



An Introduction to the Joint Programming Initiative on Agriculture, Food Security and Climate Change (FACCE-JPI)

2017 GRA Livestock Research Group Meeting
10-12 April 2017



Joint Programming

- *Concept:* Endorsed by Council of the EU in 2008 to support the establishment of the European Research Area
- *Rationale:* Address major **societal challenges**, that cannot be solved at the national level, in a coordinated and collaborative way
- *Method:* Via the development of a common Strategic Research Agenda and the **alignment** of **relevant** national research programmes and activities across participating countries
- *Key principles:*
 - ✓ Member-state driven
 - ✓ « A la carte » participation in joint research activities

FACCE-JPI: Key Facts

- Launched by Council of the EU in 2010
- 22 Member-Countries; 2 observers (EC, EU Standing Committee on Agricultural Research)
- Managed by 1 Governing Board ; 2 Advisory Boards (independent scientists and stakeholder organisations)
- Secretariat coordinated by France and financially supported by the EC
- Alignment of national research programmes at the intersection of agriculture-food security-climate change
- Mobilised financial resources so far: **€104 million**
- Link with the EU H2020 Societal Challenge 2 (Food Security, Sustainable Agriculture, Water, Bio-economy) and Societal Challenge 5 (Climate Action)

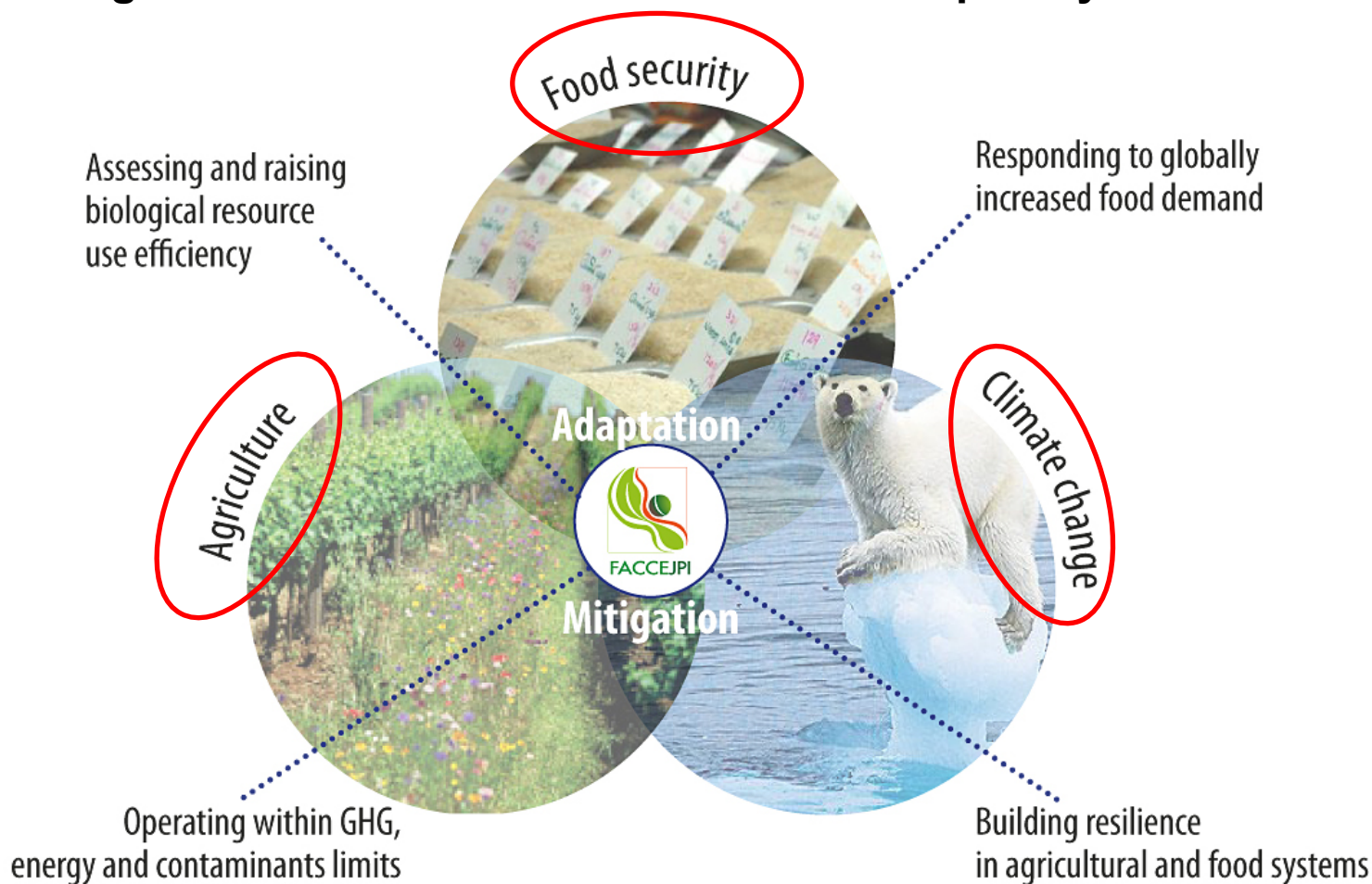
FACCE-JPI Members: 22 countries of which 15 are also in the GRA

17 EU Member States + 4 Associated Countries+ 1 Third Country

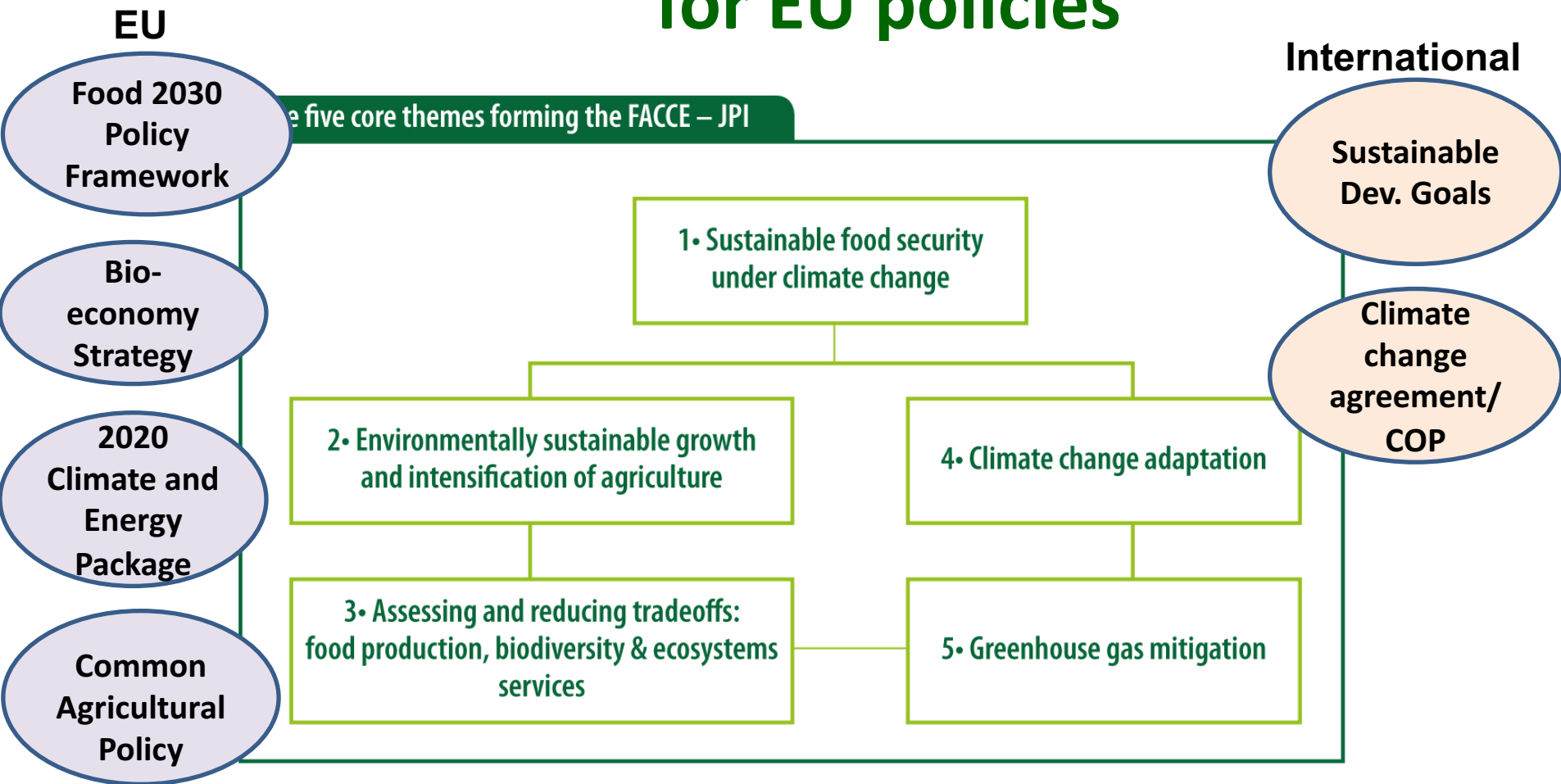
	<u>Austria</u>		<u>Italy</u>
	<u>Belgium</u>		<u>The Netherlands</u>
	<u>Czech Republic</u>		<u>Norway</u>
	<u>Denmark</u>		<u>Poland</u>
	<u>Estonia</u>		<u>Romania</u>
	<u>Finland</u>		<u>Spain</u>
	<u>France</u>		<u>Sweden</u>
	<u>Germany</u>		<u>Switzerland</u>
	<u>Ireland</u>		<u>Turkey</u>
	<u>Israel</u>		<u>UK</u>
	<u>New Zealand</u>		<u>Cyprus</u>

The FACCE-JPI thematic scope

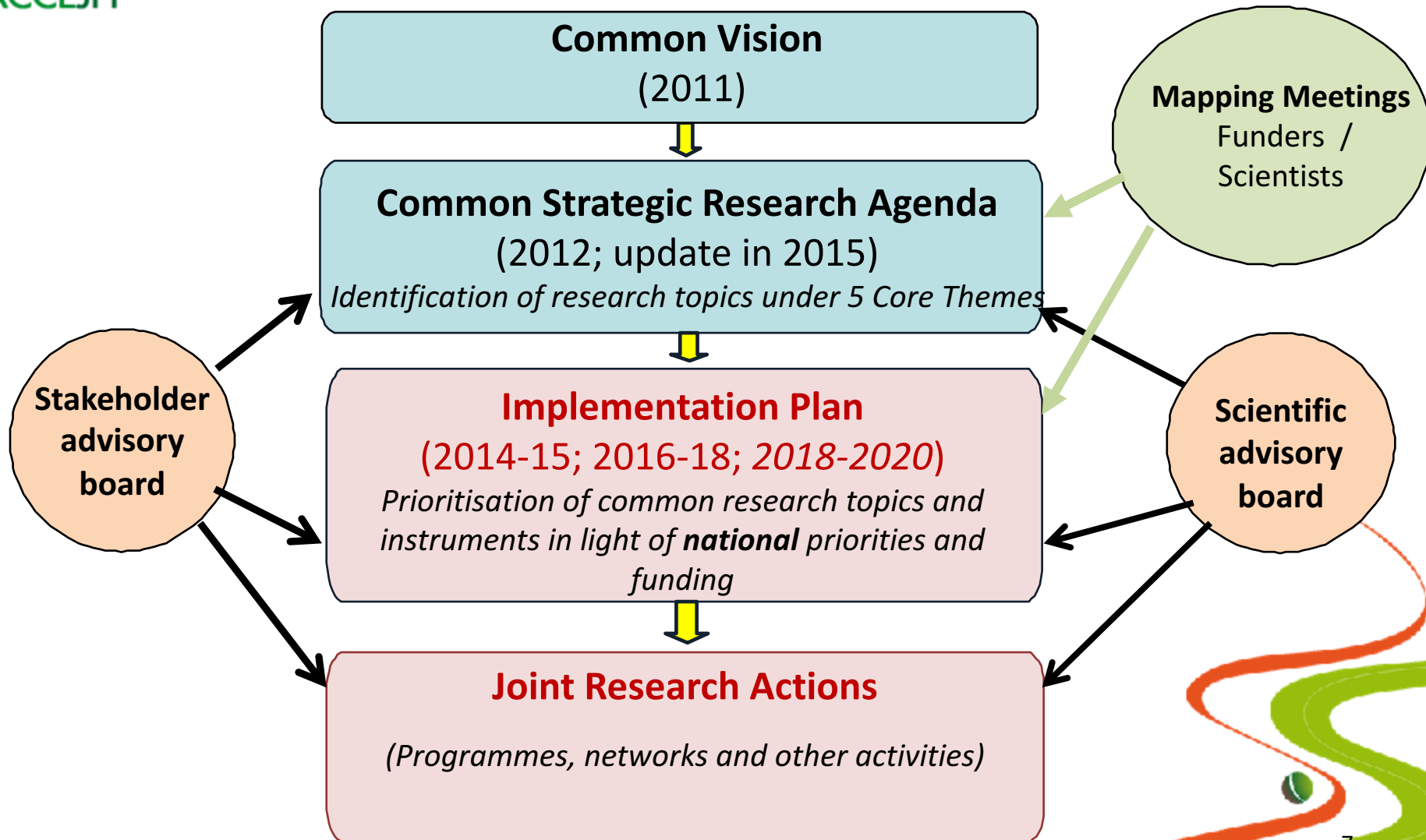
Alignment of cross-thematic and interdisciplinary research



FACCE-JPI's Strategic Research Agenda: 5 Core Themes that provide evidence for EU policies



Working Method: From a Common Strategic Research Agenda to Joint Research Actions





Overview of FACCE-JPI activities

10 joint research actions worth €104M (80% comes from national budgets)
75 collaborative research projects

Core Theme 1. Food security under climate change

Knowledge Hub on modelling the impacts climate change on food security (MACSUR) - **partnership with AgMip** (€13M, 300 researchers)

International call (Collaborative Research Action) on food security and land use change **with the Belmont Forum** (Australia, Brazil, India, Japan, S. Africa, USA) (€6.2M, 7 projects)

Core Theme 2. Sustainable intensification of agriculture

Knowledge Network on sustainable intensification

FACCE ERA-NET Cofund on Sustainable agriculture for food and non-food systems (SURPLUS) **with New Zealand** (€14.7M, 14 projects)

Thematic Annual Programming Network on organic matter sequestration in ag. soils

Core Theme 3. Biodiversity & ecosystem services

Joint call with the BiodivERsA ERA-NET (€10M, 10 projects)

+ Exploratory workshops (on food and nutrition security, ICT, biorefinery, etc.)

* Committed budget

Core Theme 4. Adaptation to climate change

FACCE ERA-NET + on Climate Smart Agriculture (€15.8M, 11 projects)

ERANET Cofund with Water JPI on sustainable water management in agri. (WATERWORKS 2015) **with Canada, Brazil, USA, China, Vietnam, India, Taiwan, Tunisia, Egypt, S. Africa** (€25.5M*, 21 projects)

Core Theme 5. GHG mitigation in agriculture

Multipartner call on agricultural GHG mitigation **with 3 GRA countries (USA, Canada, New Zealand)** (€5M, 11 projects)

FACCE ERA-NET Cofund on monitoring and mitigation of agricultural GHG (ERA-GAS) **with New Zealand** (€13.9M*)

FACCE-JPI Implementation Plans:

3 types of joint actions

Actions that allow to align
already funded research at
national levels

- Knowledge Hub
(Participating countries' funding)
- Knowledge Network
(Participating countries' funding)
- Thematic Annual Programming Network
(Participating countries' funding)

Actions that allow to
invest jointly in *new*
transnational research

- European Research Area Networks
(Participating countries+ EC co-funding; H2020)
- Joint calls for research proposals - some with international partners
(Participating countries' funding)

Actions that allow to
explore *emerging* joint
research areas

Exploratory workshops
(Participating countries' funding)

Key goals of FACCE's European/international cooperation strategy

- Promote greater **complementarity and structuring** of research to tackle global challenges more efficiently and effectively
- Improve the **visibility and impact** of FACCE-JPI's work on policymaking and innovation in Europe and beyond
- Facilitate the **exchange of information, mutual learning** and capacity building with similar initiatives in other regions





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FACCE-JPI's European & International Partners

(at operational /joint action and strategic levels)



European initiatives and partners

JPI Water, JPI Healthy Diets for a Healthy Life, JPI Climate, JPI Oceans, Selected bio-economy ERA-NETs, 4PRIMA

*Complementarity and **structuring** of R&I at EU level, strengthening of the **European Research Area**, increased innovation and impact within the EU*



International initiatives and partners

Belmont Forum, **GRA****, GACSA, 4 per 1000 international research initiative, AgMIP, TempAg Network, Wheat Initiative

*Complementarity of R&I at global level, **increased visibility and impact** at the international level, mutual learning with partners*



Third countries

New Zealand*, USA, Australia, Canada, Japan, China, Brazil, India, South Africa

*Complementarity of R&I at global level, **"science diplomacy"** and mutual learning with non-EU countries*

* Joined the JPI as an associate member in January 2016.

** Institutional partnership since Jan. 2017



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Main FACCE-JPI-GRA cooperation to date

- **Multi-Partner Call on Agricultural GHG Mitigation**
 - Launched in January 2013
 - USA, New Zealand, Canada + Belgium, Cyprus, Finland, France, Germany, Ireland, Italy, Romania, Spain, Switzerland, UK
 - Total funding of €5 million
 - 11 collaborative research projects, 2 of which relate to the **livestock sector** (RumenStability and Global Development Network : nutrition-related strategies for mitigation of methane and nitrous oxide emissions from ruminant livestock)
- *In preparation:* Cooperation to set up an **International Research Consortium on Soil** (together with the 4 per 1000 research initiative)
- **Representatives of the GRA** in the FACCE-JPI Scientific and Stakeholder Advisory Boards (Martin Scholten and Harry Clark)



FACCE-JPI became a Partner of the GRA in January 2017

www.faccejpi.com

Rationale for deeper cooperation between FACCE-JPI and the GRA

Rationale:

- Similar mission
- Overlap in research themes
- Overlap in membership (all European GRA members are also members of FACCE-JPI except for Lithuania)
- Similar partners: e.g., 4 per mille initiative



Expected benefits:

- Enhanced information exchange and coordination
- Better alignment and complementarity of research globally
- Enhanced visibility and impact on international policy processes (COP, SDGs)

Possible new areas of collaboration

- **Thematic:**

- Improving agricultural soil quality for climate change mitigation and food security; soil C sequestration
- Options for reducing GHG emissions in the agriculture and livestock sector (incl. via research on the animal microbiome)

- **Cross-cutting:**

- Dissemination and valorisation of research
- Information exchange on research methods and data sets
- Mutual learning re. what works best in terms of joint programming



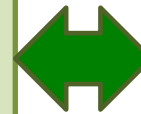
Both sides now need to discuss possible *modes* of cooperation



Possible thematic cooperation: Soil

FACCE-JPI European Joint Programme on Agricultural Soils (2019)

- Aim: Pool national research resources (**institutional funding**) to implement a joint programme of activities
- Possible activities: research (incl. integration of existing knowledge), networking, data, methodologies, training, valorisation, etc. (to be decided via annual Work Plans)
- Focus: Improving agricultural soil quality to promote food security and address climate change (all soils: crops, grassland, forests)
- Possible thematic scope (*first map and analyse what exists!*):
 - Tools and technologies for improving soil management and soil-land use analysis
 - Measures for improving soil quality/ health/ fertility and increase soil C sequestration
 - Analysis of interactions between soils and plants
 - Analysis of the economic benefits of enhanced soil quality
- Duration: 5 years
- Co-funded with the EC (national resources for the EJP are currently being identified)
- Close cooperation with stakeholders **and other European/ international initiatives** will be sought (e.g. GRA, JRC, 4/1000, FAO)



GRA Flagship Project on Soil Carbon Sequestration

Possible thematic cooperation: GHG inventories and mitigation

FACCE-JPI ERA-NET Cofund for Monitoring & Mitigation of Greenhouse Gases from Agri- and Silvi-culture (ERA-GAS) (2016)

- Coordinator: Teagasc, Ireland
- Indicative budget: € 13.9 million (co-funded with EC)
- Thematic scope:
 - Improving national **GHG inventories** and monitoring, reporting and verification of emissions
 - Refining and facilitating the implementation of GHG mitigation technologies
 - State of the art production systems that are profitable and improve food and forest biomass production while reducing GHG emissions
 - Assessment of policy and economic measures to support emissions reductions across the farm-to-fork and forest-to-consumer chain.
- Selection of projects for funding: May 2017; Start of projects: as of August 2017
- **Possible additional activities on GHG mitigation in livestock production (incl. animal microbiome)**

GRA Flagship Project on GHG Inventories



GRA Flagship Project on Enteric Fermentation

Other relevant FACCE-JPI work

FACCE-JPI [Knowledge Hub](#) on modelling the impacts of climate change on European agriculture and food security (MACSUR)

- Coordinator: Thunen Institute, Germany
- Budget: € 13 million (Phase 1+2)
- Focus: Networking and capacity building of researchers, synthesis of existing research
- 3 Groups: Crops, **Livestock (LiveM)**, Economy
- Aim of the LiveM Group: Improve livestock health and pathogen modelling and grassland modelling
- Partners: AgMIP ; GRA Animal Health Network
- **Proposed Phase 3 of MACSUR (2018-2020) is under consideration**

FACCE-JPI [ERA-NET Plus](#) on Climate Smart Agriculture

- Coordinator: INRA, France
- Budget: 15.8 million (co-funded with the EC)
- Relevant project: Optibarn: Optimized animal-specific barn climatization facing temperature rise and increased climate variability
- Project results discussed on 21 March 2017

Next steps

- Discuss possibilities to link forthcoming FACCE-JPI livestock related work to relevant GRA work (what topics and how?)
- Examine modalities for possible co-funding of joint activities in 2018-2020
- Discuss such options with the GRA representative and FACCE-JPI Governing Board on 2 June 2017

Possible challenges

- Different programmatic cycles between FACCE-JPI and GRA
- Competition for funding



Thank you for you attention!

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