



FACCEJPI

# Agriculture, Food Security and Climate Change



## FACCE JPI European and International Strategy

2016-2020

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## **FACCE Evolve Deliverable 3.1- Strategy for Cooperation and Coordination with European and International Initiatives and Partners**

**(“FACCE-JPI European/International Strategy 2016-2020”)**

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## EXECUTIVE SUMMARY

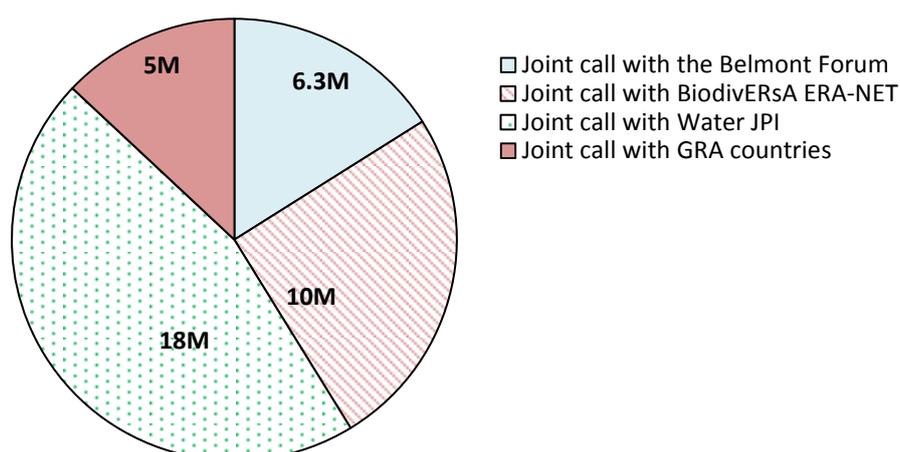
### 1. Introduction

The *Joint Programming Initiative on Agriculture, Food Security and Climate Change (FACCE-JPI)*, launched in 2010, gathers 21 EU Member States and Horizon2020 Associated Countries that have developed a Common Vision and [Strategic Research Agenda \(SRA\)](#) to tackle jointly the challenges of ensuring food security while adapting to climate change and mitigating GHG emissions in the agricultural sector.

The Initiative's main objective is to increase the **coherence and complementarity of national research programming** in its thematic remit, by helping align participating countries' research agendas and resources in areas of mutual interest, and as such strengthen and better structure the [European Research Area](#). FACCE-JPI member-countries have developed Implementation Plans that outline how such alignment will be implemented, namely via the launch of joint (transnational) research actions (e.g., European Research Area Networks, joint calls for research proposals, hubs/networks of European researchers, thematic programming network). FACCE-JPI's longer-term goal is to gather and generate European scientific evidence that can inform national and EU (agriculture/ food security/ climate change) policies, and support new practices and innovations amongst European end-users (e.g., farmers, food producers and other actors in the agrifood value chain).

Between 2012 and 2015, FACCE-JPI launched 10 joint research actions that have generated 75 transnational research projects of a total in-cash value of approx. €104 million (these investments mainly originated from participating countries' national research budgets).<sup>1</sup> Interestingly, almost half of these joint research actions have been developed from the outset **jointly with other international and European initiatives** active in the FACCE-JPI remit, such as the Belmont Forum, the Global Research Alliance on Agricultural Greenhouse Gases (GRA), the BioDiversa European Research Area Network (ERA-NET) and the Joint Programming Initiative on Water, representing a total investment of close to €40 million (see Fig. 1). In addition, selected non-EU, non-Associated countries, such as New Zealand, have also participated or plan to participate in some FACCE-JPI joint research actions (e.g., SURPLUS and ERAGAS ERA-NETs).

**Figure 1. Budget of FACCE-JPI joint research actions undertaken in cooperation with international and European partners, 2012-15 (million Euros)**



In December 2015, FACCE-JPI member-countries endorsed a **Strategy for Coordination and Cooperation with European and International Initiatives and Partners for 2016-20**, which provides broad guidance for all (new) FACCE-JPI actions. More specific action plans, outlining how exactly and when to interact with which external partners, will be developed subsequently, in the context of new FACCE-JPI Implementation Plans. The Strategy aims to underpin FACCE-JPI's overall strategic orientations.

<sup>1</sup> In addition to in-cash national resources, FACCE-JPI joint actions have also relied on national in-kind resources (e.g., staff based in national funding/ performing organisations in FACCE-JPI member-countries and partners).

## 2. Main objectives and target groups

The main goals of FACCE-JPI’s interactions and partnerships with other European and international initiatives are to:

- (i) Promote greater complementarity and structuring of research to address societal challenges more effectively and efficiently;
- (ii) Improve the international visibility and impact of FACCE-JPI and turn FACCE-JPI into *the* key EU player in research on sustainable agriculture and food security in the face of climate change; and
- (iii) Facilitate the exchange of information and mutual learning with similar research initiatives in other regions of the world.

Looking ahead, FACCE-JPI will continue to interact with **three groups of actors** that work in the same thematic remit:

- (i) **European initiatives and partners** (incl. bioeconomy ERA-NETs, other Joint Programming Initiatives, European innovation and technology platforms and Knowledge and Innovation Communities, and other EU research bodies such as the Joint Research Centre);
- (ii) **International initiatives and partners** (incl. global research alliances and funding networks, international research programmes, and intergovernmental organisations that work on similar issues as those identified in the FACCE-JPI Strategic Research Agenda); and
- (iii) **Selected non-EU, non-Associated countries (“third countries”)** that have similar strategic research objectives as FACCE-JPI member-countries and have the desire and the capacity to engage with the Initiative at institutional and joint research action level (see Fig. 2).

The FACCE-JPI Strategic Research Agenda indeed highlights that in order to reach FACCE-JPI strategic goals, *“research should be integrated on a large scale.”* The Strategy paper outlines the main benefits and challenges of interacting with each group, and identifies key partners with whom interaction would be (mutually) beneficial.

Figure 2. Key goals and target groups of the FACCE-JPI European/ International Strategy



## 2.1 European initiatives and partners

### *European Research Area Networks (ERA-NETs)*

Operating within the Horizon2020 Framework Programme, ERA-NETs promote the networking of national research programmes via the development of joint calls to fund transnational research projects. Two FACCE-JPI Workshops with relevant bioeconomy ERA-NETs were organised to exchange on possible coordination and cooperation (2011, 2013). The FACCE-JPI Governing Board then indicated that if an existing ERA-NET already addresses one of the FACCE-JPI strategic research priorities, the JPI should explore if implementation could be achieved via cooperation with the latter. If there is no ERA-NET and a research gap is identified, FACCE – JPI may propose a new one to be included in the Horizon2020 Work Programme. And this is indeed how FACCE-JPI has been working (see Fig. 1). Looking ahead, FACCE-JPI members suggest continuing to reflect on the JPI’s positioning and interactions vis-a-vis relevant bio-economy ERA-NETs, in close collaboration with the EC Standing Committee on Agricultural Research (SCAR). Discussions with the SCAR should be intensified, esp. if the latter takes on a more strategic role across the entire bio-economy-related European Research Area in the future.

At the operational (joint research action) level, FACCE-JPI member-countries recommend in the short- to medium-term that the Secretariat advances its discussions with the ERA-NET Cofund on Sustainable Livestock Production (**SusAn**), the ERA-NET on Sustainable Food Production and Consumption (**SUSFOOD2**) and the ERA-NET on Integrated Pest Management (**C-IPM**) and initiates a discussion with ERA-NET on ICT and Robotics for Sustainable Agriculture (**ICT AGRI II**). The objective would be to identify concrete joint research actions that cut across the scopes of FACCE-JPI and these ERA-NETs. These ERA-NETs have been deemed most relevant in light of FACCE-JPI’s updated Strategic Research Agenda and because of the overlap in membership with FACCE-JPI. Cooperation with the latter would help trigger cost-efficiencies, strengthen FACCE-JPI’s “**umbrella role**” **vis-à-vis such ERA-NETs** and strengthen the European Research Area in the food security-agriculture-climate change nexus.

### *Other Joint Programming Initiatives (JPIs)*

FACCE-JPI member-countries propose to continue engaging with the other nine Joint Programming Initiatives, to facilitate information-sharing, identification of good practices and mutual learning regarding the operation of joint programming initiatives, and the conduct joint advocacy, via the regular **JPI Chair Meetings**. At the operational level, they recommend continuing the discussions with the JPI Healthy Diet for a Healthy Life (**JPI HDHL**), **JPI Oceans** and **JPI Climate** to identify possible collaborative research actions that would support the implementation of FACCE’s Strategic Research Agenda since these initiatives work on related themes. (Cooperation with the **Water JPI** is already well underway, as is explained in the paper). Closer collaboration with these JPIs would be warranted to avoid duplication and further structure research at the European level, promote cost-efficiency and greater inter-disciplinarity, and trigger critical mass to address the societal challenges FACCE-JPI is aiming to tackle.

### *European Innovation Partnerships, Knowledge and Innovation Communities and Joint Technology Initiatives*

FACCE-JPI already interacts with six [European Technology Platforms](#) (industry-led research and innovation stakeholder fora) active in its thematic remit via the JPI’s [Stakeholder Advisory Board](#) in which these are members. In order to further reach out to industry and innovation players and improve the linkages between science and practice, FACCE-JPI member-countries recommend examining how to possibly work with the European Innovation Partnership on Productive and Sustainable Agriculture (**EIP AGRI**), the Knowledge and Innovation Community (**KIC Climate**) and Joint Technology Initiative for Bio-Based Industries (**JTI BBI**). (KIC Food could be approached subsequently). FACCE-JPI could take advantage from these initiatives’ (public-private) views on **innovation-driven research needs**. Likewise, these initiatives could benefit from FACCE-JPI’s (publicly funded) scientific knowledge. Closer coordination or cooperation may, in the longer run, facilitate the uptake of FACCE-JPI scientific research results by industry, and as such promote (technological and behavioural) innovations and improve FACCE-JPI’s longer-term societal impact.

### *Agricultural Research for Development Initiatives (ARD)*

FACCE-JPI member-countries suggest promoting greater **coordination** with selected European ARD initiatives active in the FACCE-JPI remit and involving EU strategic partners. In a second phase, cooperation at joint research action

level could be considered with selected initiatives to support the implementation of FACCE's and these initiatives' strategic research priorities. These include the ERA-NET on Coordination Agricultural Research in the Mediterranean Area (ARIMNet2), IntensAfrica, a European initiative aimed at working with Africa on sustainable agricultural intensification, and the proposed EU Partnership in Research and Innovation in the Mediterranean Area (**PRIMA**). Interaction with such ARD initiatives would not only facilitate information-sharing on scientific results and methods and, as such, help widen the scope of possible solutions to the global challenges FACCE-JPI is aiming to address, but also promote greater complementarity between agricultural research and agricultural research for development efforts of FACCE-JPI members and support European "science diplomacy" and development cooperation endeavours.

#### *Other European interactions*

FACCE-JPI member-countries propose to explore how to involve more systematically the EC **Joint Research Centre** (JRC; in-house EU science hub) in relevant FACCE-JPI actions and activities (e.g., by granting it observer status in the FACCE-JPI Governing Board or by inviting the JRC systematically to relevant FACCE-JPI meetings). Synergies and cooperation between FACCE-JPI and the JRC could be established at both knowledge production and knowledge management and dissemination levels, in order to avoid duplication in the conduct of research, promote better research uptake amongst policymakers, and ensure greater coherence and complementarity between EU and Member State driven research activities. In addition, FACCE-JPI members recommend exchanging more regularly with the European Strategic Forum for International Science and Technology Cooperation (**SFIC**) to ensure FACCE-JPI's international interactions are in line with the EU's strategic orientations, and with the European Strategy Forum on Research Infrastructures (**ESFRI**), to facilitate the sharing of research infrastructures *within and beyond* FACCE-JPI member-countries.

## **2.2 International initiatives and partners**

Extensive research is conducted worldwide on food security and sustainable agricultural development in the face of climate change, as these issues are of global concern. The *EU Strategy for International Cooperation in Research and Innovation* indeed acknowledges that "*the [European] Union needs to strengthen its dialogues with international partners to build critical mass for tackling these [global] challenges.*" FACCE-JPI members propose to examine how to best interact with the UN Food and Agriculture Organisation (FAO), the Global Alliance on Climate Smart Agriculture (GACSA) and the UN Committee on World Food Security, in view of improving the **science-policy** links in its thematic remit. Such interactions would also improve the **visibility and impact** of FACCE-JPI internationally while facilitating knowledge exchange and mutual learning with other (non-EU) institutions.

At the joint action level, FACCE-JPI members propose advancing discussions with the OECD Network for Research Collaboration on Sustainable Temperate Agriculture (**OECD TempAg**), the Global Research Alliance on Agricultural Greenhouse Gas (**GRA**) and the **4/1000 International Research Initiative** on Soil Carbon Sequestration, in view of identifying possible new collaborative research actions with these partners that would be mutually beneficial. Subsequently, cooperation could also be discussed with the **Belmont Forum**, with which FACCE-JPI has already been working, and the Wheat Initiative.

Collaboration with these initiatives is important to raise FACCE's visibility but also to better structure research at the global level, in view of addressing more effectively the global challenges of food security and sustainable agriculture while combating climate change. These are issues that feature highly on the international policy agenda, namely in the UN Sustainable Development Goals and the Paris Agreement of the Conference of Parties of the UN Framework Convention on Climate Change.

## **2.3 Third countries**

Several third countries have similar strategic research objectives than those identified in the FACCE-JPI Strategic Research Agenda. Moreover, more than 70% of scientific knowledge is currently generated *outside* of the EU, and one of Horizon2020's strategic priorities is to be "*Open to the World*". Likewise, the Horizon2020 Work Programme for 2016/17 flags 30% of all topics under Societal Challenge 2, "Food security, Sustainable Agriculture and the Bioeconomy", as specifically relevant for international cooperation. Against this background, FACCE member-countries agree to examine how to work more closely with selected third countries. In a first instance, they would

like to welcome **New Zealand** as the first **Associate Member** to the FACCE-JPI Governing Board (as of January 2016). New Zealand has expressed interest in joining the JPI, has already successfully participated in several FACCE-JPI joint research actions, has similar research priorities as FACCE-JPI and has the capacity and willingness to engage in a systematic way. Closer cooperation with other third countries could be considered in the future, such as the USA and Canada. These countries have prominent R&D sectors, extensive research on FACCE-JPI Core Themes and have already successfully participated in selected FACCE-JPI joint actions. Likewise, closer cooperation with emerging countries such as Brazil or with China could also be envisaged, pending their successful participation in selected FACCE-JPI joint actions in the future.

Cooperation with third countries at the joint research action level can take place via FACCE-JPI’s collaboration with international research initiatives in which these third countries are members (e.g., GRA, Belmont Forum), and/or via participation in FACCE-JPI ERA-NET Cofunds, when the third country has available national research funding. This has indeed already been the case (e.g., participation of Australia, Brazil, India, Japan, South Africa and the USA in the joint FACCE-JPI/ Belmont Forum Joint Call on Food Security and Land Use Change). Such partnerships would not only allow to better structure research internationally but also to access new scientific knowledge and infrastructures and support European science diplomacy efforts.

### 3. Coordination and cooperation modes and tools

A variety of tools and approaches can be used to operationalize coordination and cooperation with European and international partners. At the whole-of-JPI level, these include approaches to facilitate information-sharing, joint advocacy and awareness-raising (e.g., joint position papers and outreach events) as well as strategic partnerships (e.g., Memoranda of Understanding) and Associate Membership in the JPI. At the joint research action level, modalities for cooperation, for example, include joint mapping and horizon-scanning of existing research, joint calls for research proposals, participation in FACCE-JPI ERA-NETS and knowledge hubs, sharing of research data and methods, and the sharing of research infrastructures. The choice of cooperation mode will depend on the partner’s profile and on the cooperation objectives sought.

### 4. Process for considering partners

At the “whole-of JPI” level, FACCE-JPI member-countries and the Secretariat have the possibility to propose new strategic or institutional partners for the JPI, yet such proposals need to be approved by the Governing Board before proceeding onwards. Criteria for considering such partners include: the degree of thematic complementarity with FACCE-JPI’s Strategic Research Agenda; overlap in membership; visibility at European and international levels; expression of interest in working with the JPI. At the operational level, the FACCE-JPI Secretariat and Joint Research Action Working Groups (in charge of scoping and developing joint research actions) are best placed to propose possible partners. In cases where external partners approach directly FACCE-JPI, the Secretariat (or the Joint Action Working Group) would be responsible for conducting an initial screening. In the case of institutional partners and Associate Membership, approval by the Governing Board would be required (see Fig. 3 and 4 below).

Figure 3. Process for considering partners at joint research action level

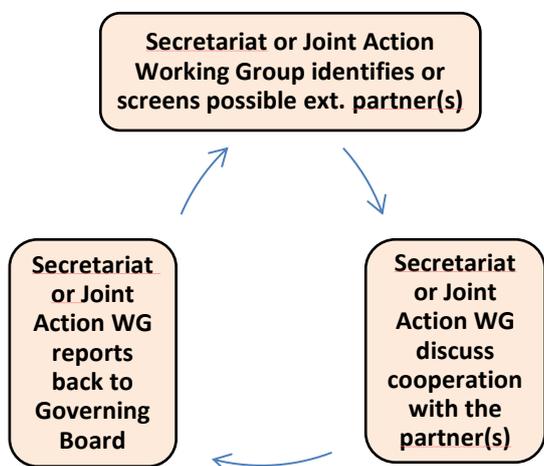
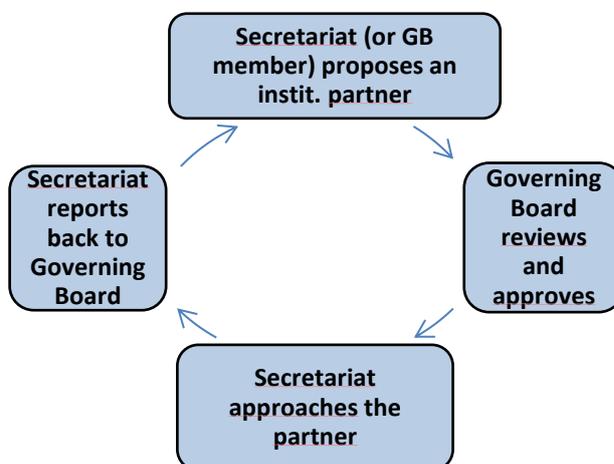


Figure 4. Process for considering partners at whole-of-JPI level



FACCE-JPI member-countries recommend to be selective and focus first on the European and international partners with the highest added value for the Initiative. Establishing collaborative activities with other partners and third countries, while bringing many benefits, can also be challenging and time-consuming. For example, identifying an activity of common interest, harmonising operational procedures and timetables for funding and executing research activities, and finding the right counterpart within external partner organisations takes time.

## 5. Recommendations for implementing the Strategy

Finally, in order to implement this Strategy in an efficient way, FACCE-JPI members recommend to:

- **Better leverage on all FACCE-JPI actors** (e.g., members of the Governing Board, Secretariat, Scientific Advisory Board and Stakeholder Advisory Board) who are already engaged with some of the proposed European and international partners/ initiatives, in order to identify possible synergies and cooperation modes with the latter.
- **Set up an informal network of European/international relations contact points** across relevant FACCE-JPI (existing and future) joint research actions, in view of facilitating the monitoring, coordination and exchange of good practices at the operational level, and
- **Better communicate FACCE-JPI's scientific results and achievements.** Effective communication of the JPI's achievements and added value is essential to attract external partners.

