



**Social & demographic change  
(inc. rural)**



**Governance  
for sustainability**



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# Orientations towards Horizon EU strategic planning

## Six cross-cutting targeted impacts

Environmental  
Observation

Biodiversity  
and Natural  
Resources

Agriculture,  
Forestry  
and Rural Areas

Seas, Oceans  
and Inland  
Waters

Food Systems

Bio-based  
innovation  
systems in the  
EU Bioeconomy

Circular Systems

- ✓ Reduction of greenhouse gas emissions and successful adaptation of ecosystems and production systems as well as rural, coastal and urban areas to climate change
- ✓ Halt of biodiversity decline and restoration of ecosystems
- ✓ Sustainable and circular management and use of natural resources; prevention and removal of pollution; healthy soils and clean water and air for all; attractive jobs, enhanced value creation and competitiveness
- ✓ Establishment of primary production, food and bio-based systems based on sustainability, inclusiveness, health and safety; food and nutrition security for all
- ✓ Behavioural, socio-economic and demographic change are well understood and drive sustainability; a balanced development of vibrant rural, coastal, peri-urban and urban areas
- ✓ Establishment of governance models enabling sustainability



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# What?



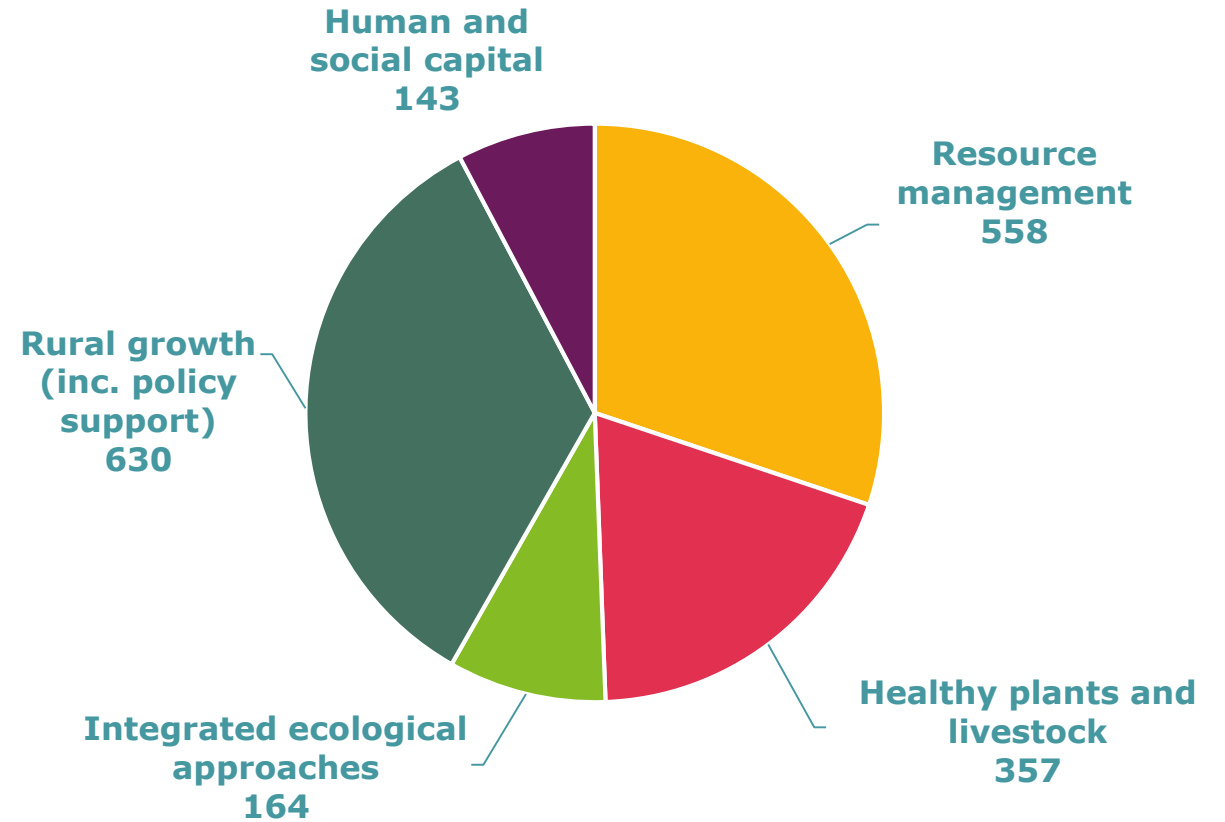
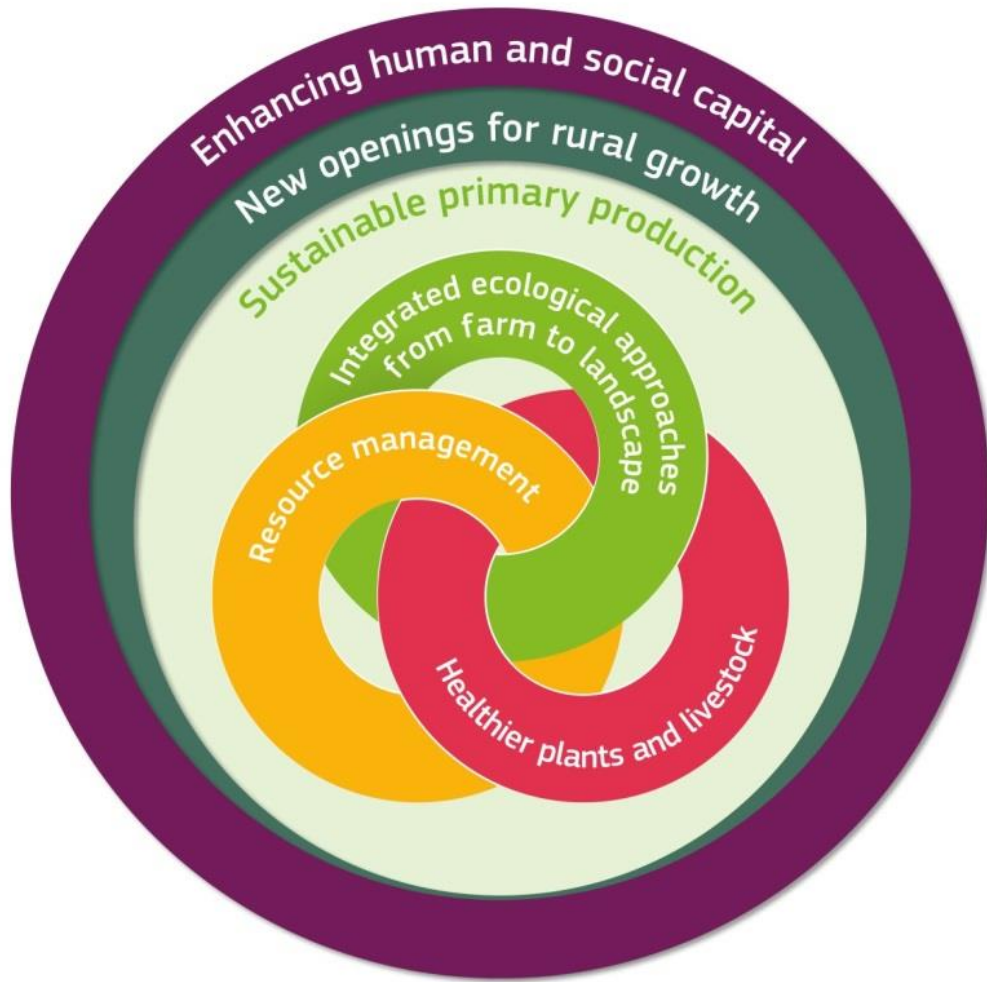
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# Strategic R&I priorities

**Distribution of budget over priorities**  
(EUR million - 2014-2020)



**315 projects – 1,9 M€ under Horizon 2020**



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# From strategy to action: 12 big themes under H2020

[https://ec.europa.eu/agriculture/research-innovation/documents-links\\_en](https://ec.europa.eu/agriculture/research-innovation/documents-links_en)

**AGRI RESEARCH FACTSHEET PUBLIC GOODS FROM AGRICULTURE AND FORESTRY**

**AGRI RESEARCH FACTSHEET DIGITAL TRANSFORMATION IN AGRICULTURE AND RURAL AREAS**

**AGRI RESEARCH FACTSHEET SOILS**

**AGRI RESEARCH FACTSHEET ECOLOGICAL APPROACHES AND ORGANIC FARMING**

**AGRI RESEARCH FACTSHEET ANIMAL PRODUCTION SYSTEMS**

**AGRI RESEARCH FACTSHEET UNDERSTANDING DYNAMICS AND MODERNISING POLICY**

**AGRI RESEARCH FACTSHEET SUSTAINABLE, CIRCULAR AND INNOVATIVE VALUE CHAINS**

**AGRI RESEARCH FACTSHEET ENHANCING HUMAN CAPITAL AND BOOSTING INNOVATION SYSTEMS**

**AGRI RESEARCH FACTSHEET ANIMALS AND HEALTH**

**AGRI RESEARCH FACTSHEET PLANT HEALTH**

**AGRI RESEARCH FACTSHEET WATER, NUTRIENTS AND WASTE**

**AGRI RESEARCH FACTSHEET GENETIC RESOURCES AND BREEDING**

**AGRI RESEARCH FACTSHEET RURAL POLICY UNDER HORIZON 2020 SOCIETAL CHALLENGE 2**

Update June 2019

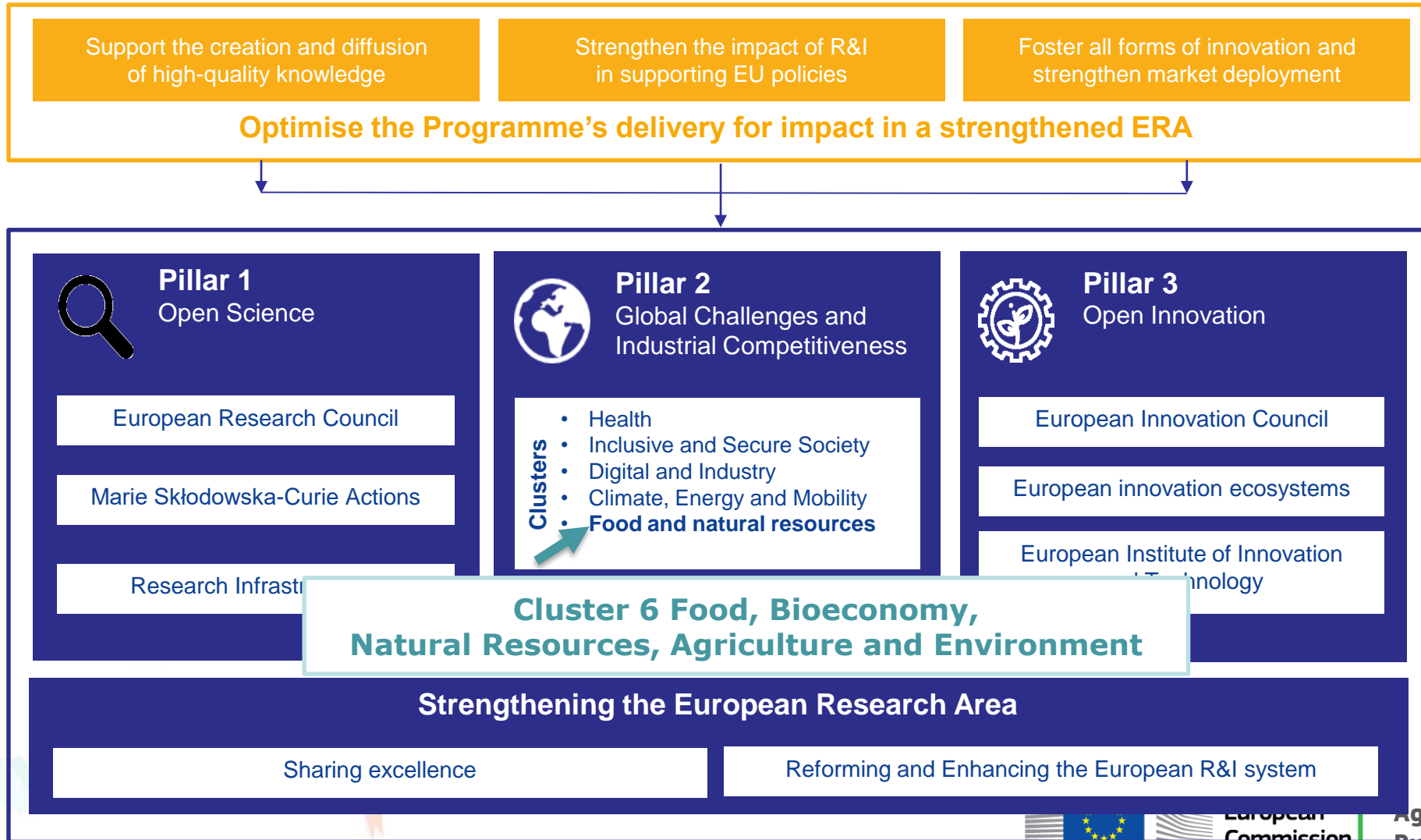


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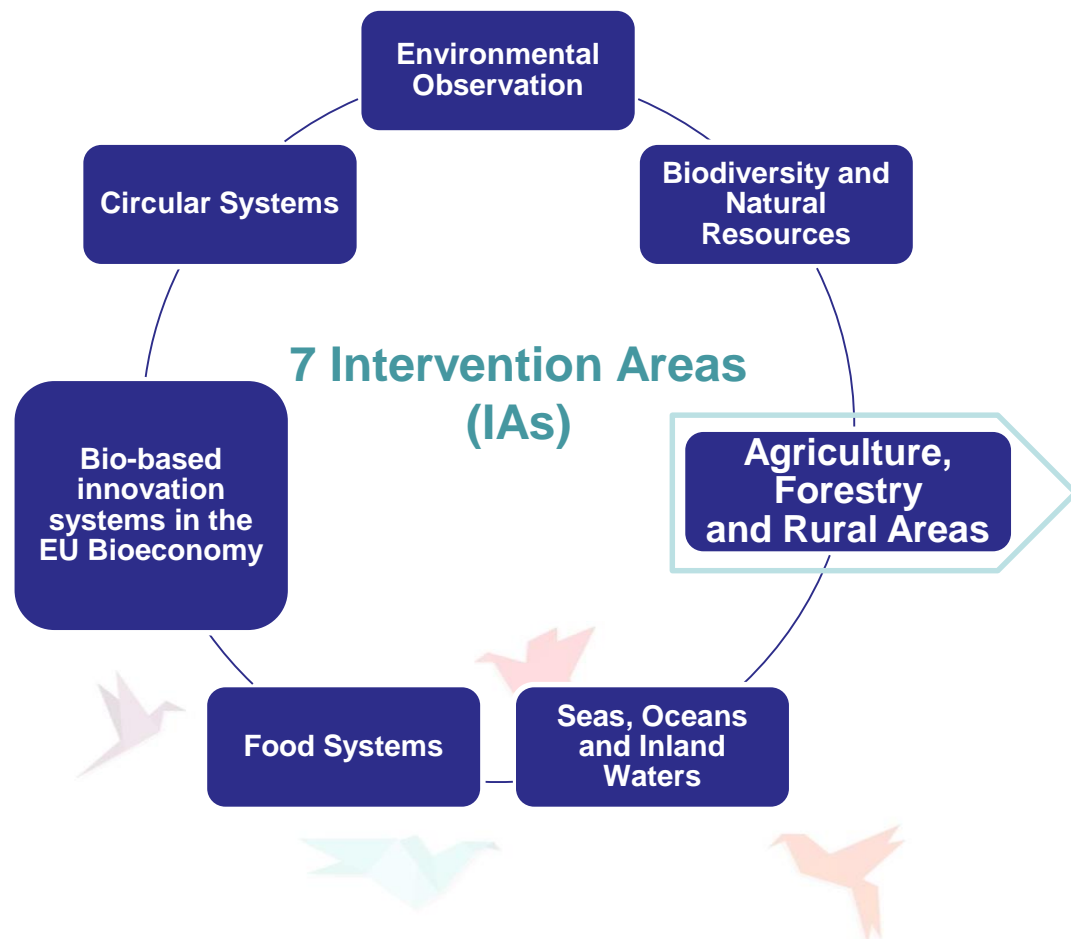
# Horizon Europe

## Specific objectives of the Programme





## *What is in it?*



- Sustainable management and efficient use of natural resources
- Climate mitigation and adaptation
- Plant health
- Animal health and welfare
- Use and delivery of ecosystem services
- Sustainable forest management
- EU plant protein production
- Sustainable land use, rural development and territorial linkages
- Digital innovations
- AKIS; advice, building skills, participatory approaches and information sharing
- International partnerships for sustainable agriculture for food and nutrition security

# How?



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# Strategy: our six dimensions of implementation



**Being strategic about programming**



**Boosting implementation of R&I**



**Leaving more space for new approaches**



**Encouraging synergies with Member States**



**Developing international cooperation**



**Developing synergies with the private sector**

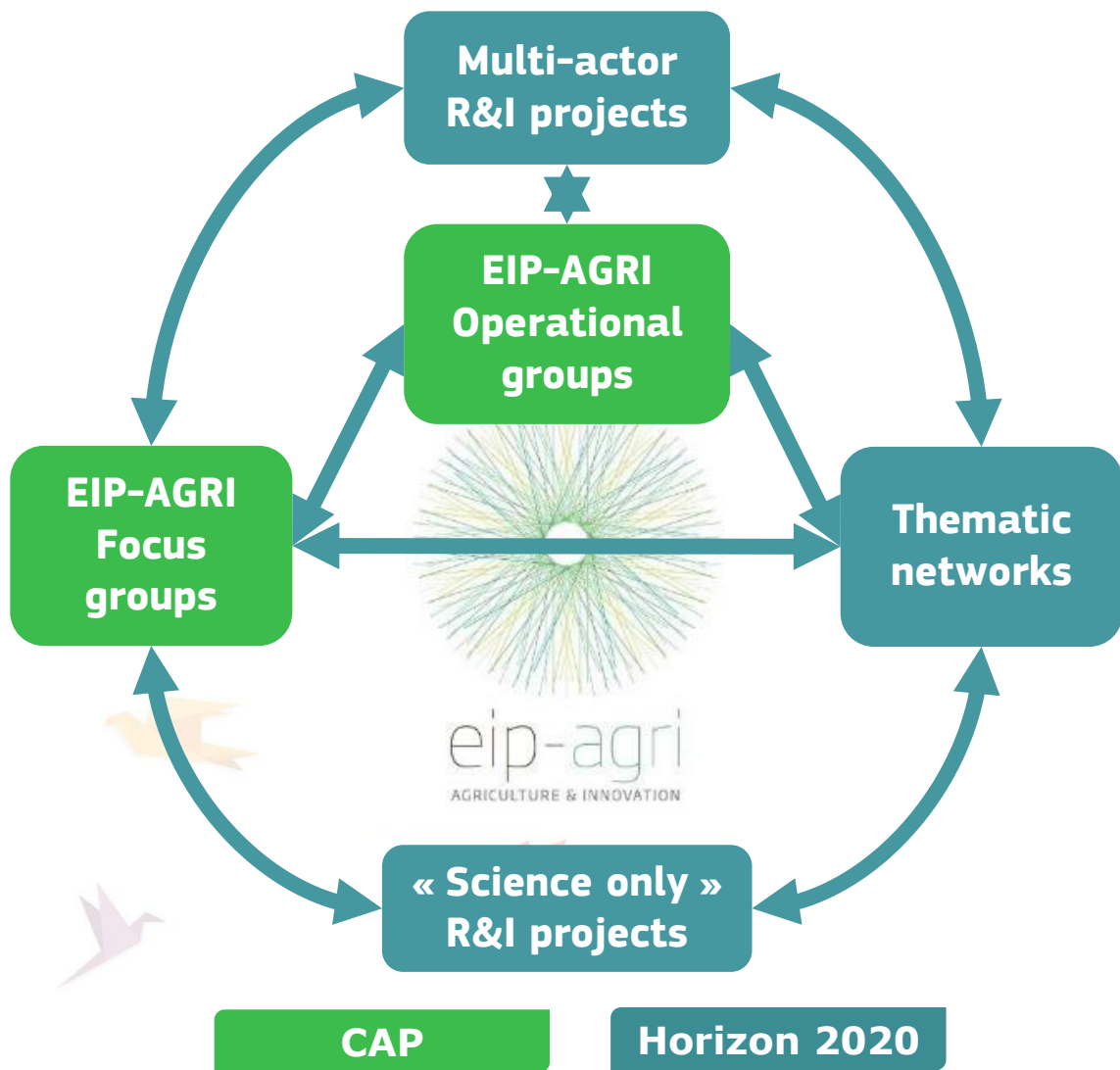


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# Boosting implementation: EIP-AGRI and multi-actor approach



- ✓ 190 H2020 multi-actor projects (€1 billion), including 29 thematic networks; 50% newcomers; results!
- ✓ 27 Member States implementing the EIP
- ✓ Around 3 200 OGs planned in 2014-2020; over 1000 OGs already running
- ✓ A growing and thriving network
- ✓ Increasing volume of practice-oriented knowledge

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



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# Leaving space for new approaches: R&I Missions

**Mission area:** Soil Health and Food



## R&I Missions

**Connecting to citizens:** Missions will relate EU's research and innovation to society and citizens' needs, with strong visibility and impact

A mission will consist of a portfolio of actions intended to achieve a **bold and inspirational as well as measurable goal within a set timeframe**, with impact for science and technology, society and citizens that goes beyond individual actions.



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# Encouraging synergies: Partnerships - proposed areas

New generation of objective-driven and more ambitious partnerships with MS, industry and others in support of agreed EU policy objectives:



- ❑ **Towards more sustainable farming: agro-ecology living labs and research infrastructures**
- ❑ **European partnership on animals and health**
- ❑ **Environmental observations for a sustainable EU agriculture (agriculture of data)**
- ❑ **Others related to biodiversity, Blue Economy, food systems, circular bio-based sector, water**

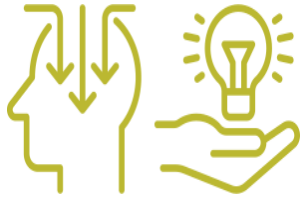


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# Future CAP



## DEVELOPING A KNOWLEDGE- BASED AGRICULTURE

- Continuation of the agricultural **European Innovation Partnership**
- 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 agriculture, food, bioeconomy and rural development



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# Have your say: why, what and how



- Summer 2019: Open Public Consultations [LINK](#)
- Autumn 2019: Workshops → Roadmaps for EU Agricultural R&I

**24 → 26**  
 SEPTEMBER

**2019**

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 Quai des Péniches / Akenkaai  
 1000 Brussels  
 BELGIUM

**EUROPEAN RESEARCH & INNOVATION DAYS**



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# Thank you!

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**#AgriResearchEU**  
**#H2020SC2**

[www.ec.europa.eu/agriculture/research-innovation\\_en](http://www.ec.europa.eu/agriculture/research-innovation_en)  
[www.ec.europa.eu/research/bioeconomy](http://www.ec.europa.eu/research/bioeconomy)

Funding and tenders portal

<http://ec.europa.eu/research/participants/portal/desktop/en/home.html>



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