



● full member

Full members: France, Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, Germany, Ireland, Israel, Italy, Netherlands, Norway, Poland, Romania, Spain, Sweden, Switzerland, Turkey, United Kingdom, New Zealand

FACCE-JPI

FACCE-JPI provides and steers research to support sustainable agricultural production and economic growth, to contribute to a European bio-based economy, while maintaining and restoring biodiversity and ecosystem services under current and future climate change.

This is achieved through a strong transdisciplinary research base, encompassing economic and social aspects in addition

to scientific ones, and accompanied with a creative approach towards the alignment of national programmes and the input of multiple actors and stakeholders.

Bringing together 22 Member Countries FACCE-JPI has been running since 2010. An updated Strategic Research Agenda was published in January 2016 and the actions of the second Implementation Plan are being carried out.

KEY ACHIEVEMENTS:

In its first six years, FACCE-JPI has achieved a great deal in terms of research alignment, having launched 10 joint research actions, mobilising approximately €110M of funding for transnational research activities, 80% of which comes from

national research budgets. FACCE-JPI has also organised a thorough mapping exercise and a number of exploratory workshops amongst its members. The joint actions launched by FACCE-JPI have relied on different approaches (e.g.,

networking amongst researchers, linking up existing research projects, new calls for research, etc.). Furthermore, FACCE-JPI has developed innovative instruments (e.g. knowledge hub) that have been duplicated by other JPIs, and 6 out of its 10 joint actions have involved non-EU countries.

To date, the FACCE-JPI actions include:

- 1 Knowledge Hub, MACSUR (FACCE's pilot action, see below),
- 3 joint calls with EC co-funding, through ERA-Nets (FACCE ERA-Net Plus 'Climate Smart Agriculture', FACCE-SURPLUS, FACCE ERA-GAS)
- 4 joint calls with other European initiatives, international partners and non-EU countries (Joint call with the ERA-Net BiodivERsA, Joint call with the Water JPI entitled Waterworks 2015, International call with the Belmont Forum, and a Mul-

ti-partner call on agricultural greenhouse gas research with 3 non-EU countries),

- 1 Thematic Annual Programming Network on soil organic matter, and
- 1 Knowledge Network on Sustainable Intensification.

In terms of scientific excellence and impact, the research in FACCE-JPI has helped inform European and international policy decisions, e.g., contributing to the EU Food2030 Strategy and IPCC's fifth assessment report (see below). In addition, FACCE-JPI has also helped identify new approaches for sustainable agricultural development (e.g. through research conducted as part of the ERA-Net Plus on Climate Smart Agriculture) and to increase the visibility of European research on agriculture, food security and climate change on a global scale.

FACCE MACSUR KNOWLEDGE HUB

The MACSUR Knowledge Hub was established in June 2012 as a three-year pilot joint activity of the FACCE-JPI (MACSUR1, 2012-2015). It is a network that builds on the concept of "Networks of Excellence" and that gathers European researchers who already have secured (national) funding for modelling and assessing how climate variability and change will potentially affect regional farming systems and food production in Europe and the associated risks and opportunities for European food security. The MACSUR Knowledge Hub brings together 300 researchers originating from 18 countries⁶ under the coordination of a German research institute, Thünen Institute of Market Analysis.

MACSUR has helped **reduce research fragmentation and duplication**, and achieve greater cost-efficiency. In addition, the Hub has led to (i) enhanced European **research excellence** thanks to the generation of new interdisciplinary knowledge on the impacts of climate variability on regional farming systems and food production in Europe; (ii) increased European modelling capacity thanks to joint training and capacity building activities for participating researchers; and (iii) a **better visibility and influence** on European and international policymaking, including at the level of the Intergovernmental Panel on Climate Change.

The main outputs listed in MACSUR's Summary of Results⁷ have also contributed to improvement of **trans-national data management** with the development of a common data classification and rating tool for exploration of existing data sets, the publishing of data sets generated by MACSUR⁸ and the harmonisation of databases. So far, MACSUR has supported:

- The publication of joint scientific papers (278 articles in peer-reviewed journals) and contributions to books and reports (including the report of the IPCC); the organisation of 8 major international congresses and presentations in over 450 scientific conferences;
- The development of applied regional case studies (currently in Finland, Austria and Italy) that allow to assist policy makers and actors in the agri-food chain in identifying effective and efficient adaptation and mitigation measures and potential consequence scenarios;
- The development of common "European Representative Agricultural Pathways" as an input to global scenario exercises (linked to the socio-economic and greenhouse gas concentration IPCC scenarios)

For more information on MACSUR, see www.eralearn.eu.

⁶Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Israel, Italy, Norway, Poland, Romania, Spain, Sweden, Netherlands, United Kingdom (list of participating research organisations: <http://macsur.eu/index.php/about/partners>).

⁷Summary of Results of MACSUR1 (2015); MACSUR First Phase Report (2015)

⁸<http://macsur.eu/index.php/toolbelt-preview>

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