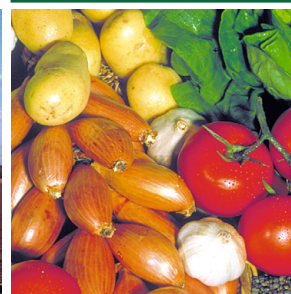


Agriculture Food Security and Climate Change

Newsletter

[Bi-annual Newsletter]

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On October 22nd 2013, the Joint Programming Initiative on Agriculture, Food Security and Climate Change (FACCE-JPI) celebrated its 3-year anniversary in Paris, and launched its first biennial Implementation Plan for 2014-2015. The event, hosted by INRA at its headquarters, starred guest speakers from the European Commission (DG RTD, DG AGRI, JRC), national ministries, and representatives of the scientific and stakeholder community. It was attended by more than a hundred high-level policy makers, scientists and stakeholders from FACCE-JPI, and watched on live-streaming by a further 150 people from all over Europe. The full programme is available [here](#), and [interventions can be watched online](#) on the FACCE-JPI website.

www.faccejpi.com



The first session included a series of political statements, dedicated to the role of the Member States and Joint Programming Initiatives (JPI) in implementing the European Research Area (ERA).

Keynote opening

The European Research Area : The role of Member States



Pierre Valla, Director General for Research and Innovation, replacing the French Minister for Higher Education and Research Geneviève Fioraso, emphasised the role of Member States in implementing the European Research Area by giving the example of French involvement. **"The ERA [is] for research what the European single market is for trade: it calls for an effective Member State research policy fostering scientific excellence, competitiveness and innovation besides actions undertaken and financed at the European level". "The Stakes are high for science and research to bring an understanding of key problems and to devise solutions. Europe, (...) must play a leading role in developing knowledge and technologies that could be at the core of sustainable and productive food systems. It is hence not a surprise that this JPI was the first to be established."**

According to him, European Member States have a crucial role to play by aligning research on agriculture, food security and climate change.

Joint Programming Initiatives in achieving the ERA



Keith Sequeira, representing Commissioner Geoghegan-Quinn, focused his intervention on JPIs' core-mission to align national research, in the continuation of the general orientations given by the European Commission in Dublin at the last conference on Joint Programming. He insisted on the importance for JPIs of implementing their Strategic Research Agendas, and on the pilot role of FACCE in this regard: **"We now have to move from agenda setting to implementation. Again, FACCE is leading the work here, looking at their first Implementation Plan"**. On the collaboration between Member States and the European Commission, he stated again that **"The Commission is more than a willing partner for Joint Programming Initiatives which are serious and backed by the Member States"**, stressing the role of FACCE and other JPIs in show-casing the European added value of Joint Programming. He finally called for **"better and stronger interactions"** between JPIs and Horizon 2020, each focusing on their strengths in order to create added value at the European level.

The Joint Programming Initiative on Agriculture, Food Security and Climate Change (FACCE-JPI)



Marion Guillou, the outgoing Chair of the FACCE-JPI Governing Board (GB), reviewed the history of the creation of FACCE-JPI. The remit and scope of FACCE-JPI were agreed by France, the UK and Sweden, preparing the Council Decision under the French EU presidency in 2008. Joint Programming, she insisted, is a novel tool, and remains an experiment: **"We are experimenting all the time, because we need to put in place new tools and new ways to collaborate and to converge"**. This convergence of European national research programmes, certain amongst the first and best in the world, but which alone cannot tackle great societal challenges, is done on a **"global remit"**. It follows an **"inclusive method"** and **"co-construction process"**. **"We need to rethink the agricultural practices and systems,"** she says, **"to respond to globally increased food demand with special attention to efficiency and new productivity factors: resources and land efficiency adding to labour land capital. We need to operate within limits"**. Marion Guillou stated that there is still much work ahead, as FACCE-JPI is entering its next phase, consisting of the implementation of a plan of action for 2014-2015. The Implementation Plan, adopted the day before by the Governing Board, foresees numerous common actions for nationally funded research (aligning), co-funded research (investing) and emerging research topics (exploring).

She concluded by wishing her successor Niels Götke, one of the two FACCE-JPI GB members for Denmark, a warm welcome and much success.

Agriculture, food security and climate change: what is the role of science?



Dominique Ristori, Director General of the Joint Research Centre (JRC) of the European Commission, stressed the importance of science for a sustainable agricultural production, and the necessity to adopt a global approach. **"The 3 year experience of FACCE-JPI exemplifies the integrated approach: it brings together more than 20 countries and a strong interdisciplinary research base, encompassing economic and social aspects."** **"With a combined research agenda and agreed scientific networks and project plans for the short, mid and long term"**, he said, **"the JPI is now well established and seen as a mature and successful flagship for Joint Programming Initiatives"**, and called for **"maximised synergies by strengthening the links between the JRC and the FACCE-JPI"**, in particular, cooperation on foresight and modelling of crops, livestock and trade, on mapping (soil) and on specific research projects

such as the knowledge hubs and knowledge networks. **"Joining forces"**, he stressed, **"is definitely the way forward to tackle complex challenges requiring multidisciplinary solutions"**.



• The point of view of the FACCE Scientific Advisory Board

Jean-François Soussana, Chair of the FACCE-JPI Scientific Advisory Board, responded by recalling the scientific and societal challenges when the JPI was launched, which have since then dramatically increased: **"Failure of climate change adaptation, the extreme volatility in agricultural prices, the food shortage crisis, all those are underlined, together with the rising greenhouse gas emissions, as critical, both in terms of the magnitude of the potential impacts, as of the risks. We now reached a stage where world leaders acknowledged the trends."** He then emphasised the timely creation and launch of the JPI, praised the exponential developments of FACCE-JPI. **"We can now say that we were right to launch**

this action, and we were timely", as the paper entitled **"The increasing role of FACCE-JPI in the research on the interplay between agriculture, food security and climate change"**, released on this day, illustrates with its timeline.

Addressing the great societal challenges in agriculture, food security and climate change: what is the role of stakeholders?



Nikiforos Sivenas, Head of the Taskforce on Research and Innovation of the DG AGRI, spoke about the importance of including stakeholders in the process linking research to innovation, for example through the European Innovation Partnership (EIP) on Agricultural Productivity and Sustainability. **"There is a bottleneck between research and farming practice; we need to increase interactions with the genuine involvement of various actors (researchers, end-users such as farmers/farmers' groups, advisors, enterprises, etc.) all along the life of a research project (multi-actor approach)."**

"The EIP will focus on innovation. A key element for promoting innovation will be the Operational Groups which are defined as bottom-up, demand-driven partnerships linking farmers, researchers, advisors, businesses and other actors around a concrete innovation project".

He recalled that Marion Guillou is also a member of the EIP Steering Board, thus contributing to its general orientations, as are 7 other member organisations of the FACCE-JPI Stakeholder Advisory Board (StAB).



• The point of view of the FACCE Stakeholder Advisory Board

Tania Runge, Chair of the FACCE-JPI StAB, outlined the **"very certain added value"** that organisations derive from their membership in the FACCE-JPI StAB, owing to the interface it offers between scientists and stakeholders: **"FACCE-JPI grants stakeholders access to a complex research environment, and allows for exchanges to which we are not used. Thanks to FACCE-JPI, we have a dialogue on our expectations, we have a return"**, and further voiced the request of **"a key connection between FACCE-JPI and the agricultural EIP"**. Many benefits are also derived from FACCE-JPI's integrated approach: **"Many farmers or stakeholders are facing several challenges at a time. This leads to the fact that multidisciplinary**

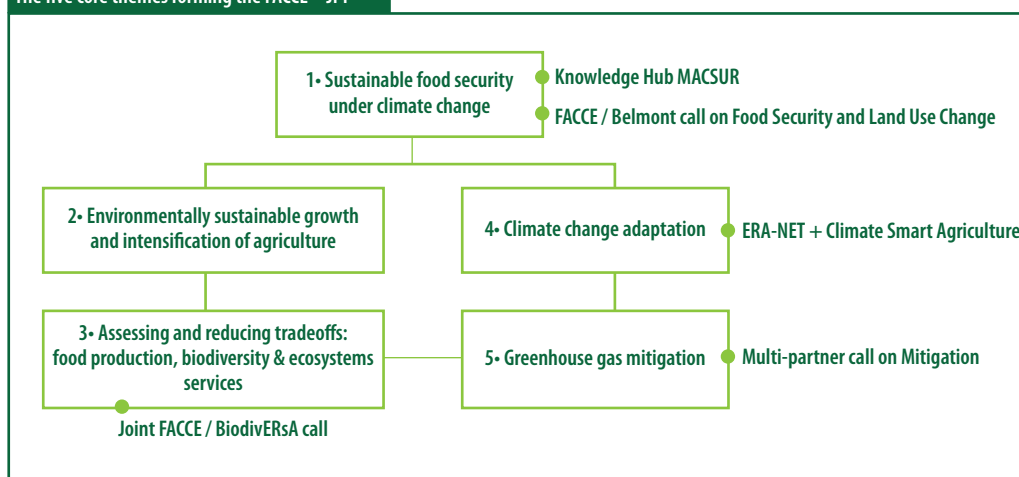
and integrated research is needed; we are lucky that this has been the approach taken by FACCE-JPI". She stressed stakeholders' needs for **"solutions, allowing us to meet society and consumers' expectations while ensuring the competitiveness of the agricultural sector"** for which **"Collaboration is key. This is what we are doing in FACCE-JPI. It is sometimes extremely difficult, and time-consuming. But this is the only possible first step to a new approach."**



The Joint Programming Initiative on Agriculture, Food Security and Climate Change (FACCE-JPI): achievements and perspectives

Political keynote interventions were followed by a round table, moderated by **Annette Wijering**, one of the members of the FACCE-JPI GB for the Netherlands (Ministry of Economic Affairs). Each presentation show-cased the innovative scientific aspects and original concept of the 5 ongoing joint actions implementing the Strategic Research Agenda. Mrs Wijering stressed the importance that FACCE attaches to developing different kinds of Joint Programming activities. These include alignment, cooperation with ERA-NETs, exploring new research themes and of course joint calls together as a consortium. The complementarity of the actions undertaken together by FACCE-JPI countries contribute to tackling societal challenges and to improving critical mass within Europe on these research themes.

The five core themes forming the FACCE – JPI



Innovating: The “Knowledge Hub” concept, MACSUR

Martin Banse from the Thünen Institut, and coordinator of the FACCE Knowledge Hub MACSUR, explained the concept of a Knowledge Hub, created by FACCE-JPI in 2011: an original tailor-made instrument with 3 dimensions: research, networking, and capacity-building. He introduced MACSUR, a network of modellers across different disciplines from all over Europe, who work on integrating models on the impacts of climate change on European food security across scales, and on capacity building with summer schools, seminars, courses and workshops. The novelty of MACSUR lies in the in-kind contributions of €7 million euros adding to the €8 million of new money, which contribute to the convergence of already funded and ongoing research, and new research. He described the aim of MACSUR: **“to improve models for adaptation assessment, to benchmark our models to common protocols and to contribute to these agricultural pathways now under development at the global level”** and presented the first scientific results. MACSUR is currently developing a Memorandum of Understanding with AgMIP, the agricultural model intercomparison and improvement project, to intensify collaboration and contribute to coordinated regional and global assessments of future climate impacts.

MACSUR KEY FIGURES

261 modellers / 74 organisations / 18 countries

37 publications from MACSUR participants / 51 external presentations

Engaging the international research community: The International multi-partner call on agricultural greenhouse gas (GHG) mitigation

Maurice Héral, Head of the Environment and Biological Resources Department of the ANR (France) and one of the French representatives of the FACCE-JPI GB, introduced the international multi-partner call on greenhouse gas (GHG) mitigation. With a global budget of approximately €10 million mixing €5 million of fresh money with in kind contributions, the call involves 8 FACCE-JPI countries with **international partners** from the Global Research Alliance on Agricultural Greenhouse Gas (GRA) countries such as Canada, New Zealand and the US. After a two-step selection procedure, 11 projects were selected for funding, which will start in February 2014. The objective of the call is to work towards **“a common approach”** towards understanding and reducing agricultural greenhouse gas emissions, as agricultural GHG emissions are gaining increasing weight on international agendas in view of negotiating future international regulations.

INTERNATIONAL CALL ON MITIGATION KEY FIGURES

36 preproposals received, 11 proposals selected for final funding (success rate of 11%)

11 countries / 59 research teams / €9.9 million total

See [list of projects](#)

Engaging stakeholders and emerging countries: The Joint Call on Food Security and Land Use Change with the Belmont Forum

Reynaldo L. Victoria, Coordinator of the Research Program on Global Climate Change of the FAPESP, Brazil, presented the Joint call on Food Security and Land Use Change. He described the collaboration opportunities offered by this call between FACCE and Belmont Forum member countries, including emerging or third countries such as Brazil, India and South Africa. This call presents 3 innovative features. To support the creation of stronger links within the international research community, this call, with a global budget of approximately €10 million, has developed two types of calls: a classical call for research projects with international consortia, and a call entirely dedicated to the **building up of new research partnerships** addressed to countries with no previous tradition of bilateral research cooperation. Strong **stakeholder engagement** is another specificity of this call, as is its multidisciplinary, with a strong incentive to involve **social and human sciences** in the research proposals. The projects are currently being evaluated, and the first projects will be launched in March 2014.

This collaboration has also led FACCE-JPI to be selected as an example of "good practices" for the EU-Brazil Joint Action Taskforce workshop on EU-Brazil collaboration on Research and Innovation.

An example of collaboration with the European Commission: The ERA-NET Plus on Climate smart agriculture: adaptation of European agricultural systems

Marina Montedoro, Italian member, and Vice-Chair of the FACCE-JPI GB, presented the FACCE-JPI ERA-NET + call on "Climate Smart Agriculture: Adaptation of European agricultural systems". Prepared 2 years ago in response to an invitation from the European Commission, with inputs from the SAB and the StAB, and with the aim to implement the Strategic Research Agenda (SRA), this ERA-NET is a significant call of €19 million including €4 million of EC top-up. It stands as a pilot in working together with the EC, a collaboration which is key in leveraging funding. Launched on October 1st 2013, it includes 22 funding organisations from 18 countries, focusing on 4 key-areas: i) genetics and breeding of animals and plants to increase resilience to climate change, ii) pests and diseases linked to climate and posing significant risks, iii) adaptive management of water and soil resources, and iv) options for adapting agricultural systems. It is the first FACCE ERA-NET of a series aiming to implement short-term priorities of the SRA. Two more are foreseen in the Implementation Plan covering 2014-2015.

Reducing trade-offs and promoting synergies between FACCE-JPI and the ERA-NETs: The Joint call with BiodivERsA on food supply, biodiversity and ecosystem services

Xavier Le Roux, Senior Scientist at INRA and at the Fondation pour la Recherche sur la Biodiversité (FRB) and coordinator of the ERA-NET BiodivERsA, presented the objective of the joint call on “Promoting synergies and reducing trade-offs between food supply, biodiversity and ecosystem services”, a consequence of the good collaboration between FACCE and the existing ERA-NETs within its scope (18 in total). There are opportunities and services created by agriculture for biodiversity: food provision, but also carbon sequestration, regulation of water and soil quality, to name but a few. Xavier Le Roux presented the joint call’s innovative approach: **Turning a “trade-off” into a “win-win”**, by envisioning the links between agriculture and biodiversity, but also the institutional challenge implied within the ERA to properly address this trans-sectoral issue. This call, gathering 14 countries (5 FACCE countries and 11 BiodivERsA partners) with an approximate budget of €10 million, was made possible following a mapping meeting organised by FACCE on the third core theme of the SRA “Reducing trade-offs between food supply, biodiversity and ecosystem services” and a joint BiodivERsA/FACCE workshop. **“Joining forces”**, says Xavier Le Roux, **“allows us to have a stronger impact.”**

Looking ahead for the next two years: the Implementation Plan (2014-2015)

Niels Götke, the newly elected Chair of the FACCE-JPI GB, presented the Implementation Plan formally launched at this event, listing short-term actions foreseen for 2014 and 2015. This document is the result of many inputs, including a broad-based concluding meeting organised by the FACCE-JPI after a series of Mapping Meetings organised on each of the SRA core-themes throughout the last 2 years. The concluding meeting gathered policy makers, previous mapping meeting participants, and representatives of the SAB and StAB, to set short-term priorities for the implementation of the Strategic Research Agenda. These priorities are organised around the 3 objectives of FACCE-JPI: to align existing research, to invest in new research when needed, and to explore emerging topics, and propose innovative instruments to do so.

In **2014**, the **alignment of existing national research** will be supported by the launch of both a Knowledge Hub and a Knowledge Network. The Knowledge Hub will concern plant disease epidemiology under climate change, focusing on emerging pests and diseases, with the intention to strengthen existing data on infrastructures and to develop participatory research as well as epidemiological modeling. The Knowledge Network, a new instrument to be developed, similar to the Knowledge Hub but with multiple research consortia, will focus on the development of options for sustainable intensification of European crop (both major and minor crops) and livestock systems.

In the same year, **investments** in new or existing but scattered research will be made through co-financing between the European Commission and national Member States, primarily through an ERA-NET on Sustainable and resilient agriculture for food and non-food systems, proposed in the first Work Programme launched under Horizon 2020. This ERA-NET is currently under preparation. It will aim to strengthen the resilience of regional agricultural systems in Europe, in particular to climate variability and to price volatility, which needs to be increased taking into account both food and non-food uses and the integration of production systems within regions. Moreover, further EU financial will be continued to support the FACCE-JPI, in particular with regard to the alignment of national research, and the development of links with other major international research initiatives.

Two **exploratory workshops** will also be organised in 2014, on Animal health and diseases and GHG mitigation in Madrid on May 21st, and one on Food safety implications of climate change and climate variability.

In **2015**, a third Knowledge Hub will complement the FACCE-JPI alignment activities with the creation of a network of experimental climate change studies on crop and grassland systems. An innovative tool will also be launched: a Thematic Annual Programming Network. This Thematic Annual Programming Network will gather national funders to discuss major national research programmes on improving agricultural soil quality, with the objective to align them.

Investments in new research could be made through an ERA-NET on Agricultural greenhouse gas research.

Finally, three exploratory workshops will be organised in 2015: "Methods for better integrating research on food economics and climate change", "Better understanding of trade-offs (positive and negative) across ecosystem services at farm level and their economic effects at farm level", and "Overcoming socioeconomic and technological barriers to GHG mitigation in European agri-food chains".

The Chair concluded the day by thanking all participants of this 3rd anniversary. This first retrospective was a success, and FACCE-JPI hopes to be able to present next time the results of the actions shown on this day.

Upcoming events

- February 4th 2014: FACCE Mapping Meetings Dissemination Workshop, Madrid, Spain
- February 10th 2014: FACCE Side event on Bioeconomy, The Hague, The Netherlands
- February 11th 2014: FACCE-JPI Governing Board Meeting, The Hague, The Netherlands
- February 13th 2014: EC Workshop "Synergies of European Structural and Innovation Funds (ESIF) and Horizon 2020 for public-public partnerships", Brussels
- March 18th-19th: back-to-back meeting of the FACCE Stakeholder and Scientific Advisory Boards, Brussels
- April 1st-4th 2014: FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancement' in Sassari, Italy
- May 12th-16th 2014: Adaptation Futures 2014 - Third International Climate Change Adaptation Conference, Fortaleza, Brazil - 12-16 May 2014
- May 19th-20th 2014: Livestock, Climate Change & Food Security Conference, Madrid, Spain
- May 21st: Exploratory Workshop on Animal health and GHG emissions, Madrid, Spain
- June 21st-26th: EuroScience Open Forum Copenhagen, Copenhagen, Denmark
- June 24th 2014: FACCE-JPI Governing Board Meeting, Copenhagen, Denmark

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