# FACCE - JPI Joining Forces in Europe in Agriculture, Food Security and Climate Change

Miur, 24 Febbraio 2012



Agriculture Food Security and Climate Change



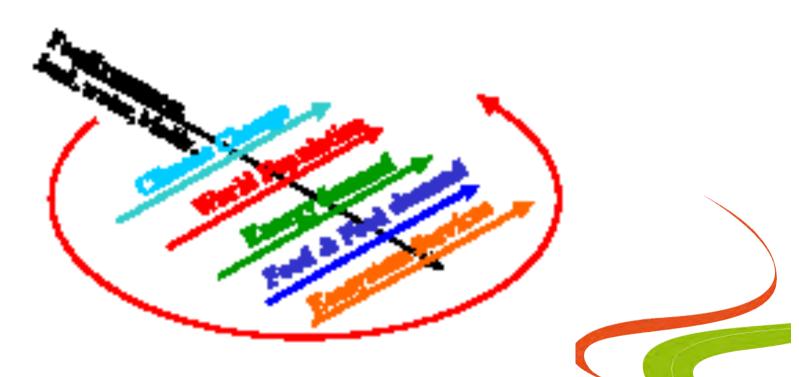
#### **Outline**

- Context
- Background to FACCE-JPI
- FACCE-JPI remit
- FACCE-JPI state of play
- Pilot Action
- Next steps





# A perfect storm



A "perfect storm" of food shortages, scarce water and insufficient energy resources threaten to unleash public unrest, cross-border conflicts and mass migration as people flee from the worst-affected regions.

Prof. John Beddington, UK Chief Scientific Adviser



# Two Goals of Our Time

- 1. Achieving Food Security
  - 1 billion hungry
  - Food production to increase 70% by 2050
  - Adaptation to Climate Change and dwindling natural resources critical
- 2. Avoiding Dangerous Climate Change
  - "2 degree goal" requires major emission cuts
  - Agriculture and Land use = 30% of emissions...
  - ...and needs to be part of the solution

New and strong emphasis on agricultural research is vital for sustainable global development, need for a European approach



# **European Research Area**

#### 3 concepts

- the creation of an "internal market" in research (free movement of knowledge, researchers and technology)
- the restructuring of the European research fabric (improved coordination of national research activities and policies) – "Ex-Post" FRA-NET and Art.169
- the development of a European research policy (taking into account other EU and national policies)





# 1. Joint Programming in research

#### **JOINT PROGRAMMING (Definition)**

- Member States engaging
  - voluntarily and on a variable geometry basis
  - in the <u>definition</u>, <u>development and implementation</u> of <u>common</u> <u>strategic research agendas</u>
  - based on a <u>common vision</u> on how to address <u>major societal</u> <u>challenges</u>.
- It may involve <u>collaboration</u> between <u>existing national</u> <u>programmes</u> or the <u>setting up of entirely new ones</u>.
- It entails <u>putting resources together</u>,
  - > selecting or developing the most appropriate instrument(s), and
  - collectively monitoring and reviewing progress.



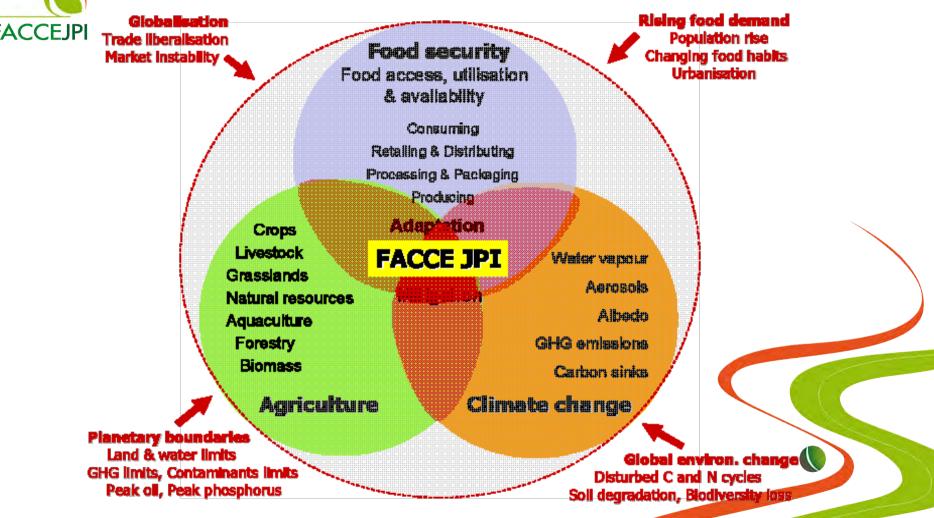
# **Background to FACCE-JPI**

- SCAR Foresight 3 key challenges (2009):
   Food Security, Climate Change, Diet & Health
- EURAGRI brought FR and UK plans together to propose
   Agriculture, Food Security and Climate Change JPI (Sept 09)
- NL proposed Healthy Diet for a Healthy Life JPI
- These 2 (plus Cultural Heritage) adopted Competitiveness Council (December 2009)
- FACCE-JPI GB created (January 2010)
   €5000 entry fee





#### **FACCE-JPI** remit





ICT-AGRI Core Organic II, ERACAPS

**ERA-IB, EUROTransbio ERASysBio, ERA SynBio** 

(EUPHRESCO) (ANIHWA) -

**BIODIVERSA2** 

ARIMNET, CORE ORGANIC
(EUPHRESCO, ANIHWA)
(RURAGRI)

(SUSFOOD)

ERA ARD2
ARIMNET
SAFEFOOD
SUSFOOD

RURAGRI (CIRCLE 2)

#### Same domain as FACCE JPI

Other sectors than agriculture & food Other regions than Europe Includes health and food habits

2. Environmentally sustainable growth and intensification of agriculture

4. Climate change adaptation

CIRCLE2
EUPHRESCO
ANIHWA
(ERA-ARD2)

3. Assessing and reducing tradeoffs: food production, biodiversity & ecosystems services

5. Greenhouse gas mitigation

**FACCEJPI** 

Agriculture Food Security and Climate Change



# **FACCE-JPI** Participants



Austria



Italy



Belgium



The Netherlands



Czech

Denmark

Estonia



Norway



Republic



Poland







Romania



Spain



**Finland** 



Sweden



France



Germany



Ireland



Israel



🚹 Switzerland







Cyprus



**European Commission** 

SCAR (observers)





### State of the play

- Since Jan 27<sup>th</sup> 2010 (1<sup>st</sup> GB) and June 10<sup>th</sup> 2010 (1<sup>st</sup> SAB)
- ⇒ Many achievements, e.g.:
- ⇒ Scientific Research Agenda (ScRA)
  - ⇒ Pilot action call
  - ⇒ 1st&2nd meeting with the funders/ mapping
  - **⇒** ERA-NETs Workshop (Stakeholders)

With the support of the CSA, tool integrated within the FACCE-JPI to ensure the JPI implementation



# **The Joint Programming Process**



**FACCEJPI** 

Agriculture Food Security and Climate Change



#### **FACCE - JPI Governance**

Governing Board (GB):
Max. 2 representatives
from each MS/AS with 1
vote + max. 2 representatives of
CE and of SCAR



International Scientific
Advisory Board (SAB): 12
experts named by GB
Terms of reference adopted
by GB



Secretariat INRA/BBSRC



Possibility to add working groups, implementation groups



Agriculture Food Security and Climate Change



# Scientific Advisory Board

- Elias Fereres
- Steve Long
- Frits Mohren
- Bernd Müller-Röber
- Pirjo Peltonen-Sainio
- John R. Porter

- Thomas Rosswall
- Johan Rockström
- Jean-François Soussana
- Henning Steinfeld
- Joachim von Braun
- Rajul Pandya-Lorch

The members of the SAB (elected by Governing Board) serve in their capacity as independent experts

- Elaborate a scientific research agenda
- Prioritise actions
- Advise on scientific governance
- Advise / participate in peer review and evaluation





# **Scientific Research Agenda 5 core research themes**

- 1. Integrated food security under climate change, based on an integrated food systems perspective: modelling, benchmarking and policy research perspective.
- 2. Sustainable intensification of agricultural systems under current and future climate and resource availability.
- 3. Optimizing trade-offs between food production and the preservation and utilization of biodiversity, ecosystem goods and services.
- 4. Adaptation to climate change throughout the whole food chain, including market repercussions.
- 5. Mitigation of N<sub>2</sub>O and CH<sub>4</sub> emissions by the agriculture and forestry sector, carbon sequestration and reducing GHG emissions associated with indirect land use change.

COMMENTS WELCOME ON THE SCIENTIFIC RESEARCH AGENDA





# FACCE CSA organisation April 2011- March 2014



WP1 Refining and updating the Strategic Research Agenda

Leader: UK Co-leader: FR

WP2 Mapping and foresight for strategic collaboration Leader: NL Co-leader: ES

WP3 Design and delivery of implementation modalities Leader: TK Co-leaders: AT, DE

WP4 Communication and outreach Leader: FR Co-leader: UK

WP5 Coordination with international initiatives Leader: IE Co-leader: RO

WP6 FACCE consolidation and perpetuation Leader: UK Co-leader: FR

WP7 Project and consortium management Leader: FR Co-leader: UK





# First mapping meeting on mitigation of agricultural greenhouse gas - induced climate change (theme 5)

- Gathering national funders, policy makers and scientists + members of the SAB
- Recommendation to the GB for implementation of theme 5
  - Research themes
  - Tools identified
- Second meeting on adaptation (theme 4) 22-23
   February 2012

#### **Pilot Action**

- One-off, initial action at early stage of FACCE-JPI
  - To bring together nationally-funded modellers in the areas of crops, livestock and trade, to look at how climate variability and change impact on European agriculture and food security
  - 96 letters of intention received, 74 groups eligible
  - Selected national applicants met at a networking workshop to develop a Knowledge Hub (network) – October 18, 2011
  - Submission of coordinated Knowledge Hub proposal December 2011
  - Evaluation January February, 2012
  - Launch of Knowledge Hub June 2012





#### Pilot action: instrument

#### **FACCE-JPI Knowledge Hub**

- An instrument building on the concept of "Networks of excellence"
- Main idea of "FACCE knowledge hubs";
  - Bring together research groups that already have funding in the thematic area(s) chosen
  - It can be worded as building "virtual centers" between research groups.
  - The support given can be administration/project management, travel expenses, mobility, money for common research, use of common infrastructure and thematic workshops.



#### **Pilot action: numbers**

#### **FACCE-JPI Knowledge Hub**

- 67 partner (12 italian research groups in a single partnership)
- 17 Countries involved;
- 3 themes (livestock-crop-trade);
- 20 work packages;
- 2.360 person/months;
- Total costs:15 milioni;
- Co-funding: 58% (8.8 mil di euro finanziati)





### **Next steps**

- Knowledge Hub starting in 2012
- Working with existing ERA-NETs to implement the Research Agenda (e.g. ERA-CAPS: Coordination Action in Plant Sciences, BiodivERsA)
- Stakeholder consultation Strategic Research
   Agenda
- Discussion on an international call on climate change mitigation (2013)
- Possibility of an ERA-NET+ on "Climate smart food systems in Europe" (2014)



#### Thank you for your attention!

Visit: www.faccejpi.com & www.politicheagricole.it

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