

Joint Knowledge Creation

Towards sustainable
agriculture in a
changing climate



FACCEJPI

Joint Programming
Initiative on
Agriculture,
Food Security
and Climate
Change

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Joint Programme Initiative on Agriculture, Food Security and Climate Change

FACCE-JPI (Joint Programming Initiative on Agriculture, Food Security and Climate Change) is an intergovernmental initiative that mobilises European research leaders, funders and other stakeholders to jointly tackle the challenges of ensuring food security and mitigation and adapting to climate change. It is doing this by aligning national research agendas. In this way, FACCE-JPI is striving for an integrated European Research Area, strongly focused on sustainable growth of agricultural production, a bio-based economy, the restoration of natural resources and smart responses to climate change.

In 2010, the Council of the European Union launched FACCE-JPI to stimulate collaboration between member states. Since 2012, FACCE-JPI has implemented more than 25 activities and joint research actions.

To provide coherence in the research, the FACCE-JPI Strategic Research Agenda (SRA) includes five, interdisciplinary themes:

1. Sustainable food security under climate change
2. Environmentally sustainable intensification of agricultural systems
3. Developing synergies and reducing trade-offs between food supply, biodiversity and ecosystem services
4. Adaptation to climate change
5. Mitigation of climate change

FACCE's Strategic Research Agenda (SRA) has already influenced the members' research: in 2016, 64% of members considered that the SRA had influenced the focus of their national research strategies and programmes. In the coming years, FACCE-JPI will continue to facilitate the alignment of national resources, as well as national research infrastructures and databases.

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FACCE-JPI

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Marianne Heselmans, ImpactReporters,
Utrecht, The Netherlands

Concept & Design

Brenda Kuzniar-van der Zee, Wageningen
University and Research, The Netherlands

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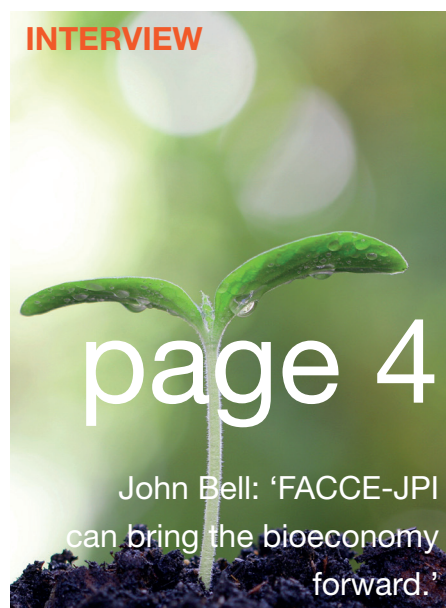
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ACTIONS THAT MATTER

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Coordinated actions to
support policies and
management

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Protocols for a sustainable
agriculture

STAKEHOLDERS ADVISORY BOARD

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Unique cooperation between
scientists and stakeholders

Joint approach

We live in an increasingly globalised world where many challenges cross borders, including food security and climate change. A joint approach to challenges is therefore needed. Only together can we play an effective role in solving the problems we face, and in helping to shape European and global policies.

A joint approach means more than simply operating on an international basis. First and foremost, it is important that we work in an interdisciplinary manner, and bring on board all stakeholders along the value chain. By including stakeholders, we strive to develop measures and technologies that will be adopted in practice.

Ultimately, we all have to learn from each other.

Knowledge sharing is imperative. That is why supporting multi-stakeholder projects is so important. All relevant actors (scientists and stakeholders) have to sit around the table and together use their knowledge to work out the best possible solutions.

From the outset, FACCE-JPI has emphasized the importance of involving all stakeholders. A Scientific Advisory Board and a Stakeholder Advisory Board were established when the FACCE-JPI Strategic Research Agenda was being drawn up. Both boards have also been included in development of the activities. As Governing Board Members, we can therefore be certain that our activities meet the needs of stakeholders and society, and support scientifically valuable research.

Cooperation between the scientific community and interest groups will continue to be an aim of FACCE-JPI, because only in this way are we able to achieve the best possible results – in policymaking and social terms – through our projects and activities.

Dr Hartmut Stalb,
Chair of FACCE-JPI Governing Board



The Governing Board comprises representatives of the 24 countries currently participating in FACCE-JPI. Dr Hartmut Stalb has been chair since 2016. He is currently the Head of Division for Research and Innovation within the Federal Ministry of Food and Agriculture, BMEL (Germany).

John Bell, European Commission: 'FACCE-JPI can bring the bioeconomy forward.'

The European research community must help the EU to switch from a fossil-fuel based economy to a thriving bioeconomy that creates new jobs and markets, says EU-director John Bell. 'FACCE-JPI is perfectly positioned to take that idea forward.'

John Bell, Director for the Bioeconomy in DG Research & Innovation at the European Commission, likes to compare the European research community to a village. Many problems in agriculture, such as droughts, biodiversity loss, soil degradation and food waste are urgently asking for solutions. 'It is time to get the village together', he says at his office in Brussels. 'What are we going to do now, what technologies can we use, and how do we divide the tasks?'

According to John Bell, FACCE-JPI has been very effective in organising this "village" in the past eight years. 'It is now doing what the European scientific community really needs:

structuring its work, and directing what has to be done first: adapting agriculture to climate change. Maybe it's not always that visible, but FACCE-JPI has set up well-functioning networks of prominent researchers and funding bodies that now know that they can rely on each other.'

Bio-based industries

John Bell is responsible for the EU Research & Innovation (R&I) policy and programming across the entire bioeconomy. This ranges from agriculture and food systems, oceans and maritime issues, to new sustainable bio-based industries. The ambitions of the EU Bioeconomy Strategy are huge. Together with

companies, farmer organisations and other stakeholders, the research community must ensure food security and food quality, and help make the switch from a fossil-fuel based economy to a thriving and sustainable bioeconomy that creates new markets and jobs.

Sustainability standards

Bell: 'The research community used to think of impact mainly in terms of great ideas and great publications. But groups must now aim for what society, the environment and economy need from them, for example sustainability standards, new value chains and lower greenhouse gases emissions. FACCE-JPI is perfectly positioned to take this approach forward. They have developed the instruments for this, such as the Knowledge Hub MACSUR, in which research



Dr John Bell is Director for the Bioeconomy in DG Research & Innovation. He is responsible for leading the definition, implementation and investment of EU Research & Innovation policy and programming across the Bioeconomy; from agriculture and food systems, oceans, marine and maritime issues to investment in new sustainable bio-based industries.



‘Researchers and funders are very much helped by being part of FACCE-JPI’s structured conversations.’

institutes have jointly improved scenario studies (see page 8).’

What impact have FACCE-JPI’s actions already had on European policy?

‘The experts from MACSUR and the ERA-NET Plus on Climate Smart Agriculture (see page 6) have done a very good job. They have ensured that food security and agriculture have been given a central place in the Paris Climate Agreement. The Intergovernmental Panel on Climate Change is now also using their scenario studies. But we have to step up our ambitions, and go for co-creation of policies and solutions from the beginning of the innovation trajectory. We are aiming for a strong link between the new Common Agricultural Policy (CAP) with the next framework programme Horizon Europe (2021-2027), and FACCE-JPI

can play an important role in this.’

What do you expect from FACCE-JPI in the future?

‘Even though FACCE-JPI’s main focus is primary production, they can connect to EU-initiatives that concern other aspects of the food system such as how to create markets for new products, or how to make food healthier. FACCE-JPI is operating in a policy environment with a number of existing bioeconomy supporting instruments, including Horizon 2020, public-private partnerships and multi-stakeholder platforms such as European Joint Programmes (EJPs). The JPI is in a strong position to conduct broader discussions, because they are already used to setting up activities with related EU-platforms (see page 10). The research community and the funding

bodies are very much helped by being part of FACCE-JPI’s structured conversations and networks.’

Why is it so important that European regions collaborate in research and innovation?

‘We need one Europe. We cannot have one region doing very well, while their solutions are not available for other regions. All regions need to have access to the same knowledge and ideas. We have already set up a Bioeconomy Knowledge Platform to realise this, and we are aiming for a Food Cloud too. On such online platforms, companies, farmer organisations or citizens can find tools and information, and learn from best practices elsewhere. FACCE-JPI can contribute strongly to this. If the organisation did not yet exist, we would have to invent it.’

Collaboration offers new opportunities for climate-smart agriculture

The EU is not only responsible for its own food security and bioeconomy, but also for the implementation of global agendas such as the Sustainable Development Goals (SDGs). Since 2012, FACCE-JPI has implemented a variety of actions. On the basis of three actions, we show how increased cooperation between the member countries contributes to four of the SDGs.

When European farmers want to adapt their enterprises to climate risks such as heat stress, drought or heavier rains, there are many options. For example, they could start growing drought resilient varieties, or make use of sowing dates to prevent drought damage. They could also switch to new tillage regimes to retain rainwater, or invest in drip irrigation, intercropping or composting. They could even transform their farm into a mixed,

or multifunctional agroforestry enterprise.

To help farmers decide how to adapt to climate risks, the partners of the FACCE ERA-NET Plus organised the joint call 'Climate Smart Agriculture: Adaption of agriculture systems in Europe' in 2014. The available budget (18 million euro) came from 22 national funding organizations and was co-funded by the European

Commission. The programme was one of FACCE's first actions, and a good example of how a joint research call can contribute to four of the Sustainable Development Goals: Zero Hunger and sustainable agriculture (SDG 2), Sustainable food production and consumption (SDG 12), Climate Action (SDG 13) and Restoring Ecosystems (SDG 15). The result of the programme, which ran until September 2018, is that more than 100 research groups across

Rewetting peatlands

Cinderella, one of the funded research projects of the FACCE ERA-NET Plus, shows how collaboration can lead to a faster mitigation of problems, and therefore a contribution to the SDG's. In Cinderella, the researchers worked on rewetting peatlands in Germany, Denmark, Sweden and the Netherlands. Conventional agriculture on drained peatlands causes peat degradation, subsidence, enormous greenhouse gases and eventually a loss of productive land. Rewetting, while introducing water tolerant crop species such as reed, cranberry or cattail, reduces these effects and restores simultaneously other ecosystem services such as water purification and cooling. The new crops also provide food, feed and building materials. But it is not easy to develop this Paludiculture (from the Latin word Paludi, which means swamp). Knowledge institutes, regional innovation centers and farmers have to improve the yields, find sales markets for the new products, and convince land owners, companies and local governments to invest in them. This is all much easier when regions can bundle their forces, and inspire each other.





Europe have now jointly evaluated and improved all sorts of adaptations across Europe.

Calculating scenarios

Adaptations evaluated include the introduction of no-till soybean cropping and decision support tools, better cooling of naturally ventilated barns, and drought tolerant ryegrass. The researchers also calculated scenarios. For example: What would be the yield of wheat in different countries after ten or fifty years under climate change conditions? How will the organic matter balance in the soil improve when Swiss, German or Italian farmers start using compost? How much carbon sequestration can you then expect? How many additional labour hours are needed? Almost 90 percent of European research is still planned and funded through often isolated national research programmes, which means that research groups risk to duplicate work, or miss proven strategies. By combining forces in this joint call, the funding organizations and project partners have avoided unwanted fragmentation and improved effectiveness.

A second example to show how FACCE's actions can contribute to the SDGs, is the programme 'Monitoring & Mitigation of greenhouse gases from agri- and silvi-

culture' (2016-2021). Not only adaptation, but also climate change mitigation helps to reach these goals. Climate change mitigation is also one of the goals of the 2015 Paris Climate Agreement, under which countries have decided to keep warming below two degrees Celsius relative to pre-industrial levels.

71 partners across 13 European countries

Agriculture contributes to greenhouse gases emissions (and also carbon sequestration) in a variety of ways. For example, fertilisers are converted into nitrous oxide (N_2O), cattle produce methane (CH_4) and tillage techniques lead to carbon dioxide (CO_2) emissions. To

develop solutions to various emissions, FACCE ERA-GAS pooled resources to set up a call in 2016. Since 2017, the programme (14 million euro) has been financing 71 project partners from 13 European countries, New Zealand and the United States in 10 research projects.

Liming to reduce emissions

Project aims vary from increasing the precision of carbon stock change estimates in European forests and soils, to adapting the diets of ruminants and improving soil management. For example, the project "MAGGE-pH", led by a Norwegian research group, builds on the emerging understanding of how soil pH influences the



emission of nitrous oxide (N₂O). The eleven partner institutes are now jointly exploring options for pH control and fertilisation such as liming, that will not increase these emissions. They are also assessing the potential for upscaling best practices across Europe, using soil maps and calculation models, and together with policymakers, they are identifying suitable policy instruments to promote these practices.

The Knowledge Hub MACSUR (Modelling European Agriculture with Climate Change for Food Security) has contributed to climate action and other SDGs by improving scenario studies. Farmers and industry could face reduced yields, and consumers could face higher food prices. To prevent doomsday scenarios, it is essential that climate change related scenarios and strategies are included in agriculture-related policies such as the European Commission's Common Agricultural Policy (CAP) and Habitats Directive, and the 2015 Paris Climate Agreement. In order to achieve this, policymakers need

clear outcomes of reliable scenario studies. Companies and farmers also need reliable simulation models that can help them to make decisions.

Livestock, grassland, crops and farms

To improve scenario studies, the Knowledge Hub MACSUR was setup under FACCE-JPI in 2012. National agencies have contributed 13 million euro to this Hub. MACSUR has brought together more than three hundred European experts from 70 institutes in modelling grasslands, livestock, crops, farms, and agricultural trade. They have refined simulation models and datasets, linked models from different sectors (for example: integrating crop models with trade models), and trained young scientists. The researchers have also adapted existing crop, livestock and trade models in such a way that they can now include climate and land use change, and respond to adaptation measures.

Yields, prices and labour requirements

Before the start of MACSUR, most models could only answer questions at one level, for example: What

will happen to the yield of crop A or B when deprived of water or certain nutrients? Now, integrated models can answer more complex questions such as: What will happen to the yields, prices and labour requirements in Andalucía, Scotland or Tirol, when farmers start to grow alternative crops (as an adaptation measure) under the expected climate conditions until 2050?

Stronger science-policy dialogue

MACSUR's experts have published their improved assessments in 200 scientific articles, and they have ensured that agriculture has been given a central place in the Paris Climate Agreement. Next steps include a stronger science-policy dialogue, to make the models and their outcomes more useful for policy makers, companies and farmers (Implementation Plan 2018-2020). To this end, FACCE-JPI is considering a new type of Knowledge Hub that will concentrate entirely on knowledge transfer and valorisation. This would facilitate FACCE's goal of improving its societal impact.



FACTS

FACCE-JPI, launched in **2010**,
brings together **24** countries of
which **20** EU Member States, **3**
Associated Countries and **1** non-EU
country.

FACCE-JPI has launched **10** joint
research actions that have generated
95 collaborative research projects.
These actions have mobilised approx.

104 million euro in cash,
of which **74%** originated from
participating countries' **national**
research budgets (2012-2017).

FACCE-JPI joint actions have relied on
various instruments: **1** Knowledge
Hub, **1** Knowledge Network, **3**
International Calls, **5** ERA-NET
Actions and **1** Thematic Annual
Programming Network.

The integrated **FACCE-JPI strategic**
research agenda defines **5** core
research themes.

50% of joint actions have been
developed in **cooperation with other**
international/EU initiatives (2012-
2017).

Out of the **11** running
FACCE-JPI joint actions, **5** are
co-funded ERA-NET Actions
and **3** focus on the **alignment of**
already funded national research
projects (MACSUR Knowledge Hub,
Knowledge Network on Sustainable
Intensification, and Thematic Annual
Programming (TAP) Soil).

ACTIONS THAT MATTER

An important goal of FACCE-JPI's joint actions is to generate research results that can inform policies at different levels. Another goal is to support new practices and innovations from farmers, food producers and other end-users in the agri-food chain. Here we describe nine additional ongoing and future actions that illustrate how FACCE-JPI is working on these goals, together with other European and global initiatives.



Productive, healthy and resilient crop systems

The crop systems of the future have to be productive and resilient to address the requirements of the entire food chain, to reduce waste and deliver ecosystem services. In order to tackle so many challenges, 23 funding organizations from 18 countries were brought together to set up a European research programme 'Sustainable Crop Production' (2018-2023), co-funded by the European Commission. The multidisciplinary groups will aim to jointly develop crop breeding methods and integrated pest- and disease management methods. They also will evaluate strategies that help to make the systems more economical in the use of water and energy, and investigate the crops as part of an ecosystem with other species. The programme SusCrop (17 million euro) will lead to more harmonised data collection and common indices of sustainability at field, farm and landscape level.

No more waste in the new bioeconomy

The transition toward a bioeconomy that utilises all available biomass has already begun, according to the 15 member countries that participate in the FACCE ERA-NET Cofund SURPLUS, a programme on sustainable and resilient food- and non-food systems. The first bioplastic, biochemicals and building materials made from crop waste are now on the market. In order to support regional economies, the projects in the second SURPLUS call (2017-2021) are aimed at developing small-scale bio-refinery concepts. Researchers assess opportunities to valorise grass, chicory, barley straw, oat hulls or other crop waste, develop methods to breed the crops in such a way that the whole plant can be used, or develop technologies to extract useful molecules, or to fraction plant materials. Economic analysis or life cycle analysis are included as well, and thereby help to find sales markets.

Actions



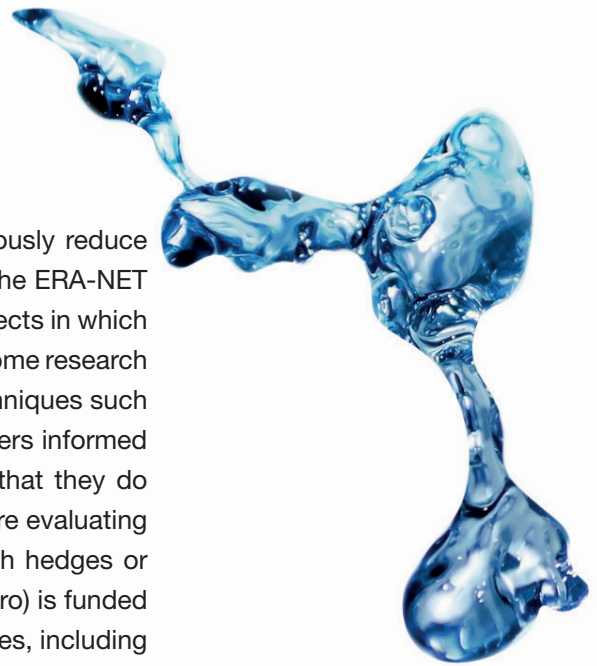
Nature friendly farming

Would it be preferable for the farmers in a region to combine agriculture with nature (agro-ecological approach), or should they save land for nature, and go for more intensive agriculture? FACCE-JPI, together with the ERA-NET Cofund BiodivERsA3, have decided to set up a knowledge hub and/or a joint research programme that will answer this question. Other questions will include the potential of agro-ecology, and how markets can be created for more nature-friendly products. This new joint action will build on the results of the previous joint programme: 'Promoting synergies and reducing trade-offs between food supply, biodiversity and ecosystems services' (2014-2018). Projects in this past programme varied from developing strategies to protect honeybees, to evaluating mixed cropping systems, and the positive role that hedges can fulfil in protecting crops against pests and droughts.



Combatting water shortages and pollution

To help regions to improve water use efficiency, and simultaneously reduce water pollution, FACCE-JPI and JPI Water have collaborated in the ERA-NET Cofund Action WaterWorks2015, a programme that funds 21 projects in which researchers from different European regions are collaborating. Some research groups are now jointly evaluating more economical irrigation techniques such as drip irrigation, others are working on apps that can keep farmers informed about soil moisture, plant growth and weather forecasting, so that they do not irrigate unnecessarily. To mitigate pollution, the researchers are evaluating techniques such as riparian buffer strips (shorelines planted with hedges or trees) and constructing wetlands. WaterWorks2015 (17 million euro) is funded by 25 national and regional funding organizations from 22 countries, including Canada and the United States, and co-funded by the European Commission.



Urban agriculture

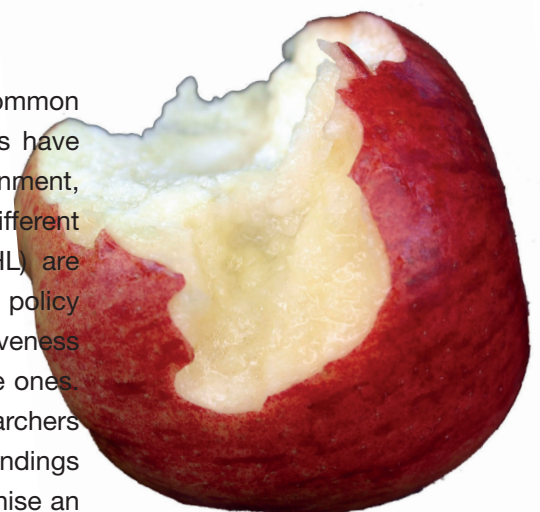
Urban farms have enormous potential to increase (urban) food security, because more than half of the world's population lives in cities, and these farms are seen as more climate-resistant than traditional farms. FACCE-JPI is therefore looking for opportunities to integrate urban agriculture into current projects, and to set up new actions. Member states will be asked to provide input into an exploratory workshop, that will focus on both high-intensity 'vertical' farms and low-intensity, community-based gardens. In the vertical farms vegetables or other plant species are grown under LED-lamps in sterile and climate-controlled buildings, so the plants are not subjected to droughts and pests. The low-intensity community-based gardens (or other open urban farms) usually serve multiple purposes, such as job creation, nature protection, care and community building.



that matter

Improving policy interventions

National food regulations, taxation policies, environmental laws, Common Agricultural Policy (CAP), dietary advice: all such policy interventions have many intended and unintended effects on human health, the environment, climate change, and the competitiveness of European industries in different regions. FACCE-JPI and JPI Healthy Diet for a Healthy Life (HDHL) are considering a joint research programme that can help improve policy interventions. The new programme should first evaluate the effectiveness of current policy interventions, and then come up with ideas for future ones. Because of various tradeoffs, a holistic analysis is required. The researchers should come from different disciplines and discuss their plans and findings with stakeholders throughout the entire research cycle. They will organise an exploratory workshop to obtain input from experts and funders.



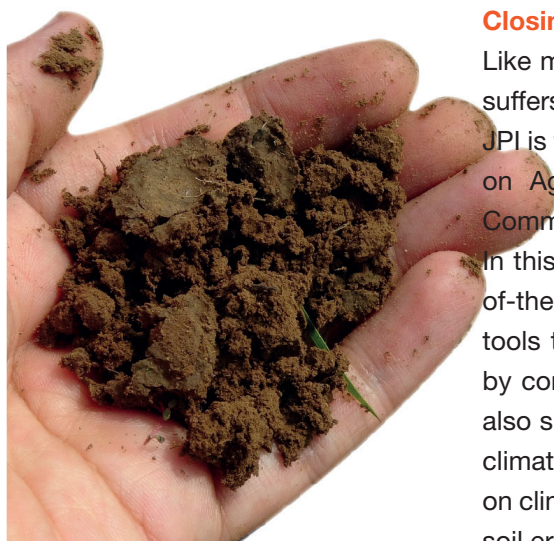
Nutrition security requires a systems approach

Many factors influence food and nutrition security, from crop growth and food processing to consumer behavior and the economic gap between rich and poor populations. Addressing food and nutrition security therefore requires an integrated food systems perspective. FACCE-JPI, JPI Healthy Diet for a Healthy Life (HDHL) and JPI Oceans aim to develop a joint Knowledge Hub and a joint research programme with a systems approach. The provisional scope will be the impact of climate change on the nutritional make-up of food and diets, and how changes will impact health. Strategies to be investigated may include diversifying food sources (from land and sea), improved management practices across the entire food chain, and a facilitating role for industry and food retailers, with consumer acceptance as the key driver for bringing about change. Education, dialogue, data sharing, and co-design of solutions with stakeholders will support this new approach. The Knowledge Hub will collaborate with the Horizon 2020 Action FitforFood2030.



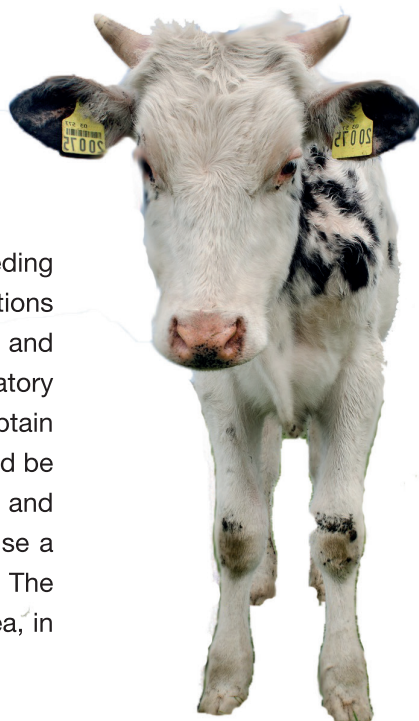
Closing the knowledge gaps in soil research

Like many research communities, the European soil science community also suffers from fragmentation and knowledge gaps. To overcome this, FACCE-JPI is facilitating the proposal for an European Joint Programme (EJP) Cofund on Agricultural Soil Management that was developed by the European Commission (Directorate General for Agriculture and Rural Development). In this programme (up to 80 million euro), the researchers will explore state-of-the-art technologies for mapping and soil sampling, and develop ICT-tools that can be widely used by national and regional agencies, as well as by companies and farmers. If accepted, the work will start in 2019, and will also support a number of policies, including the Common Agricultural Policy, climate change related policies and environmental policies. The focus will be on climate adaptation and mitigation, but the activities should also lead to less soil erosion and the restoration of soil fertility.



Genotyping and phenotyping in crop breeding and livestock

Techniques such as phenotyping and genotyping can speed up the breeding of crops and livestock, but modern breeding also raises questions. Questions are related to the use of big data, the definition of GMO's, ownership and intellectual property rights. In 2016, FACCE-JPI organized an exploratory workshop to clarify how novel breeding techniques can be used to obtain more climate resilient crops. One of the conclusions was that there should be more breeding (using phenotyping and genotyping) of perennial crops, and of crops that can be used for multiple purposes. FACCE-JPI will organise a similar workshop on phenotyping and genotyping in the livestock sector. The workshop aims to investigate what FACCE-JPI can contribute in this area, in order to develop more resilient livestock farms.



‘Effective exchange with policymakers leads to better insights’

The Scientific Advisory Board (SAB) advises on FACCE-JPI's activities. The fourteen members provide input on and review the outputs of the projects. They also advise on increasing the impact of activities: ‘It is important that policymakers tell the researchers what their problems are’, says Frank Ewert, chair of the Board.

In 2010 the Scientific Advisory Board elaborated five core themes for cooperation. Later on the members also listed 13 relevant technologies, including precision modelling, cloud computing, genomics, robotics, and sensors for environmental monitoring (Strategic Research Agenda 2016).

One of the ambitions is now to jointly develop tools and solutions with policymakers and interest groups. According to professor Frank Ewert, director of the Leibniz-Zentrum für Agrarlandschaftsforschung (ZALF) in Germany, and chair of the Scientific Advisory Board, a more effective stakeholder exchange is therefore needed. ‘Many of the analysed data

and calculated scenarios still have to find their way to the policymakers.’

Increasing the impact

It is important that policymakers tell the researchers what knowledge they need, Frank Ewert explains. For example, policymakers might want to know how to facilitate carbon sequestration in their region, and at the same time prevent negative environmental effects such as nitrogen leaks. In such cases, models that calculate these aspects under specific policies will help to improve policy decisions.

Jointly developing protocols

‘We must develop protocols

for sustainable agriculture and cooperate in data sharing’, says Frank Ewert. ‘We therefore need to organise workshops, internet discussion groups and other forums at regional, national and European levels. A good instrument to set this up is a research project with input from different European regions. Researchers and stakeholders can then jointly compare and integrate their knowledge, which will improve their insights. A knowledge hub is a good instrument too. Countries can contribute to such a hub, depending on their interest in a specific topic.’



‘Unique cooperation between stakeholder and scientists in FACCE-JPI’

A major task of FACCE-JPI’s Stakeholders Advisory Board (StAB) is to judge the relevance of research projects for industry, civil society, farmer organisations and other stakeholders.

‘Regular updates from the scientists allow us to see if their projects can really fly and contribute to practical solutions’, says Beate Kettlitz, who chairs the Advisory Board.

Beatrice Kettlitz is a firm believer in the concept of Joint Programming: ‘I see FACCE-JPI as a perfect match between the European Commission’s plans and the needs of Member States’, she says. ‘There is certainly room for improvement, but the cooperation of scientists and stakeholders in FACCE-JPI is unique, and most valuable.’

On the Board, Kettlitz represents the European Technology Platform Food for Life, the industry-led public-private partnership that defines European research priorities. In her daily life, Kettlitz is Director of Food Policy, Science and R&D within FoodDrinkEurope, which represents

the interests of European food and drink companies.

Key forum

Besides advising on how to increase the societal relevance of FACCE-JPI’s projects, the Stakeholder Advisory Board also suggests ways to enhance their dissemination and impact. The Board currently consists of 16 European and international organizations, themselves representing a great number of other organisations active in the food, environment or agricultural sectors. StAB members include NGOs and consumer organizations, farmer and industry organizations and European

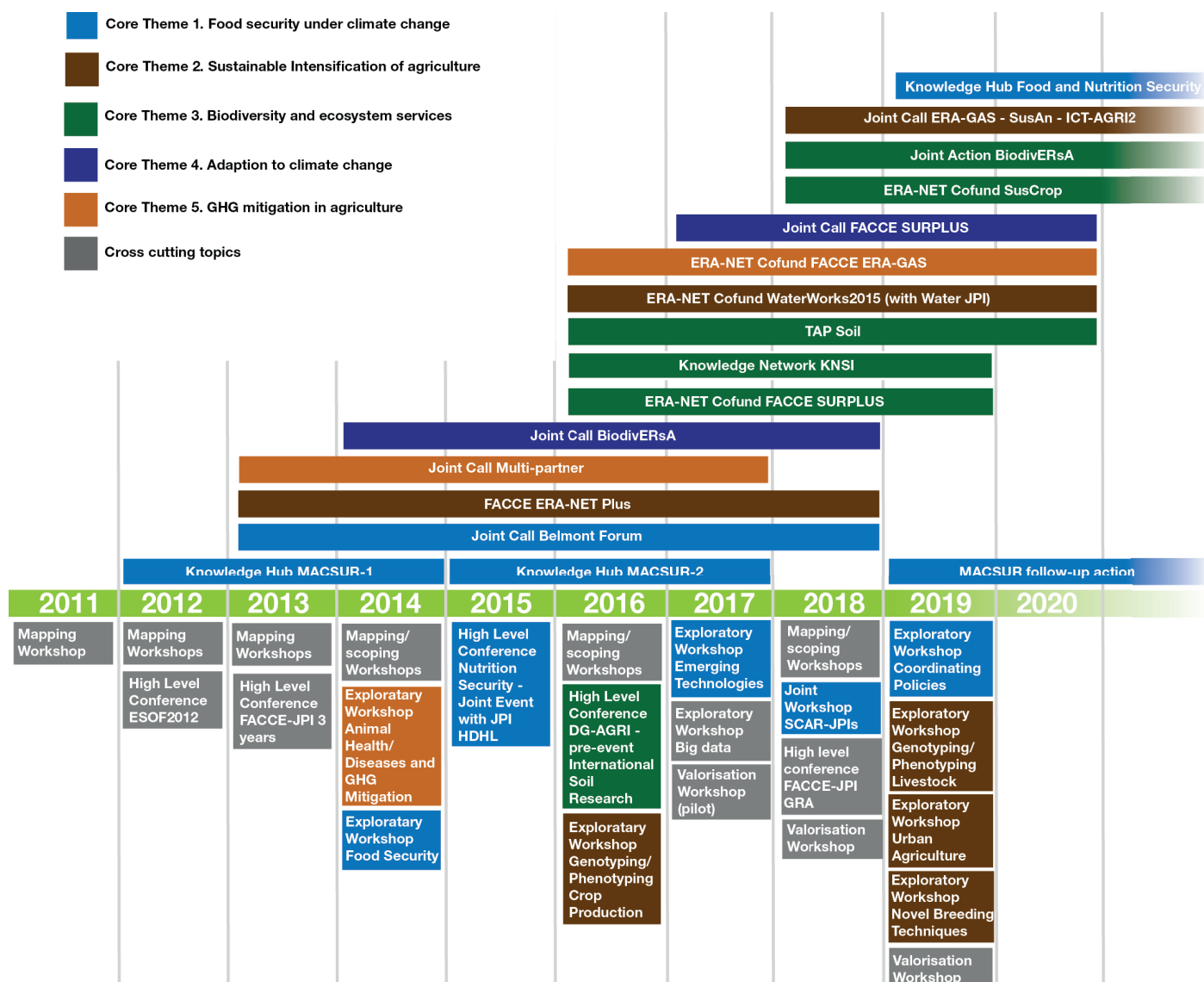
Technology Platforms.

Strong views

According to Kettlitz, the interactions between scientists and stakeholders are not always easy, but are improving: ‘Scientists can have strong views, and so can stakeholders. In order to come to a balance, you must be well prepared for the meetings. Further improvement could be realised in the initial phase of choosing the projects. Also, when the projects are running, it’s important that scientists regularly feed back to the stakeholders. Upgrading these interactions is a major challenge in the coming period.’



FACCE-JPI Implementation Actions



Main FACCE-JPI instruments used in the implementation actions

Exploratory workshops

Exploratory workshops bring together experts, funders and policy makers to explore emerging topics. These workshops can lead to new activities, to recommendations and/or to the identification of partners with whom to collaborate.

Valorisation workshops

Valorisation workshops explore ways to valorise funded research projects. They foster dialogue between researchers and stakeholders, and common understanding of policy needs. They also help to identify the most urgent social issues.

Knowledge Hub

A Knowledge Hub is focused on research, networking and capacity building in a certain research area. Countries which are interested can choose whether they want to fund research, or whether they prefer to participate through the funding of coordination and networking.

Knowledge Network

A Knowledge Network fosters cooperation and communication between funders, policy makers, research groups and other stakeholders. A Knowledge Network is temporary, has a clear goal, and is primarily focussed on making effective use of existing funding.

ERA-NET Cofund

ERA-NET Cofund Actions are a means of aligning national programmes with Horizon 2020 programmes. Projects in ERA-NETs are thus financed by participating Member States and the European Commission. FACCE-JPI collaborates with existing related ERA-NETs, and has proposed new ERA-NETs.

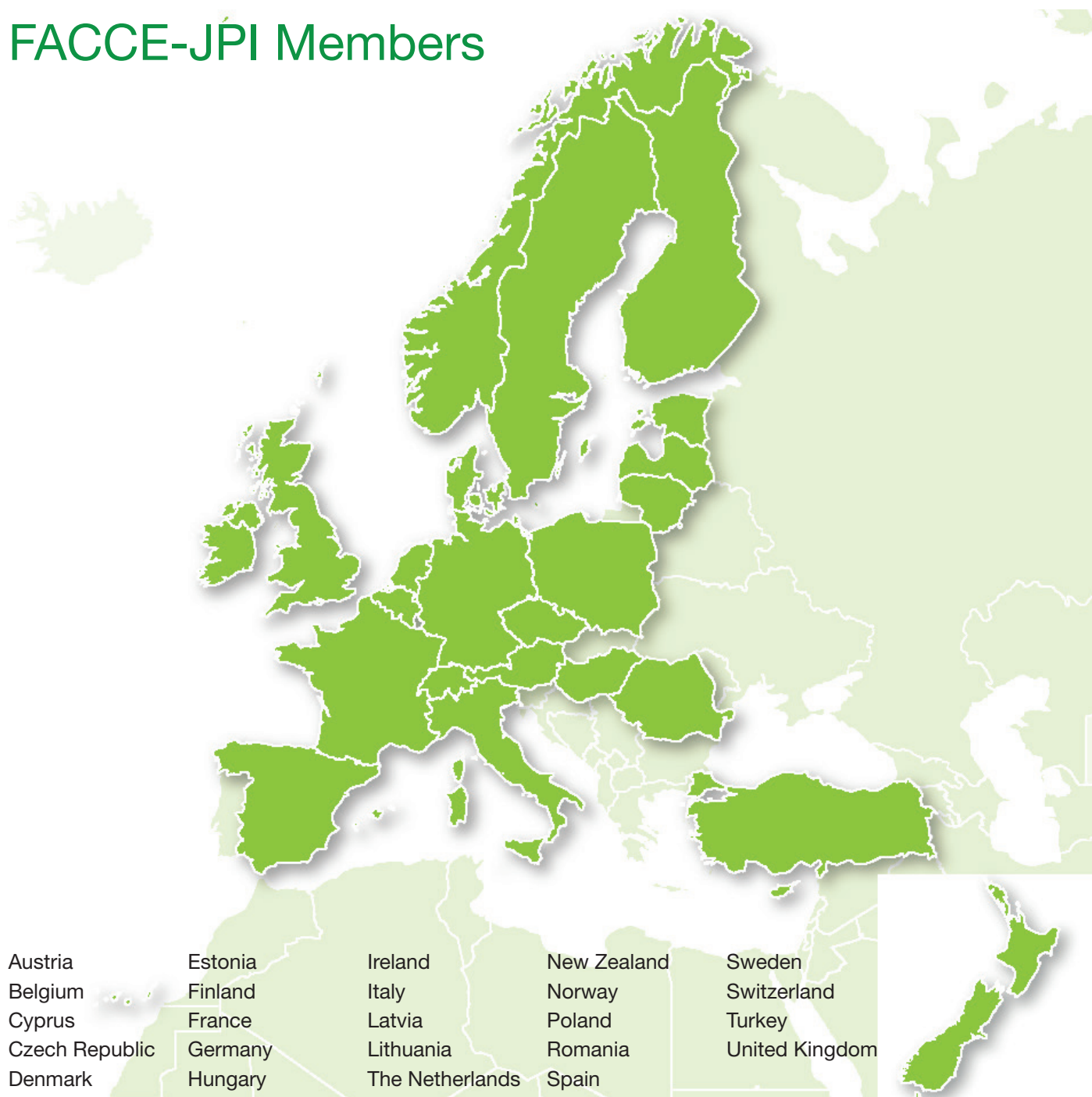
European Joint Programme (EJP) Cofund

The EJP Cofund also aims at adding national resources to related Horizon 2020 resources. The EJP Cofund allows the implementation of a range of joint activities, from research and innovation to coordination and networking activities, including training, demonstration and dissemination activities, and support to third parties.

Interaction with existing initiatives

To maximize its impact, FACCE-JPI interacts with relevant European initiatives, such as relevant ERA-NETs, Knowledge and Innovation Communities (KICs), other Joint Programming Initiatives (JPIs), Public Private Partnerships (PPPs) and European Innovation Partnerships (EIPs). FACCE-JPI also interacts with international initiatives, such as the Global Research Alliance (GRA) and the related Coordination and Support Action on Soil Carbon Sequestration (CIRCASA).

FACCE-JPI Members



The Joint Programming Initiative on Agriculture, Food Security and Climate Change (FACCE-JPI) brings together 24 countries who are committed to building an integrated European Research Area (ERA), addressing the interconnected challenges of sustainable agriculture, food security and impacts of climate change. FACCE-JPI is composed of a Governing Board, a Scientific Advisory Board and a Stakeholder Advisory Board, supported by a Secretariat. The Secretariat currently consists of six organisations from six member countries and is led by INRA, France.



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Contact

e-mail heather.mckhann@inra.fr

website faccinepi.com



FACCEJPI