Agricultural and rural innovation R&I under Horizon 2020 & EIP-AGRI

Priorities, approaches and main achievements

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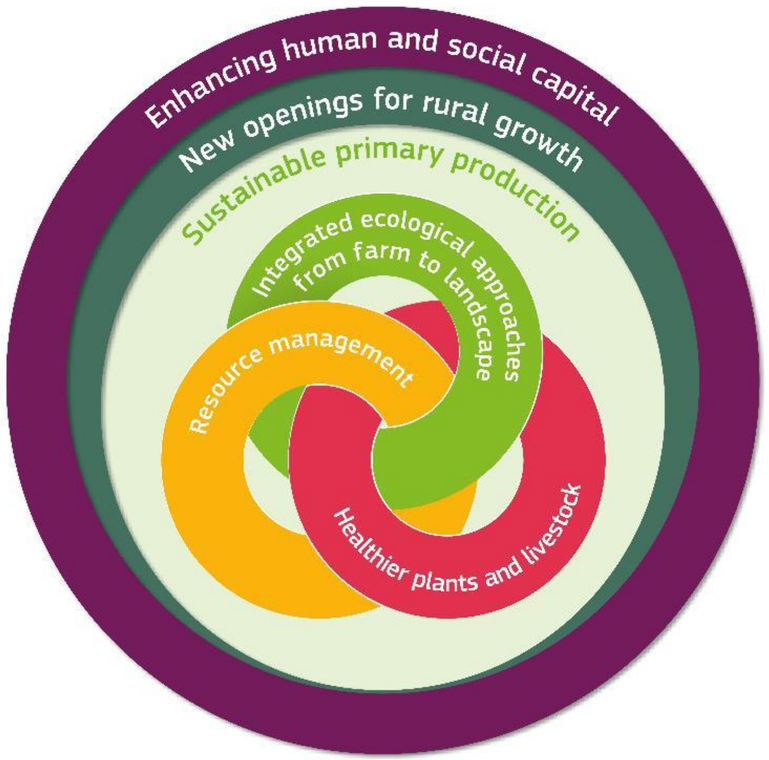
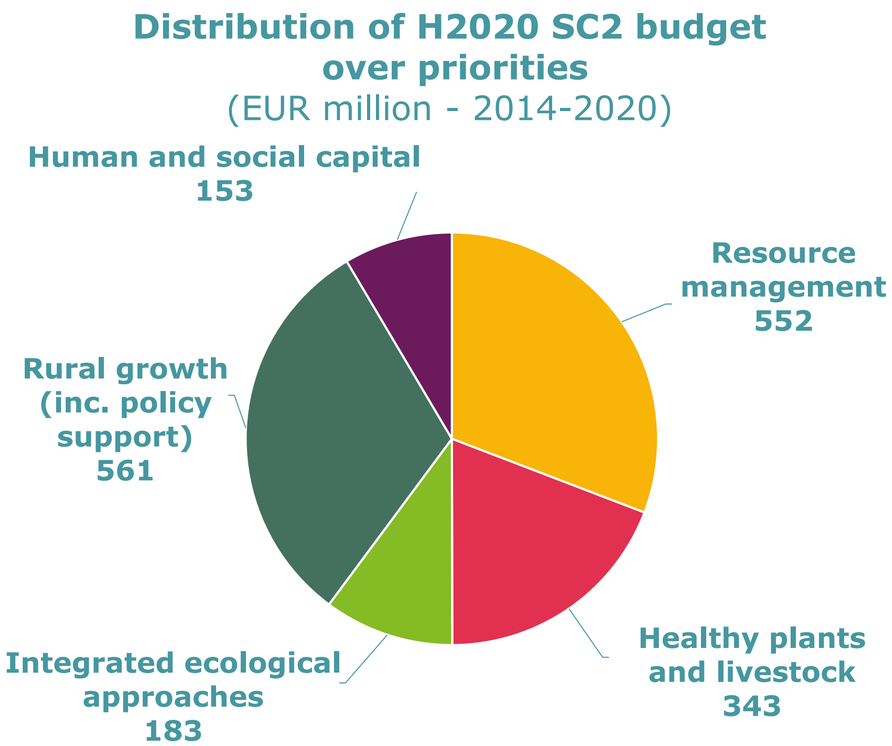
Five priorities





+ Cross-cutting

- **Systems approaches**
  1/3 Grants
- **Socio-economic research**
  30% SSH – 2/3 value chain approaches
- **New approaches and infrastructure**
- **Using information technologies**
- **Engaging with society**

Strategic clustering of our activities for…

Soils
26 projects
EUR 197 million
Soil functions; Soil water resources; Soil-improving cropping systems; Carbon sequestration

Water, nutrients and waste
26 projects
EUR 182 million
Water management; nutrient recycling; fertigation; waste valorisation; bioeconomy

Plant health
29 projects
EUR 161 million
Alternatives to pesticides; Ecosystem services; Emerging diseases; Integrated pest management

Animal health
21 projects
EUR 179 million
Host-pathogen interaction; Vaccinology; One Health; anti-microbial resistance; International cooperation

Genetic resources and breeding
33 projects
EUR 189 million
Biodiversity strategies; Genebanks; Landraces and value chains; Diversifying agriculture and forestry

Animal production systems
22 projects
EUR 132 million
Animal welfare; Feeding sustainability; Efficiency; Economic performance; Resource use

Ecological approaches and mixed farming
36 projects - EUR 213 million
Agroecology; Organic Farming; Biodiversity; Ecosystem Services; Landscape; Agriculture; Agroforestry; pollination; biocontrol; diversification; mixed farming; permanent grassland

Understanding dynamics and modernising policies
23 projects
EUR 107 million
Food and nutrition security policies; Social innovation; Business models; Rural-urban relations; Generational renewal; Foresights; Modelling

Public goods from agriculture and forestry
24 projects
EUR 139 million
Biodiversity; Carbon sequestration; Drinking water; Governance and business models; Land management

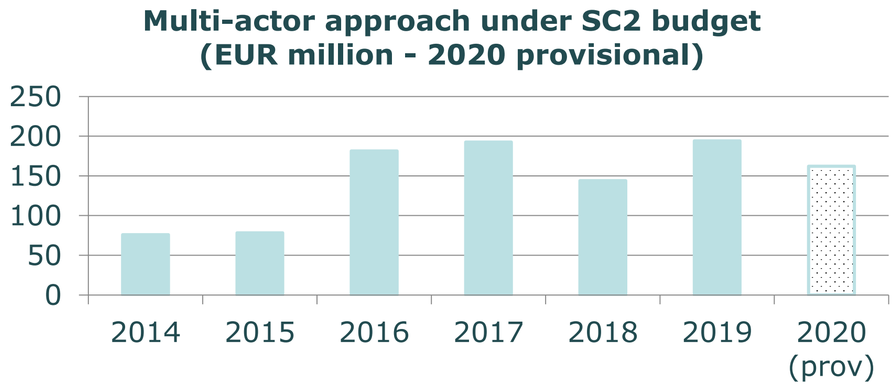
Sustainable, circular and innovative value chains
54 projects
EUR 367 million
Integrated biomass logistics; food chain sustainability; food safety / quality / authenticity; short food chains

Taking advantage of the digital revolution
17 projects - EUR 163 million
Internet of things; Precision agriculture; Robotics; Services in rural areas

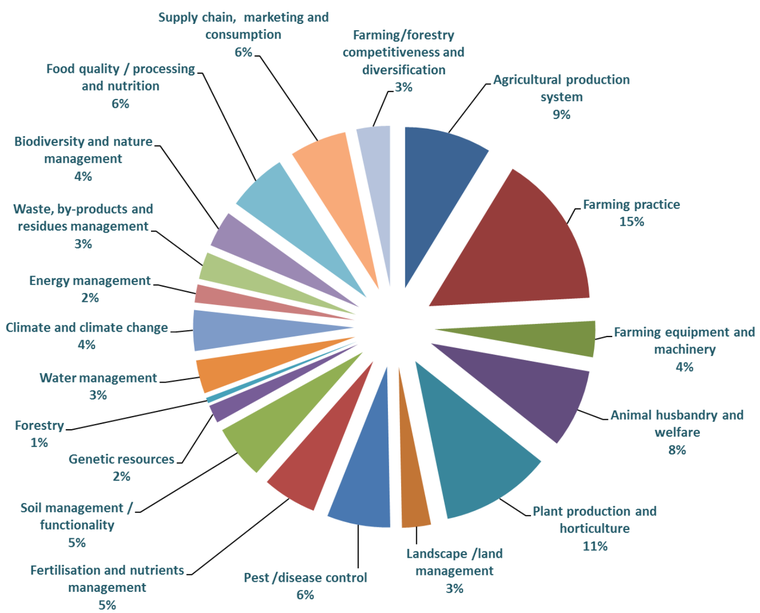
Human and social capital and innovation systems
53 projects - EUR 151 million
Agricultural knowledge and innovation systems (AKIS); Education and training; Advice; On-farm Demonstration; Networks; Knowledge exchange

- ✓ **Easier "cross-policy" programming**
  - Involving other departments (health, environment…)
  - Co-funded calls (Digital transformation)
- ✓ **Better science-policy interface**
  - Targeted policy sessions
  - Dedicated publications & briefs
- ✓ **Engaging with stakeholders**
  - Communities of practice
  - Linking with stakeholders
- ✓ **Better long-term monitoring**
  - Continuity, consistency, "roadmapping"
  - Measuring impact
- ✓ **Better communication**

The multi-actor approach: interactive innovation in action



H2020= EUR 1 billion – 180 grants



CAP= 3200 operational groups

- ✓ More newcomers
  - 48% newcomers in Multi-actor topics (+20% compared to classical SC2 topics)
  - Newcomers = actors closer to the field
  - Triggers private sector participation
- ✓ Co-created knowledge
  - Complementary types of knowledge
  - → innovative solutions…
  - … better adapted to the field
- ✓ Keeping room for "science-only" as well (40% budget)

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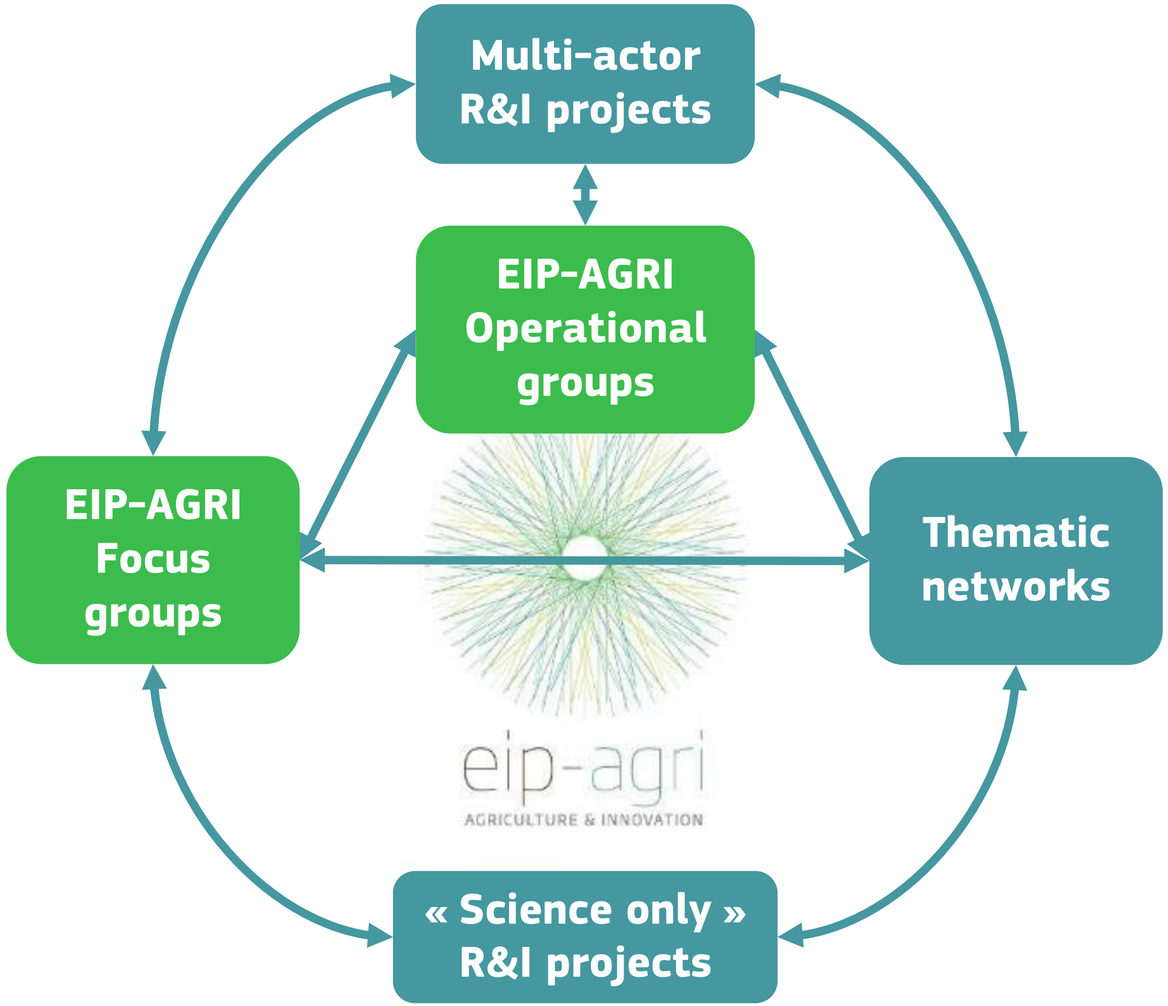
Our framework: two policies working in synergy



- ✓ Horizon 2020 Multi-actor projects
  - Engage with EIP-AGRI operational groups
  - Can help create them… or the other way round?
- ✓ EIP-AGRI Operational groups
  - Solve specific problems on the ground
  - Inspire wider European activities
- ✓ EIP-AGRI Focus groups
  - Enrich programming
  - Build multi-actor communities for Horizon 2020
  - Inspire projects (OGs or Horizon 2020)
- ✓ Horizon 2020 Thematic networks
  - Translate knowledge into practice
  - Boost impact of all activities
- ✓ EIP-AGRI networking activities
  - Enhance knowledge exchange

CAP | Horizon 2020

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Enhancing synergies with and between Member States

Horizon 2020 = 10% of public R&I in the EU

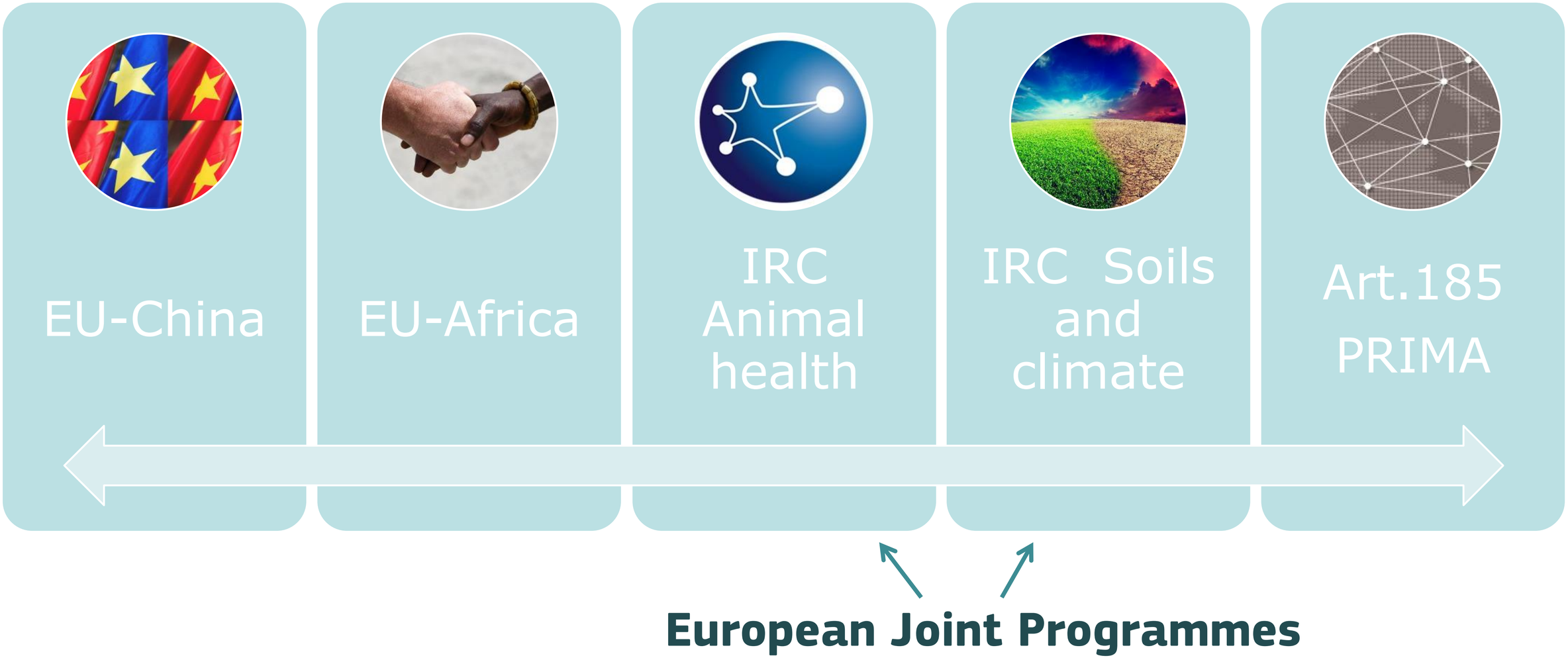
Need to foster complementarities and synergies

- ✓ ERA-NETS
  - 11 ERA-NETS – 72 M€
  - One co-funded call each
- ✓ **Piloting** European Joint Programmes
  - Increased scale
  - Longer-term (several calls)

EJP One-Health and food-borne zoonoses

EJP Soils and climate

Building strategic international cooperation



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Thank you for your attention

More in your factsheets

https://ec.europa.eu/agriculture/research-innovation_en

www.eip.agri.eu

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AGRIRESEARCH FACTSHEET

EU AGRICULTURAL RESEARCH AND INNOVATION IN A NUTSHELL

From strategy to action

Developing a long-term view on agricultural research and innovation (R&I) needs, fosters the overall consistency, sequencing and impact of R&I activities. A strategic approach helps to ensure synergies between R&I activities and other EU policies and set a common direction with Member States and for international research cooperation. The strategic coordination with Member States is crucial as the resources devoted to agricultural research and innovation at EU level still represent only about 10% of Member States public investments in the same area. The strategic approach to EU agricultural research and innovation developed in 2015-2016 aims to harness EU investments to ensure food and nutrition security in the long term, address the environmental sustainability and resilience of land-based primary production and related food and non-food systems and to boost the sustainable growth of rural areas. The strategy is implemented through a synergistic approach mobilising both Horizon 2020 and the Common Agricultural Policy (CAP) under the umbrella of the European Innovation Partnership 'Agricultural productivity and sustainability' (EIP-AGRI). The EIP-AGRI aims to develop a comprehensive R&I ecosystem covering all aspects of knowledge creation, exchange and use by all concerned actors in agriculture, food and non-food value chains.

The implementation of the strategy mobilises a variety of Horizon 2020 instruments, covering the full spectrum of R&I from basic research to innovation (one quarter of resources are directed to innovation actions). To increase and accelerate innovation impact, the so-called 'multi-actor approach', through which end-users, such as farmers and advisers, are involved in R&I from design to implementation of solutions, is used in around two-thirds of the projects. The strategy aims also to enhance synergies with Member States (in particular through European Joint Programmes) and, beyond EU borders, to boost coordination on priority themes at the global level (through the establishment of international research consortia). The use of a systems approach in about one-third of the projects reflects the will to carry out agricultural research in close connection with the wider societal context and challenges[1]. Close links have been established with other parts of Horizon 2020 to achieve higher impact. In particular, strong synergies have been developed with Leadership in enabling and industrial Technologies (LEIT) on Information and Communication Technologies (ICT), with which a number of large projects on digital transformation have been co-funded.

This factsheet[2] outlines the main features of strategy implementation through the already selected 150 Horizon 2020 projects of interest to agriculture, forestry and rural areas (calls 2014-2017) and the still expected projects under current and future calls (2018-2020).

1 It is also expected that relevant parts of EU agricultural R&I will contribute to the implementation of Food 2030 (SWD(2016)319 final).
2 Statistics are based on topics of interest to agriculture, forestry and rural development, partly or fully funded by Horizon 2020 Societal Challenge 2 (2014-2020). Each grant is allocated to only one of the main five priorities. Only collaborative projects are covered (the SME instrument and Articles 185 and 187 initiatives are not counted). Financial contribution from other Horizon 2020 parts is included where relevant.

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