

eip-agri  
AGRICULTURE & INNOVATION

# Research & Innovation across EU borders

Finding your way through networking and cooperation  
initiatives in agriculture and forestry



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Commission



## Research and innovation initiatives and networks

The European Union (EU) supports or recognises various initiatives which help to reduce the fragmentation and unnecessary duplication of research efforts, and which can help to bring scientists, farmers, foresters and the industry together. Some of these initiatives concentrate on networking and identifying research needs while others finance research activities.

### Networking and building strategic research agendas

**European Technology Platforms (ETPs)** are industry-led stakeholder fora recognised by the European Commission. They develop research and innovation agendas and roadmaps in a specific domain, with the aim of shaping private and public research funding. ETPs are independent and self-financing entities and are open to new members.

### Pooling research funding together

**Joint Programming Initiatives (JPIs)** pool national research efforts, to make better use of Europe's public Research and Development (R&D) resources that aim to tackle common European challenges that cannot be solved at the national level. Member States can participate in the joint initiatives that seem useful for them. JPIs are larger and focused on a longer-term perspective than ERA-NETs.

**European Research Area Networks (ERA-NETs)** improve the cooperation and coordination of research activities on specific themes that are carried out at national or regional level in EU Member States and Associated States for a limited period. ERA NETs undertake joint calls to which universities, research institutions and enterprises based in the participating countries can apply.

**Public Private Partnerships (PPPs)** bring together the European Union and private bodies who commit to support the development and implementation of research and innovation activities of strategic importance to the European Union's competitiveness and industrial leadership or to address specific societal challenges.

This brochure gives an overview, per theme, of ETPs, JPIs as well as the most recent ERA-NETs in the fields that are relevant to productive and sustainable agriculture and forestry in the EU.



ERA-NETs may have published results of the projects they funded. These results can offer inspiration for setting up Operational Groups or for starting follow-up applied research.

# Building a bridge from research to agriculture and forestry

The European Innovation Partnership for Agricultural Productivity and Sustainability (EIP-AGRI) encourages fruitful collaboration and knowledge exchange with other innovation-related initiatives and networks like the European Research Area Networks (ERA-NETs), the European Technology Platforms (ETPs), and Joint Programming Initiatives (JPIs).

## PLATFORM - Connecting bioeconomy ERA-NETs

The Platform of bioeconomy ERA-NET Actions is a network that improves cooperation and knowledge exchange among funders and programme managers in food, agriculture, aquaculture, fisheries, forestry, climate, biodiversity and biotechnology networks. PLATFORM fosters links between the ERA networks, Technology Platforms driven by the private sector, and scientist-driven research alliances. It also encourages the collaboration between ERA-NETs, JPIs and the EIP-AGRI, to ensure that research results are put to use and to identify research needs from practice for future calls.

PLATFORM started in 2012 supported by FP7 and continues with Horizon 2020 funding.

More information: [www.era-platform.eu](http://www.era-platform.eu)

To find interesting stories on networking initiatives and ERA-NET projects, [register to the EIP-AGRI newsletter](#), or visit the EIP-AGRI website at [eip-agri.eu](http://eip-agri.eu).

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## Horizontal

### RURAGRI - Facing sustainability: new relationships between rural areas and agriculture in Europe

**Type:** ERA-NET - FP7  
**Timespan:** 1/10/2009 - 31/03/2014  
**Overall EC funding:** app. 1 million €



**Focus on:**

- ▶ Challenges and opportunities for European agriculture and rural areas in a context of increasing urbanisation
- ▶ Improved connectivity between urban and rural areas, to deal with new geographical, economic and human dynamics
- ▶ Understanding new interactions between agriculture and other types of land use, to achieve sustainable rural development

**More information:** [www.ruragri-era.net](http://www.ruragri-era.net)

Project example: MERIT: Merit-based income from sustainable land management in mountain farming (RURAGRI)

Many European mountain farms have intensified their production to reduce costs and increase product income. To counter a loss in ecosystem diversity in alpine regions, EU Member States are developing financial incentives and new agri-environmental schemes that give more responsibility to farmers and encourage them to manage their land considering factors such as biodiversity, erosion, water, quality and quantity of species and habitats. The MERIT project analyses whether such merit-based agro-environmental programmes are more attractive for farmers than standard systems, and develops innovative governance systems based on the results.

[www.umweltbuero-klagenfurt.at/merit/index.php](http://www.umweltbuero-klagenfurt.at/merit/index.php)

### ICT-AGRI 2 - Information and communication technologies and robotics for sustainable agriculture

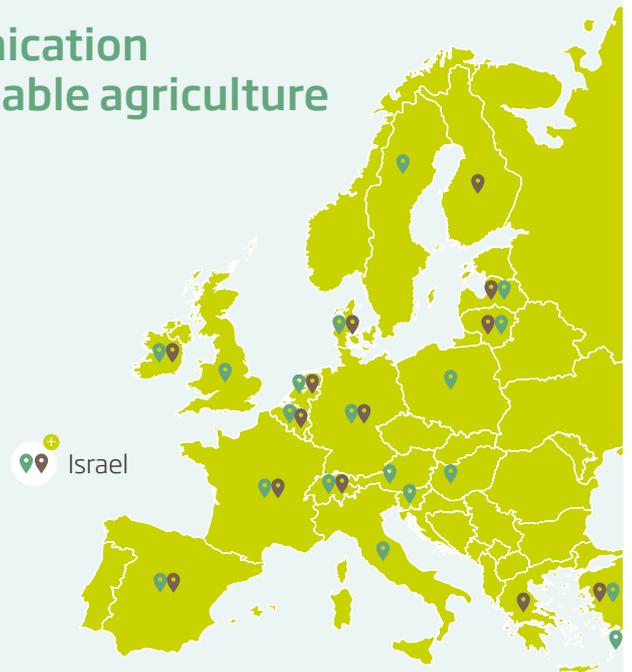
**Type:** ERA-NET - FP 7  
**Timespan:** 01/01/2014 - 31/12/2017  
**Overall EC funding:** app. 2 million €



**Focus on:**

- ▶ Development and implementation of new Precision Farming technologies, for a competitive, sustainable and environmentally friendly agriculture
- ▶ Compatible systems to harness the full potential of ICT and robotics in internal farm operations and in external farm business relations

**More information:** [www.ict-agri.eu](http://www.ict-agri.eu)





## Organic

### CORE Organic Plus - Innovative solutions in organic food and farming systems

**Type:** ERA-NET - FP7  
**Timespan:** 1/12/2013 - 30/11/2018  
**Overall EC funding:** 3 million €



**Focus on:**

- ▶ Plant-soil interaction in organic crop production
- ▶ Functional biodiversity to improve management of diseases, weeds and pests
- ▶ Livestock health management systems, including breeding
- ▶ Ensuring quality and safety of organic food along the processing chain

**More information:** [www.coreorganic.org](http://www.coreorganic.org)

#### Project example: ReSolVe (CORE Organic Plus)

The ReSolVe project tests the effects of selected agronomic strategies to restore optimal soil functionality in degraded areas within organic vineyards. These areas may suffer from a reduction in vine growth, in disease resistance, grape yield and quality. The project will test different organic soil cover methods (adding compost, adoption of green manure, dry mulching), through monitoring of soil organic matter content and turnover, soil nitrogen and water availability, biodiversity, soil enzymes, plant water stress, and grape yield and quality.

<http://coreorganicplus.org/research-projects/resolve/>

### TP ORGANICS - Organic food and farming research

**Type:** ETP  
**Timespan:** Ongoing (launched in 2007)  
**Members:** Umbrella organisations and Small and Medium Enterprises (SMEs)  
**National platforms:** BE (Flanders) - CZ - ES - HU (currently being established) - IT - NL



**Focus on:**

- Leveraging organic food and farming potential:
- ▶ Improving the contribution of organic agriculture and processing to rural economies
  - ▶ Securing sound ecosystem management and sustainable food production through eco-functional intensification
  - ▶ Contributing to healthier and higher-quality foods and diets

**More information:** <http://www.tporganics.eu/> - [www.tporganics.eu/index.php/national-platforms.html](http://www.tporganics.eu/index.php/national-platforms.html)





## Environment & climate change



### BiodivERsA2 - Cooperation and shared strategies for biodiversity research programmes in Europe



**Type:** ERA-NET - FP7

**Timespan:** 01/11/2010-31/10/2014

**Overall EC funding:** app. 2 million €

**Focus on:**

- ▶ Relationships between biodiversity and ecosystem services
- ▶ Developing integrated biodiversity scenarios
- ▶ Incorporating biodiversity and ecosystem services into society and policy
- ▶ Biological invasions and adaptation

**More information:** <http://www.biodiversa.org>

Project example: APPEAL - Assessment and valuation of pest suppression potential through biological control in European agricultural landscapes (Biodiversa)

Biological pest control provided by natural enemies is an ecosystem service of immense economic value - threatened by agricultural intensification. APPEAL uses historical records and current data to analyse how changes in natural enemy fauna are influenced by changes in land use. Results will support the assessment of multiple ecosystem services and the analysis of land use change scenarios.

<http://www2.ekol.slu.se/appeal/>



ERA-NETs often provide an overview of research projects in their fields of expertise. This can be useful to build project proposals that reach beyond the state of the art.

## FACCE JPI - Agriculture, food, security and climate change



**Type:** JPI

**Timespan:** Ongoing (launched in 2010)

**Overall EC funding:** app. 4 million €

**Focus on:**

- ▶ Sustainable agricultural production and food security under climate change
- ▶ Adaptation to climate change throughout the food chain, including market repercussions
- ▶ Greenhouse gas mitigation

**More information:** <https://www.faccejpi.com>

The FACCE JPI has led to several specific actions, including two ERA-NETs (FACCE ERA-NET+ Climate-smart agriculture and FACCE SURPLUS).

## Circle-2 - Climate impact research and response coordination



**Type:** ERA-NET - FP7

**Timespan:** 01/05/2010-30/04/2014

**Overall EC funding:** app. 2 million €

**Focus on:**

- ▶ Solutions for water-related climate change: integrated coastal zones and water management
- ▶ Consequences of climate change for policy making
- ▶ Options and barriers for climate change impacts and adaptation, including the relationship between adaptation and mitigation

**More information:** <http://www.circle-era.eu>

## FACCE-ERA-NET+ - Climate-smart agriculture



**Type:** ERA-NET - FP7

**Timespan:** 01/10/2013-30/09/2018

**Overall EC funding:** 4 million €

**Focus on:**

- ▶ Adaptation of European agricultural systems to climate change
- ▶ Genetics and breeding of animals and plants to increase resilience to climate change
- ▶ Pests and diseases linked to climate and posing significant risks
- ▶ Adaptive management of water and soil resources

**More information:** <https://www.faccejpi.com/FACCE-Joint-activities/ERA-NET-Plus-on-Climate-Smart-Agriculture>



Also see FACCE SURPLUS (Horizon 2020 ERA-NET): <http://facceturplus.org/>



Horizon 2020 has financed 3 ERA-NETs in the 2015 calls, and will finance other ERA-NETs in the future. This brochure will help you understand what they are, and maybe see if you would like to get involved.



## Livestock



### FABRE TP - Sustainable farm animal breeding and reproduction in Europe



**Type:** ETP

**Timespan:** Ongoing (launched in 2005)

**Members:** Stakeholders from farming organisations, research and industry

**Focus on:**

- ▶ Scenarios for the future development of sustainable animal breeding, for increased competitiveness, better animal health and welfare, and for the benefit of the environment and society.
- ▶ Efficient reproduction techniques, allowing genetic improvement to be rapidly and safely disseminated throughout the production chain
- ▶ Contribution to improved food security, reduced food cost and better environmental performance

**More information:** <http://www.fabretp.info/>

### ETPGAH - Global animal health

**Type:** ETP

**Timespan:** Ongoing (launched in 2004)

**Members:** Different stakeholders

**Focus on:**

- ▶ New or improved tools for controlling major animal diseases, such as vaccines and diagnostic tests
- ▶ Improving human and animal health, food safety and quality, animal welfare, and market access
- ▶ Help speed up the delivery of new products to the market by overcoming constraints identified throughout the supply chain



**More information:** <http://www.etpgah.eu/>

FABRE TP and ETPGAH contribute to a wider European platform called the Animal Task Force. This platform fosters knowledge development and innovation for a sustainable and competitive livestock sector in Europe.

**More information:** <http://www.animaltaskforce.eu/Home.aspx>



## ANIHWA - Animal health and welfare

You might want to explore the ETPs, to look for names or organisations that are active in your field or to find information on funding.



**Type:** ERA-NET - FP7  
**Timespan:** 01/01/2012 - 31/12/2015  
**Overall EC funding:** app. 2 million €

### Focus on:

- ▶ Interface between farm animal health and welfare; development of practical animal-based indicators of animal health and welfare, and implementation of new husbandry strategies
- ▶ Disease prevention and control tools including diagnostic tools and vaccines
- ▶ Antimicrobial and anthelmintic resistance, and development of alternative curative and preventive therapies

**More information:** [www.anihwa.eu](http://www.anihwa.eu)

### Project example: BetterBones: Better bone quality in laying hens (ANIHWA)

Laying hens can produce eggs economically for over a year. This long period of egg production can cause a type of calcium to settle in bone cavities, which may result in bones becoming weaker or more likely to break. The BetterBones project developed a number of approaches to discover genetic markers that determine bone quality in laying hens without requiring them to be killed. The project wants to develop practical solutions for breeders and allow them to use this information in selection, resulting in productive laying hens with better bone quality.

**More information:** <https://www.anihwa-submission-era.net/betterbones>



Israel



## Crops



### Plants for the Future - Platform for stakeholders from the plant sector



**Type:** ETP

**Timespan:** Ongoing (launched in 2004)

**Members:** A diverse range of stakeholders from industry, farmer organisations and research

**Focus on:**

Plant sciences and development of the plant sector to:

- ▶ Meet the increasing demand for healthier, safer and more diverse food and feed
- ▶ Develop plants as green factories for bio-based products
- ▶ Improve plant efficiency and productivity

**More information:** <http://www.plantetp.org/>

### C-IPM - Integrated pest management



**Type:** ERA-NET - FP7

**Timespan:** 01/01/2014-21/12/2016

**Overall EC funding:** app. 2 million €

**Focus on:**

- ▶ Ensuring implementation of Integrated Pest Management among European farmers
- ▶ IPM-strategies on sustainable crop protection valid at European level
- ▶ Translation of national and European IPM-related programmes into applicable innovations

**More information:** <http://c-ipm.org/>



## ERA-CAPS - Coordinating action in plant sciences



**Type:** ERA-NET - FP7

**Timespan:** 01/12/2011-30/11/2014

**Overall EC funding:** app. 2 million €

**Focus on:**

- ▶ Fundamental molecular plant science
- ▶ Sustainable and secure supply of safe and nutritious food for an increasing global population, including yield optimisation and nutrient use efficiency)
- ▶ Adaptation to a changing climate
- ▶ Plant responses to biotic / abiotic stresses

**More information:** <http://www.eracaps.org/>



Canada, Israel, New Zealand



## EUPHRESCO II - European phytosanitary research coordination



**Type:** ERA-NET - FP7

**Timespan:** 01/01/2011-31/03/2014

**Overall EC funding:** app. 1 million €

This network evolved and grew, following ERA-NET FP6 and FP7 funding support. It became a sustainable long-term network in 2014, funding research on the following topics:

**Focus on:**

- ▶ Emerging phytosanitary plant pests, in European agriculture, horticulture, forestry and the general environment
- ▶ Diagnostic methods for quarantine
- ▶ Pest risk analysis

**More information:** <http://www.euphresco.org>

### Project example: ANOPLORISK - II (Euphresco)

Longhorn beetles are among the most damaging invasive tree pest insects in Europe and North America. The ANOPLORISK - II project aims to refine a number of techniques that will help to detect and diagnose these beetles, in particular the use of detection dogs for detecting Asian longhorn beetles (ALB). Depending on the test situation, dogs showed a sensitivity of 75 % to 88.1 % towards living ALB larvae that were hidden in woodchips. Specialised dogs could successfully be employed in routine inspections of wood packaging material, imported plants or infested areas (i.e. natural environments).

**More information:** [http://www.euphresco.net/media/project\\_slides/anoplorisk\\_II\\_1.pdf](http://www.euphresco.net/media/project_slides/anoplorisk_II_1.pdf)



## International cooperation

### ARIMNET 2 - Coordination of agricultural research in the Mediterranean

**Type:** ERA-NET - FP7  
**Timespan:** 01/01/2014 - 31/12/2017  
**Overall EC funding:** app. 2 million €



**Focus on:**

- ▶ Sustainable production in the context of increasing ecological and climatic stresses
- ▶ Enhancing the advantages of Mediterranean agriculture in developing products with high added value
- ▶ Sustainable management of land and natural resources

**More information:** <http://arimnet2.net/>

#### Project example: CLIMED (ARIMNET2)

Mediterranean livestock farming systems need to adapt to the complex changes that have occurred in the area. The CLIMED project aims to assess the technical, economic and socio-ecological viability of crop-livestock systems in the Mediterranean context, to help farmers, local communities, researchers and policy makers develop priorities for Mediterranean livestock. The project wants to provide solutions for demographic and land pressure, increasing demand for wood and strong international competition.

**More information:**

<http://climed.cirad.fr/the-project/the-project>

### FORESTERRA - Enhancing forest research in the Mediterranean

**Type:** ERA-NET - FP7  
**Timespan:** 01/01/2012-31/12/2015  
**Overall EC funding:** app. 2 million €



**Focus on:**

- ▶ Understanding global change drivers, indicators and impacts on forest ecosystems
- ▶ Fostering the resilience of forest systems by managing biodiversity

**More information:** <http://www.foresterra.eu>



 Israel, Egypt, Syria

 Algeria, Morocco, Tunisia



# Food

## Food for Life



**Type:** ETP  
**Timespan:** Ongoing (launched in 2005)  
**Members:** Board members and Working groups (introduction, mission, members)

**Focus on:** Supporting national, regional and global markets in the field of innovative food products, tools and services:

- ▶ Enhancing the competitiveness of the EU food industry, stimulating economic growth
- ▶ Sustainable and ethical food production, with safe food that consumers can trust
- ▶ Developing high-quality products that improve health and well-being for European consumers

**More information:** <http://etp.fooddrinkeurope.eu/asp/index.asp>

## A healthy diet for a healthy life



**Type:** JPI  
**Timespan:** Ongoing (launched in 2010)  
**Overall EC funding:** app. 2 million €

- Focus on:**
- ▶ Validation and nutritional status of biomarkers in nutrition and health
  - ▶ Interrelation of nutrition and cognitive functions
  - ▶ Optimising food processing, to preserve and enhance health-promoting properties of food

**More information:**  
<http://www.healthydietforhealthylife.eu/>

## SUSFOOD - Sustainable food production and consumption



**Type:** ERA-NET - FP7  
**Timespan:** 01/12/2011-30/11/2014  
**Overall EC funding:** app. 2 million €

- Focus on:**
- ▶ Improving input, waste and side flow strategies to increase resource efficiency, and reducing input (energy, water etc.) in the food chain
  - ▶ Understanding consumer behaviour to encourage a (more) sustainable food choice
  - ▶ Innovation in food processing technologies and food products to support a sustainable food chain

**More information:**  
<https://www.susfood-era.net/>

Canada, New Zealand





International (European Forest Institute - EFI; Nordic Forest Research Cooperation Committee SNS)



## Forestry

### Forest-based Sector Technology Platform



**Type:** ETP

**Timespan:** Ongoing (launched in 2005)

**Members/National platforms:**

- ▶ 4 Owners (confederations of forest owners' organisations, woodworking industries and paper industries)
- ▶ National support groups and supporting companies

**Focus on:**

- ▶ Safeguarding biodiversity and the multiple functions of forests through sustainable forest management
- ▶ Economic and environmental balance in using forest biomass for products and energy, and improving the forest industry's energy efficiency
- ▶ Mitigating the effects of climate change

**More information:**

<http://www.forestplatform.org/>

### WOODWISDOM-NET+ - Increasing resource efficiency and tackling climate change through innovation in forestry



**Type:** ERA-NET - FP7

**Timespan:** 15/11/2012-14/11/2017

**Overall EC funding:** 8 million € maximum

**Focus on:**

- ▶ Sustainable forest management for increasing resource efficiency and for mitigating climate change effects
- ▶ Substitution of non-renewable resources by renewable forest-based solutions, to reduce carbon emissions and waste
- ▶ Value added products and competitive customer solutions

**More information:** [www.woodwisdom.net](http://www.woodwisdom.net)

### SUMFOREST - Sustainable and multifunctional forestry through enhanced research coordination for policy decisions



**Type:** ERA-NET - FP7

**Timespan:** end 2013 - end 2017

**Overall EC funding:** 2 million €

**Focus on:**

- ▶ Challenges for meeting multifunctional demands on European forest resources and for their sustainable management
- ▶ Understanding regional differences in sustainable forest management and multifunctional forestry, providing a solid basis for policy decisions
- ▶ Taking into account climatic, environmental, socio-economic and land use changes at global, regional and local levels

**More information:** The ERA-NET will publish two calls, one late 2015, and one in 2016.

<https://www.sumforest.org/>



## Bioenergy

### European Biofuels Technology Platform



**Type:** ETP  
**Timespan:** Ongoing (established in 2006)  
**Members/national platforms:** European Biofuels TP stakeholder database

- Focus on:**
- ▶ Sustainable and advanced biofuels in Europe
  - ▶ Biomass supply and demand
  - ▶ Conversion technologies and fuel production
  - ▶ Sustainable low carbon transport

**More information:** <http://www.biofuelstp.eu>

### BESTF 2 - BioEnergy Sustaining the Future



**Type:** ERA-NET - FP7  
**Timespan:** 01/12/2013-30/11/2018  
**Overall EC funding:** app. 7 million €

- Focus on:**
- ▶ Increase the security and sustainability of energy supply
  - ▶ Synthetic liquid fuels
  - ▶ Bio-methane and other synthetic gaseous fuels from biomass via gasification
  - ▶ Ethanol and higher alcohols from ligno-cellulosic feedstock via fermentation

**More information:** <http://eranetbestf.net/two/>

## € Bioeconomy

### Bio-based Industries Joint Undertaking



The Bio-based Industries Joint Undertaking is a Public-Private Partnership between the EU and the Bio-based Industries Consortium, operating under Horizon 2020. Its key aim is to develop a strong European bio-based industrial sector, to reduce Europe's dependency on fossil-based products, to help the EU meet climate change targets and lead to greener and more environmentally friendly growth.

**More information:** <http://bbi-europe.eu/>



# Find out which ERA-NETs your national research funders are participating in

