

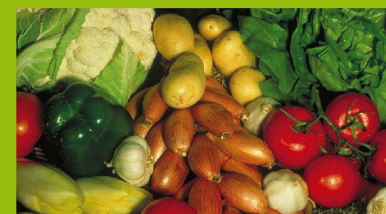
Joint actions:
International call on Climate Change Mitigation
Belmont forum: Food Security and land use change
Maurice Heral ANR

FACCE-JPI June 13th 2012, Dublin



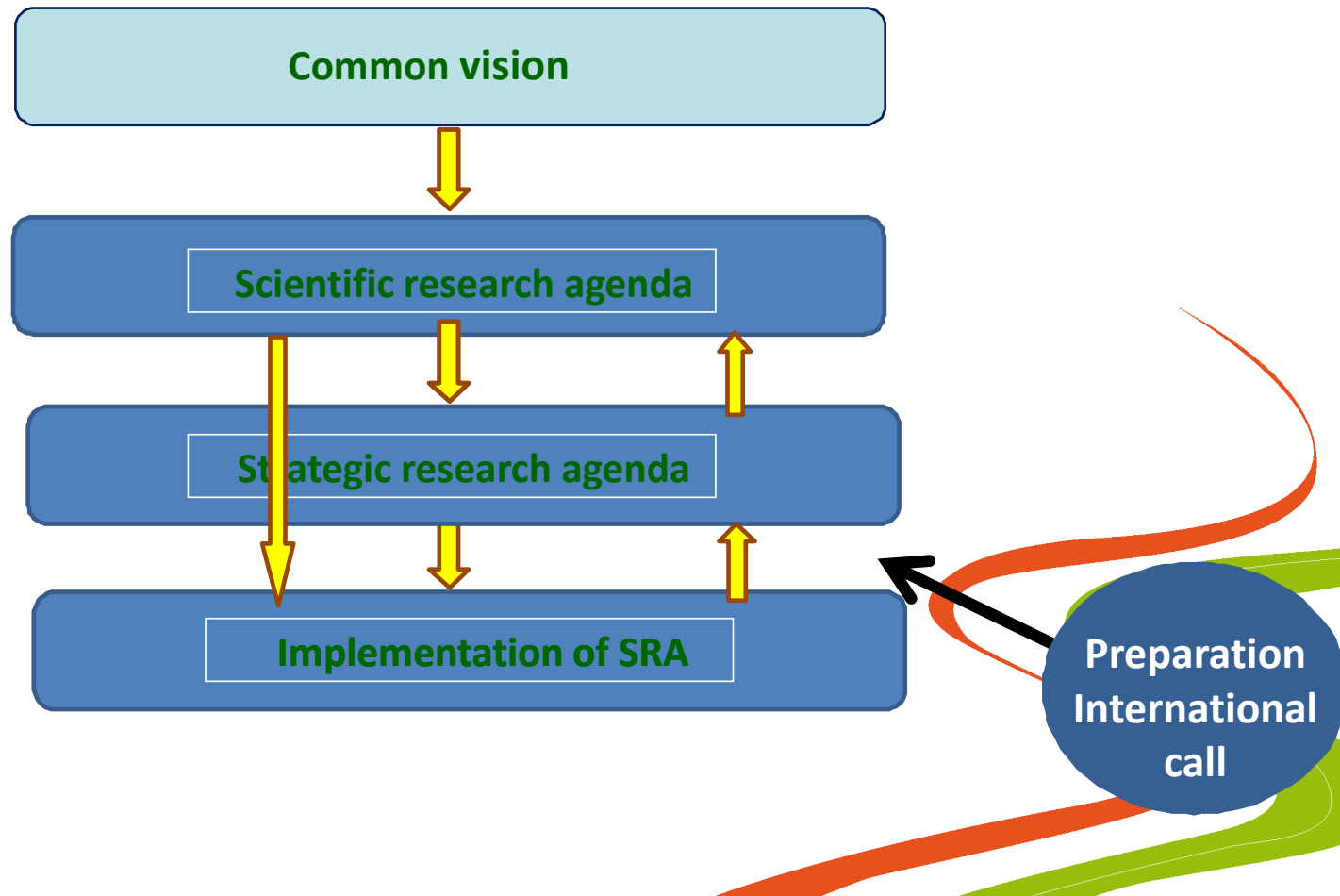
FACCEJPI

www.faccejpi.com



Agriculture Food Security and Climate Change

FACCE – JPI process



Recall

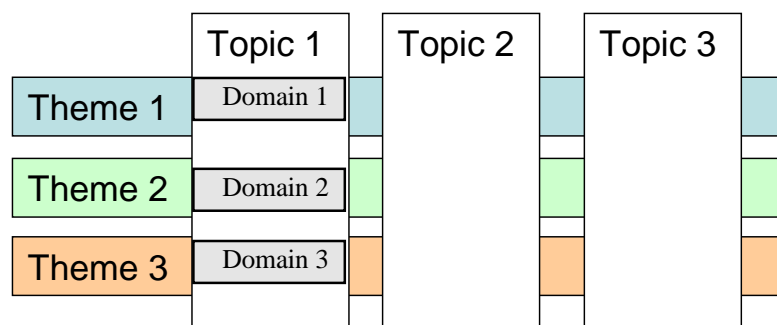
- The FACCE-JPI **mapping meeting on core theme 5** (June 2011) revealed the need for further research in the area of **Greenhouse gas mitigation**.
- GB conclusions (November 2011): GHG mitigation responds to objectives in the **research agendas of both the JPI and the GRA**. A joint call could thus be a means of taking forward the objectives of the JPI, as well as an opportunity for the JPI to work with non-European partners and to be involved in the design of the call.
- The JPI will serve as an entry point for European countries in the International Call.
- A working group was created with Maurice Héral as Chair.

Recall: scientific framework

Theme 1: Improved methodologies for quantifying GHG emissions and removals in agricultural systems and in national inventories.

Theme 2: Study of mitigation options at the field, animal and manure management scales with quantification of their technical potential for a range of agricultural systems and regions.

Theme 3: Quantification of the costs and benefits and of the impacts for food production and for the environment of GHG mitigation options.



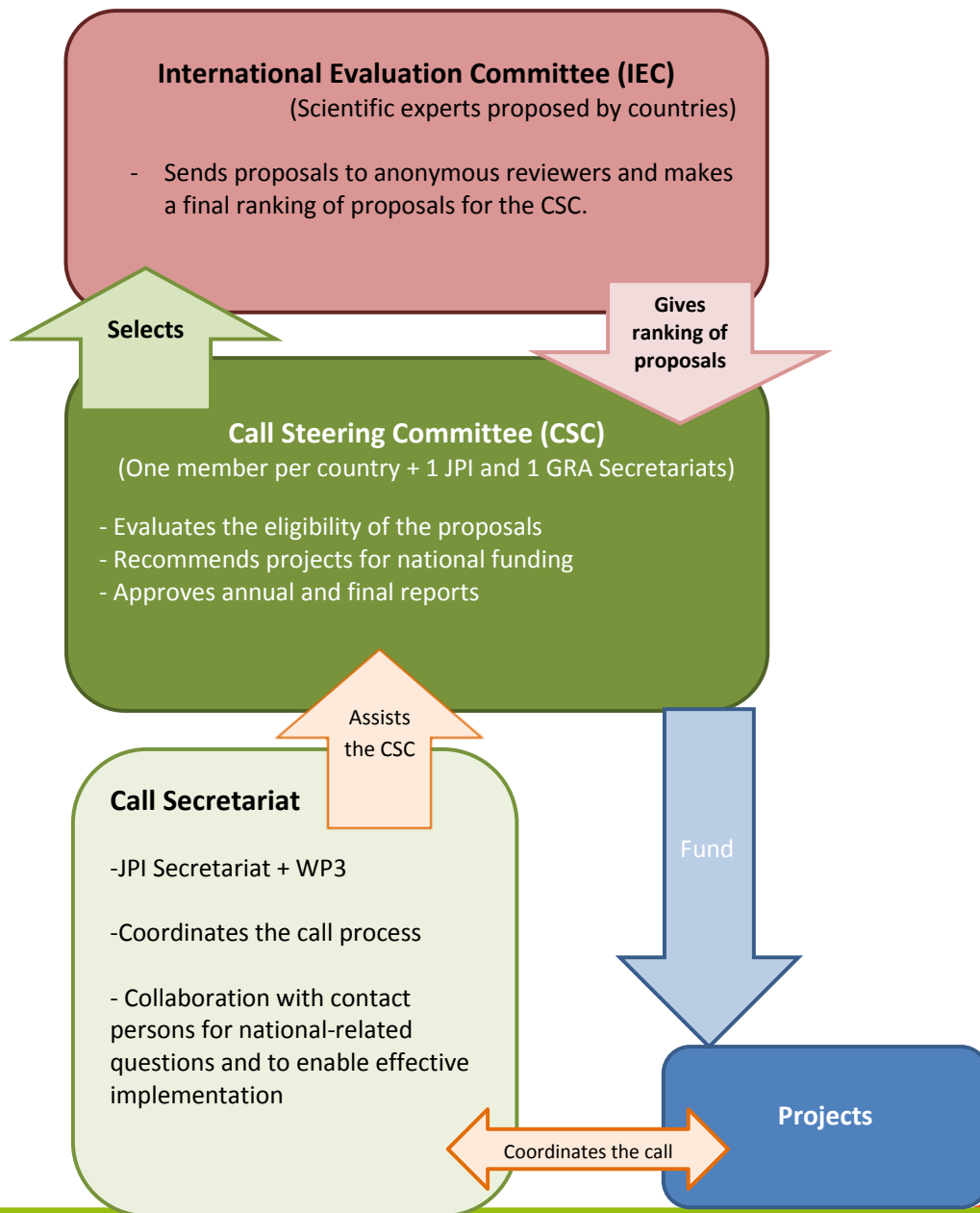
Topic 1: Greenhouse gas emissions in the agriculture sector arising from agricultural soils including crops and grasslands, domestic livestock and waste management systems.

Topic 2: Greenhouse gas removals, e.g. through carbon sequestration in agricultural soils.

Topic 3: Lifecycle of agricultural and food products GHG mitigation studies taking account other sectors such as industry, transport, energy and land use change add to the net greenhouse gas emissions.

Outputs of working group : Presentation of a MoU for JPI members and others

- A Memorandum of Understanding (MoU) is drafted, and sent for discussion to JPI (GB) and then to the 4 interested GRA countries.
- ⇒ Comments received under implementation.
- Deadline for **signature** of final MoU text: **September**
 - Launch of the International Call on Mitigation in autumn 2012



Some details different from the classical ERANET scheme: flexibility

- Participation in kind or in cash

- 2 steps processes:
 - Letter of Intention
 - Eligibility, policy relevance, merging of projects

- Private research can participate

Belmont Forum

- World's major and emerging funders of global environmental change research and international science councils
- Initiated June 2009, by NSF (US) and NERC (UK), building on IGFA – smaller, faster, decision-making
- MoU signed at PuP in March 2012 to support Collaborative Research Actions (CRAs) via International Opportunity Fund (IOF)

<http://belmontforum.org>

Current Members

- Australia/CSIRO
- Austria*/BMWF*
- Brazil/FAPESP
- Canada/NSERC
- China/NSFC
- European Commission/DG R&I**
- France*/CNRS&ANR*
- Germany*/DFG&BMBF*
- India/MoES
- Japan/MEXT&JST
- Norway*/RCN*
- South Africa/NRF
- United Kingdom*/NERC*
- United States/NSF
- *International Council for Science (ICSU)*
- *International Social Sciences Council (ISSC)*



* Also JPI FACCE

* Also JPI Climate

The International Opportunity Fund (IOF)

- To ‘fast track’ Collaborative Research Actions (CRAs) where members’ existing investments were ‘ripe’ for international collaboration
- The principles for CRAs
 - Address the Belmont Challenge priorities (i.e. societally relevant global environmental change challenges)
 - Lever Belmont Forum member’s existing investments through international added value (3 countries minimum)
 - Bring together new partnerships of natural scientists, social scientists, and users
- IOF, a flexible tool
 - *A la carte* for a given CRA
 - Common scoping, call & selection
 - No common pot of money, i.e. national budgets with specific rules (incl. capacity), any funders could adjust participation
 - Joint call with equivalent international initiative (G8, EC, ...)

CRA on Freshwater Security

- *≈10M€, joint with **G8HORCs***
- WP1: Identification and characterization of the interactions between natural processes and human practices that govern water budgeting in selected regions.
- WP2: Development of approaches that support the evolution of resilient communities/regions through improved seasonal forecasting of droughts, taking into account natural and socio-economic drivers identified in WP1.



CRA on Coastal Vulnerability

- *≈10M€, joint with **G8HORCs**, synchronized with **FP7** and **NSERC***
- WP1: Characterization of natural processes and human interactions that govern coastal vulnerability and resilience.
- WP2: Development of predictive frameworks and adaptive coastal management strategies that support the evolution of resilient coastal communities.



AP Photo/Michael Dwyer

Timeline for 2012 IOF

15th April 2012 – Call opens

20th July 2012 – Deadline for Pre-Proposals

20th September 2012 – Notification to submit Full Proposals

20th December 2012 – Deadline for Full Proposals

April/May 2013 – Official funding decisions

For more details see:

www.belmontforum.org/iof

CRA for 2013 and beyond ?

- Support "**Future Earth**", a world initiative for global sustainability (<http://www.icsu.org/future-earth>)
- Selected 2013 themes
 - **Food Security and land use change** Brazil(FASEP) lead, **joint with JPI FACCE (?)**
 - **Arctic**, Canada lead
 - **e-infrastructure**, US lead
- Others potential themes for 2014
 - **Biodiversity & Ecosystem Services** (for IPBES) ANR ?
 - **Climate services**, with WMO ? JPI Climate ?
 - **Green Growth, Disaster Risks**, with WB ?
 - **Africa**, with AID agencies ?
 - **Peri-urban** systems ?

>>> Next IOF call to be opened April 2013

Food Security and land use change

- How will changing demands for food, energy and other crops affect land use, and what are the consequences of this for ecosystem services and biodiversity?
- How will changes in land use, and the consequents on ecosystem services and biodiversity, affect availability of, and access to food?

Food Security and land use change

- 1. **Evolution of farming systems**
 - – To include both changes in arable and livestock productivity, environmental impacts and constraints (biodiversity and ecosystem services, hydrology, soils, nutrients, GHGs, climate, etc), and socio-economic impacts and constraints (employment, livelihoods and incomes)
- 2. **Land allocation for alternative purposes and impacts on food and energy production and ecosystem services**
 - – To include biofuels, oil and beverage crops, and other cash crops, as well as large-scale land acquisitions and global market dynamics on food and energy
- 3. **Land-tenure and Intensification vs Extensification**
 - – To include impacts on environment (e.g. biodiversity and ecosystem services, hydrology, biogeochemical cycling, regional climate) and socio-economic conditions (e.g. livelihoods, social capital, market infrastructure)
- 4. **Affordability of food**
 - – To include changes in local and regional food prices, livelihoods and incomes due to land use change

*We hope that other members of JPI FACCE
will join greenhouse gas emission call and
Belmont Forum International Opportunities
Fund on Food Security and land use change*

Thank you for your attention!