



FACCE-JPI – OUR COMMON VISION

FACCE-JPI Governing Board will revisit this Common Vision annually
Current version: February 2012

VISION: An integrated European Research Area addressing the challenges of Agriculture, Food Security and Climate Change to achieve sustainable growth in agricultural production to meet increasing world food demand and contributing to sustainable economic growth and a European bio-based economy while maintaining and restoring ecosystem services under current and future climate change.

FACCE-JPI MISSION: to achieve, support and promote integration, alignment and joint implementation of national resources under a common research and innovation strategy to address the diverse challenges in agriculture, food security and climate change.

WHAT IS AT STAKE?

Agriculture, food security and climate change pose key challenges for the world. The 2007-2008 world food crisis was a stark reminder that all countries need to build more resilient food systems in the light of expected (and unexpected) changes ahead. Research must play a leading role in bringing solutions. Europe has and continues to develop knowledge and technologies to underpin sustainable and competitive food production systems. Agriculture (including forestry and aquaculture) are highly exposed to climate change – the variability of crop yields has already increased as a consequence of extreme climate events, such as the summer heat of 2003 and the spring drought 2007 in Europe. However the agriculture and forestry sectors also offer the potential of mitigation of N₂O and CH₄ emissions, while reducing GHG emissions associated with indirect land use change and the development of verifiable GHG mitigation and carbon sequestration measures. Agriculture has to meet a demand for food which is estimated to rise globally by 50% by 2030 and to double by 2050, due to population growth, urbanisation and increased affluence in many societies. A European Research Area needs to play its role in sustainable growth in the agriculture sector (crops, livestock, fisheries, forests, biomass and commodities) to:

- Meet growing world food demand
- Enhance rural livelihoods
- Address competing demands on land use for biomass production
- Stimulate sustainable economic growth
- Maintain and restore ecosystem function / services
- Make the transition to a bio-based economy

WORKING TOGETHER

Cross-border collaboration offers the opportunity for more efficient utilisation of scarce resources and Joint Programming Initiatives bring a new dimension to European research by aligning national programmes across participating countries, thereby contributing to the development of the European Research Area in addressing grand societal challenges. By working together around a common vision and strategic research agenda and pooling together limited resources; Member States will be able to make significant contributions to research by avoiding duplication, filling gaps and creating critical mass. This will increase European research visibility and impact at the international level. Commitment of Member States is critical for establishing a long-term and large base research endeavor, which in turn will foster innovative, high impact research in Europe.

Europe 2020 – The European Strategy for Smart, Sustainable and Inclusive Growth, highlights the importance of further developing a strong European bio-economy and references the interconnected challenges of global food security and climate change. Further, the building of the bioeconomy by 2020 is one of the stated deliverables within the Innovation Union flagship initiative. FACCE-JPI will also work alongside important global initiatives, for example those delivered through CGIAR (Consultative Group on International Agricultural Research), the Global Research Alliance on Agricultural Greenhouse Gases, and European initiatives such as ERA-Nets, other Joint Programming Initiatives, Technology Platforms and Infrastructures.

ALIGNING RESEARCH FOR IMPACT

The JPI “Agriculture, Food Security and Climate Change” (FACCE-JPI) seeks to address the challenge of food security in the context of demographic growth, global environmental changes, globalisation of the economy and dwindling natural resources such as fossil fuels, water and arable land. In this sense, it is of particular importance to look at the intersection between research on agriculture, food security and climate change. To do so, a strong transdisciplinary research base, encompassing economic and social aspects in addition to scientific ones is required. This implies the need for cooperative research projects and a creative approach to aligning national programmes in order to get the necessary expertise for performing the project and delivering maximum impact. The interrelated challenges addressed are European and global and require the effort of multiple actors and stakeholders. For long term sustainability more is needed than just increasing efficiency and productivity. Further developments have to be driven from the demand side (including changing consumption patterns) and include the urgent need to reduce demand on resources.

The expected outcomes of FACCE-JPI include:

- (1) A large mobilisation of the research community across Europe to work together to meet a grand societal challenge, including innovative solutions.
- (2) Knowledge to inform European decision-making
- (3) Enhanced European visibility and impact in the international context
- (4) Increased competitiveness of European research through enhanced linkages with and implementation by farmers, industry and SMEs

The scope and scientific objectives of FACCE-JPI are presented in its Scientific Research Agenda (ScRA). Through inputs of stakeholders and through sharing of policy ambitions and priorities of participating member and associate countries a Strategic Research Agenda (SRA) will be developed and regularly updated. The main objective of FACCE-JPI is to align national programmes across participating Member/Associated States to address the research questions defined in the Strategic Research Agenda and to “share the burden”.

FACCE-JPI will draw on the participation of major national funders of research underpinning these areas in countries across Europe, and work towards:

- Identifying and exchanging information on relevant national programmes and research activities;
- Reinforcing joint foresight exercises and technology assessment capacities, in order to ensure that emerging and new threats are constantly monitored and regularly reported;
- Exchanging information, resources, best practices, methodologies and guidelines;
- Identifying areas or research activities that would benefit from coordination or joint calls for proposals or pooling of resources or other novel means of integration, in order to reduce fragmentation and duplication, and achieve greater efficiency of public resource;
- Defining the procedures for research to be undertaken jointly in the areas referred to in the previous point;
- Sharing, where appropriate, existing research infrastructures or developing new facilities;
- Exporting and disseminating public domain knowledge, innovation and interdisciplinary approaches to other parts of Europe and worldwide and ensuring the effective use of research outputs to enhance European competitiveness and policy making;
- Encouraging better collaboration between the public and private sectors, together with open innovation between different business sectors;
- Considering global needs and the changing needs of consumers and those of the agri-food industry in the EU when setting the objectives for related programmes.

TOWARDS A EUROPEAN RESEARCH AREA FOR AGRICULTURE, FOOD SECURITY AND CLIMATE CHANGE

After determining its Strategic Research Agenda, FACCE-JPI will set a strong emphasis on the implementation of joint activities. Naturally, for the partners of this initiative harmonization and streamlining of national research is key. Joint funding of research activities is an important approach with high impact. This instrument, however, has to be used and further developed on a case by case base to a tailor made, high-impact tool to meet the dedicated goal of each measure.

Participating countries will need to find new ways to work together. This may involve alignment of existing programmes or the joint development of new areas. To implement the Strategic Research Agenda, “à la carte” programmes will be developed in which several countries in variable geometry participate voluntarily and on the basis of their respective political and financial commitments. Use of existing EC instruments (mobility, infrastructures, ERA-NETs, Article 185, etc.) will enhance the ability of participants to work together for European added value.

The scope of FACCE-JPI as described in the Scientific Research Agenda is very broad and intends to tackle grand challenges which are very inter-related and can only be considered through multidisciplinary approaches. Other local, regional, national and international initiatives exist or are going to be created whose objectives those of FACCE-JPI. These challenges have to be considered on a global basis, namely because of the very strong inter-relation between regional climates, but can only be effectively handled on a more local basis. Where relevant, the use of regional initiatives is essential for tackling these challenges in addition to cooperation with global initiatives.

FACCE- JPI will not only focus on research but also on innovation. Here, the importance of SMEs and industry in the agriculture and food sectors has to be stressed, including societal innovation and consumer behavior. Instruments to improve access to innovation as well as specific innovation activities are essential in this domain.

FACCE-JPI will build on achievements across Europe to date, notably interactions, cooperation and coordinated approaches with various actors such as The Standing Committee on Agricultural Research (SCAR), the European Agriculture Research Initiative (EURAGRI), joint approaches to infrastructure (such as ANAEE, MIRRI, ICOS ELIXIR etc), and joint funding between many of the JPI partners, such as ERA-Nets.

FACCE-JPI Secretariat – February 2012

ANNEX – CURRENT ACTIVITIES AND ACHIEVEMENTS OF FACCE-JPI February 2012

- 21 countries participating in FACCE-JPI: Austria, Belgium, Czech Republic, Cyprus, Denmark, Estonia, Finland, France, Germany, Ireland, Israel, Italy, The Netherlands, Norway, Poland, Romania, Spain, Sweden, Switzerland, Turkey, UK
- A FACCE-JPI website www.faccejpi.com
- A Scientific Research Agenda (on website), ready for consultation over the coming months covering five core themes:
 1. Sustainable food security under climate change, based on an integrated food systems perspective: modelling, benchmarking and policy research
 2. Environmentally sustainable growth and intensification of agricultural systems under current and future climate and resource availability
 3. Assessing and reducing trade-offs between food production, biodiversity and ecosystem services
 4. Adaptation to climate change throughout the whole food chain, including market repercussions
 5. Greenhouse gas mitigation, N₂O and CH₄ mitigation in the agriculture and forestry sector, carbon sequestration, fossil fuel substitution and mitigating GHG emissions induced by indirect land use change
- A governance structure to take forward strategic discussions such as implementation measures including a Governing Board and a Scientific Advisory Board
- EU FP7 funding contribution (€2M over 3 years) towards costs such as the secretariat, the Scientific Advisory Board, mapping of national programmes, communications, linkages to other activities (eg CGIAR, GRA, ERA-Nets) etc.
- 17 countries are supporting a pilot action under Core Theme 1 funding a “Knowledge Hub” to bring together nationally-funded research groups already modelling how climate variability and change affect regional farming systems. This will bring together models covering plants, livestock plus economic and trade issues to determine uncertainties and plan for the future. The Knowledge Hub will be launched in June, 2012
- Workpackages delivering mapping meetings, coordination with international programmes, and communication and liaison with stakeholders.