CORE Organic
15th year anniversary event
10 December 2019

Organic and agroecology research in H2020 and Horizon Europe

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1. Organic and agroecology R&I 2014 - 2020
2. Preparations for Horizon Europe (2021 – 2027)
3. Opportunities for organic and agroecology research in Horizon Europe
1. Organic and agroecology R&I 2014 - 2020
The current European context for organic and agroecology R&I

- EU Organic Regulation
- Common Agricultural Policy (CAP) and Common Fisheries Policy (for organic aquatic production)
- European Innovation Partnership EIP AGRI
- European Research Framework Programme (Horizon 2020)
Agri-research priorities

More than 40 projects relevant to organic farming and agroecology amounting to €240 m 2014 - 2017
Implementation

- **Multi-actor R&I projects**
- **EIP-AGRI Operational groups**
- **EIP-AGRI Focus groups**
- **Thematic networks**
- « Science only » R&I projects

- **27** Member States,
- **98** rural development programmes implementing the EIP

- **Around 3 200 OGs** planned 2014-2020; around **1000 OGs running**

- **Around 180** H2020 multi-actor projects, including **29** thematic networks. OG **involvement** strongly recommended

- **A growing and thriving network**

[www.eip-agri.eu](http://www.eip-agri.eu)
The EIP-AGRI in short

- 2010: European Innovation Partnerships want to speed up innovation through collaboration and linking policies and instruments
- 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 CAP Operational Groups and H2020 Multi-Actor projects):
  Tackle real practice needs/opportunities through collaboration between specific 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 AKIS actors: communication, partnering, dissemination, knowledge flows and collecting practice needs (Open science)
The organic sector: key for AKIS and the Multi-actor approach (MAA)

✓ MAA: a success today

✓ “Multi-actor approaches” are intrinsic in organic sector

✓ CORE Organic was key for development of EIP-AGRI, MAA and Strategic Working Group AKIS of the Standing Committee of Agricultural Research (SCAR) -> CORE ORGANIC used as good example
EIP-AGRI and organic farming

- Organic farming a common topic in Operational Groups (organic cropping systems, horticulture, grassland management, livestock systems...)

- 121 OGs – 20% of the total – working on organic farming topics

- Focus Group (2013) and Workshop “Organic is Operational” (2017)

- Organic farming in EIP-AGRI Work Plan 2020:
  - Focus Groups on sustainable beef production and (sub)tropical crops
  - Workshop carbon neutral farming
H2020 research supporting the organic sector

8 "organic" projects + 1 ERA-NET (CORE Organic)

> €46 m EU funding

> 20 EU MS

> 150 partners

+ assoc. and int. partners

More than 40 projects relevant to organic farming and agroecology amounting to €240 m 2014 - 2017
On-going Horizon 2020 projects for the organic sector

The organic sector is also part of:
2. Horizon Europe preparations
Horizon Europe, the biggest EU research and innovation programme ever: budget €100 billion*

* This envelope includes EUR 3.5 billion allocated under the InvestEU Fund.
Horizon Europe (2021-2027)

Pillar 2: EUR 52.7bn out of a total of €100bn (implemented through calls, missions and partnerships)

EUR 10 bn proposed for R&I on food, bioeconomy, natural resources, agriculture and the environment
Horizon Europe Cluster 6 – Seven key R&I orientations

Under one cluster: the interlinked challenges of eco-systems, health of our planet, sustainable agriculture, forest and marine production, and sustainable consumption
Horizon Europe Cluster 6 – Six targeted impacts

- Reduction of **GHG emissions**; ecosystems adaptation to climate change
- Halt **biodiversity decline**; restoration of ecosystems
- **Sustainable and circular management and use of natural resources**; healthy **soils**; clean water and air for all; attractive jobs, enhanced value creation and competitiveness
- 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** well understood and drive sustainability; balanced development of **rural**, coastal, peri-urban and urban **areas**
- **Governance models** enabling sustainability

**Organic and agroecology research relevant for all the impacts**
Horizon Europe – Where are we?

Orientations document

Online consultation (4 October)
Targeted consultation umbrella organisations (17 November)

Strategic plan (max 4 years 2021 – 2024)
Multiannual work programmes and calls
Key strategic orientation for R&I support
Identification of European Partnerships and Missions

R&I Days (24-26 September)
3. Opportunities for organic and agroecology research in Horizon Europe
New approach to European partnerships: overview

New generation of objective-driven and more ambitious partnerships in support of agreed EU policy objectives

Key features

- Simple architecture and toolbox
- Common set of criteria
- Coherent life-cycle approach
- Strategic orientation

Co-programmed
Based on Memoranda of Understanding / contractual arrangements; implemented independently by the partners and by Horizon Europe

Co-funded
Based on a joint programme agreed by partners; commitment of partners for financial and in-kind contributions & financial contribution by Horizon Europe

Institutionalised
Based on long-term dimension and need for high integration; partnerships based on Articles 185 / 187 of TFEU and the EIT-Regulation supported by Horizon Europe
<table>
<thead>
<tr>
<th>HEALTH</th>
<th>DIGITAL, INDUSTRY AND SPACE</th>
<th>FOOD, BIOECONOMY, NATURAL RESOURCES, AGRICULTURE AND ENVIRONMENT</th>
<th>PILLAR III AND CROSS-PILLAR</th>
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<tbody>
<tr>
<td>EU-Africa Global Health</td>
<td>High Performance Computing</td>
<td>Transforming Europe’s rail system</td>
<td>EIT Climate KIC</td>
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<td>Innovative Health Initiative</td>
<td>Key Digital Technologies</td>
<td>Integrated Air Traffic Management</td>
<td>EIT Manufacturing</td>
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<td>Chemicals Risk Assessment</td>
<td>Smart Networks and Services</td>
<td>Clean Aviation</td>
<td>EIT Health</td>
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<td>Fostering an ERA for Health research</td>
<td>AI, data and robotics</td>
<td>Clean Hydrogen</td>
<td>EIT Food</td>
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<td>Large-scale innovation and transformation of health systems in a digital and ageing society</td>
<td>Photonics Europe</td>
<td>Built environment and construction</td>
<td>EIT InnoEnergy</td>
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<td>Pre-clinical / clinical health research</td>
<td>Clean Steel - Low Carbon Steelmaking</td>
<td>Towards zero-emission road transport</td>
<td>EIT Manufacturing</td>
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<td>Personalised Medicine</td>
<td>European Metrology</td>
<td>Mobility and Safety for Automated Road Transport</td>
<td>EIT Raw Materials</td>
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<td>Rare Diseases</td>
<td>Made in Europe</td>
<td>Batteries</td>
<td>EIT Digital</td>
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<td>Carbon Neutral and Circular Industry</td>
<td>Clean Energy Transition</td>
<td>EIT Urban Mobility</td>
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<td>Global competitive space systems</td>
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<td>Innovative SMEs</td>
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<td>European Open Science Could (EOSC)</td>
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Why agroecology?
Understandings of agroecology

“The integrative study of the ecology of the entire food systems, encompassing ecological, economic, and social dimensions”

“An integrated approach that simultaneously applies ecological and social concepts and principles to the design and management of food and agricultural systems. It seeks to optimize the interactions between plants, animals, humans and the environment while taking into consideration the social aspects that need to be addressed for a sustainable and fair food system.”

“Is considered jointly as a science, a practice and a social movement. It encompasses the whole food system from the soil to the organisation of human societies. It is value-laden and based on core principles...(...)”

We define it simply as the science of ecological processes applied to agricultural production systems.

Distinctive aspects:
- Fully systemic and transformative approach to sustainability
- Re-diversification of agricultural systems
- Equity, justice, access
- Focus on the local/territorial level
Why living labs?

Could LL be a powerful tool for change?

- Digital farming, S3
- Multi-actor projects
- G20 Agroecosystem living labs
Living Labs (LLs) are defined as **user-centred**, open innovation ecosystems based on systematic **user co-creation approach**, **integrating** research and innovation processes in **real life communities** and settings. (EnoLL)

**Living Labs <-> Social innovation**

**Key additional features:**
- **Place-based/embedded** in real working landscapes/communities
- More **systematic use of** a wide range of social sciences (behaviour)
- Beyond projects, structuring the **innovation ecosystem**

**Purpose**

Transdisciplinary approaches which involve farmers, scientists and other interested partners in the co-design, monitoring and evaluation of new and existing agricultural practices and technologies on working landscapes to improve their effectiveness and early adoption.

**Findings**

- **Finding 1**: ALL is a comprehensive approach needed to deal with complex issues.
- **Finding 2**: Applying and integrating the three components of ALL offers the greatest benefits.
- **Finding 3**: Participating countries are applying components of ALL already.
- **Finding 4**: Implementation and interest in ALL is increasing.
Why a partnership?

- Agroecology: **context-specific, long-term time scales, complexity, co-creation**
- Agroecology is **under-researched, and there is appetite for knowledge**
- **Living labs** can speed up development and scaling up of innovative practices
- EU has supported living labs **but not focused on farming / rural community and insufficient place-based focus**
- Need to establish a network at field level that can deliver solutions & data in the **long-term**
Key objectives and activities

• Goal: speed up the adoption of ecological approaches in farming systems

• Set a direction for knowledge creation on ecological processes applied to farming
  ✓ **Integrated**: agro-ecosystem biodiversity; ecosystem services; climate change adaptation / mitigation; IPM; soil health; agroforestry; organic farming; etc.
  ✓ **Transdisciplinary**
  ✓ **User-involvement**

• Creating spaces for **long-term real-life** experimentation and innovation embedded in **working landscapes**
  ✓ Network of **living labs/farms + research infrastructures**
  ✓ Place-based innovation
  ✓ Coordination + knowledge exchange
Key implementation principles

- **Co-funded**
- **Place-based** => Local/regional/national levels to play an active role
- **Combining EU funds** (synergies with ERDF/RIS3, CAP/EAFRD, ESF etc...)

- **Wide coverage of the diversity**: agroecosystems, farming systems, sectors, pedo-climatic conditions
- Seek involvement of **wide range of actors & stakeholders**: consumers, citizens, NGOs, authorities, industry etc... (in phases if necessary)

- Ensure **links with other Horizon Europe partnerships** candidates (Biodiversity, Animals and Health, Food systems...), existing initiatives (FACCE, CORE Organic, etc)... **and missions** on soil health and food and on climate adaptation!

- **Progressive** creation of the network with **capacity building**
- CSA under Horizon 2020 WP 2020 to help **prepare**!
Who would the partners be?

**Partners:**
- National / regional and local authorities, incl. environmental authorities
- Funding organisations
- Research/innovation/education organisations

**Stakeholders:**
- Farmers and the wider farming / rural community
- Civil society representatives / NGOs
- Land owners
- Agricultural Knowledge and Innovation System (AKIS)
- ...
How to get prepared?

- **Consultations with Member States** (SPC, SCAR) and multiple stakeholders → Update of fiche describing the partnership idea


- **Planning workshop early 2020 to:**
  - Discuss and build ownership of the concepts
  - Looking together at examples – Develop a shared understanding
  - Discuss how to do this in practice
  - Draw an action plan, in connection with the CSA

- **TOPIC in work programme 2023**
- **Partnership to start end 2023 – early 2024**
Open questions are many – we are just at the beginning of the process!

- How will the partnership work in practice
- Scope agroecology and living labs
- Sequence of actions
- Role of research infrastructures
- Partners and commitments (cash / in kind)
- ...

Your views and comments are welcome!
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.

Horizon Europe proposal defines mission characteristics and criteria.

Specific missions will be **co-designed with Member States, stakeholders and citizens** and programmed within the Global Challenges and Industrial Competitiveness pillar (drawing on inputs from other pillars).
5 Mission areas

- Adaptation to climate change, including societal transformation
- Healthy oceans, seas, coastal and inland waters
- Climate-neutral and smart cities
- Soil health and food
- Cancer
Horizon Europe – Mission on soil health and food

- Relevant for new Commission priorities, notably the **Green Deal** (11 December) -> land/soil management central to achieving policy objectives on food and nutrition security, climate change mitigation, protection of biodiversity, reduction of pollution and vibrant rural areas
- Co-led by DG AGRI (secretariat) and DG RTD and co-managed in cooperation with DG CLIMA, ENV, MARE, SANTE and the JRC
- Mission board set up to **advise** the European Commission (content of work programme, communication, policy coordination, KPI, etc)
- Ongoing discussion on **targets, timelines**, etc
- **Citizen’s engagement**: survey launched 5/12 (World Soil Day)

**Do you organize activities related to soil health and food?**
**Let us know!**

AGRI-SOIL-MISSION-BOARD@ec.Europa.eu
Steps towards Horizon Europe Strategic Plan and the Work Programme

- **Summer/Autumn 2019**: Exchanges with Member States, consultation with stakeholders and the public at large. Co-design via web-consultations (closed on 4 October and 17 November) and Research & Innovation Days (24 – 26 September)

- **Autumn-winter 2019/2020**: Exchanges with the European Parliament. Establishment of new Commission. Drafting the Strategic Plan

- **2020**: Adoption of Strategic plan. Drafting of first Horizon Europe Work Programme on the basis of the Strategic Plan

- **2021**: Start of Horizon Europe
To sum up

- **Legal base of Horizon Europe**: support to organic farming a broad line under IA Agriculture, Forestry and Rural Areas
- Organic farming and agroecology relevant for the **six targeted impacts of Cluster 6 of Horizon Europe**
- **Partnership on agroecology** will support implementation and upscaling of agro-ecological approaches in primary production, including organic, mixed farming and agroforestry
- **Mission on soil health and food** to include ecology, agroecology and delivery of public goods
- Need to **respond to consumer demand** for healthier and sustainable diets, **improve farmers’ income**, minimize impact on climate and environment
- Public consultations: emphasis on organic and agroecological approaches; place-based approaches
To sum up

✓ **New organic regulation** -> new research needs (processing, plant protection products, organic seeds, organic varieties...)

✓ **Priorities of the new European Commission**: Green Deal, farm to fork strategy, EU biodiversity strategy 2030, zero pollution ambition...

✓ **MAA** will continue to be one of the pillars in Horizon Europe

✓ New **CAP’s cross-cutting objective on knowledge, innovation and digitalization** -> CAP Plans, strengthened AKIS, EIP-AGRI continuation...opportunities for the organic sector

**Ongoing identification of key R&I areas leading to first work programme of Horizon Europe (2021 – 2024)**

*Your contribution is welcome!*  
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To know more...

**Strategic approach to EU’s Agricultural Research and Innovation:**

**Agri-research factsheet “Ecological approaches and organic farming”:**

**Horizon Europe:**

**European Research and Innovation Days:**
Thank you for your attention