

FACCE-JPI Knowledge Hub





Climate-change impacts on farming systems in the next decades: Why worry when you have CAP?

A FACCE MACSUR workshop for policymakers

Martin Banse

Thünen Institute, Braunschweig (Germany)

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Premises of the Representation of Lower Saxony to
the European Union



FACCE-JPI core themes

1. Integrated assessment of food security

FACCE-JPI Knowledge Hub



MACSUR:
Modeling Agriculture with Climate Change
for Food Security



FACCE Knowledge Hubs

- An instrument building on the concept of “Networks of excellence”
- Brings together research groups *that already have funding* in an thematic area
- The support given can be coordination costs, travel expenses and thematic workshops.
- Countries may choose to support research and/or mobility.



MACSUR partnership

18 countries

- Austria
- Belgium
- Czech Rep.
- Denmark
- Estonia
- Finland
- France
- Germany
- Hungary
- Israel
- Italy
- Netherlands
- Norway
- Poland
- Romania
- Spain
- Sweden
- UK

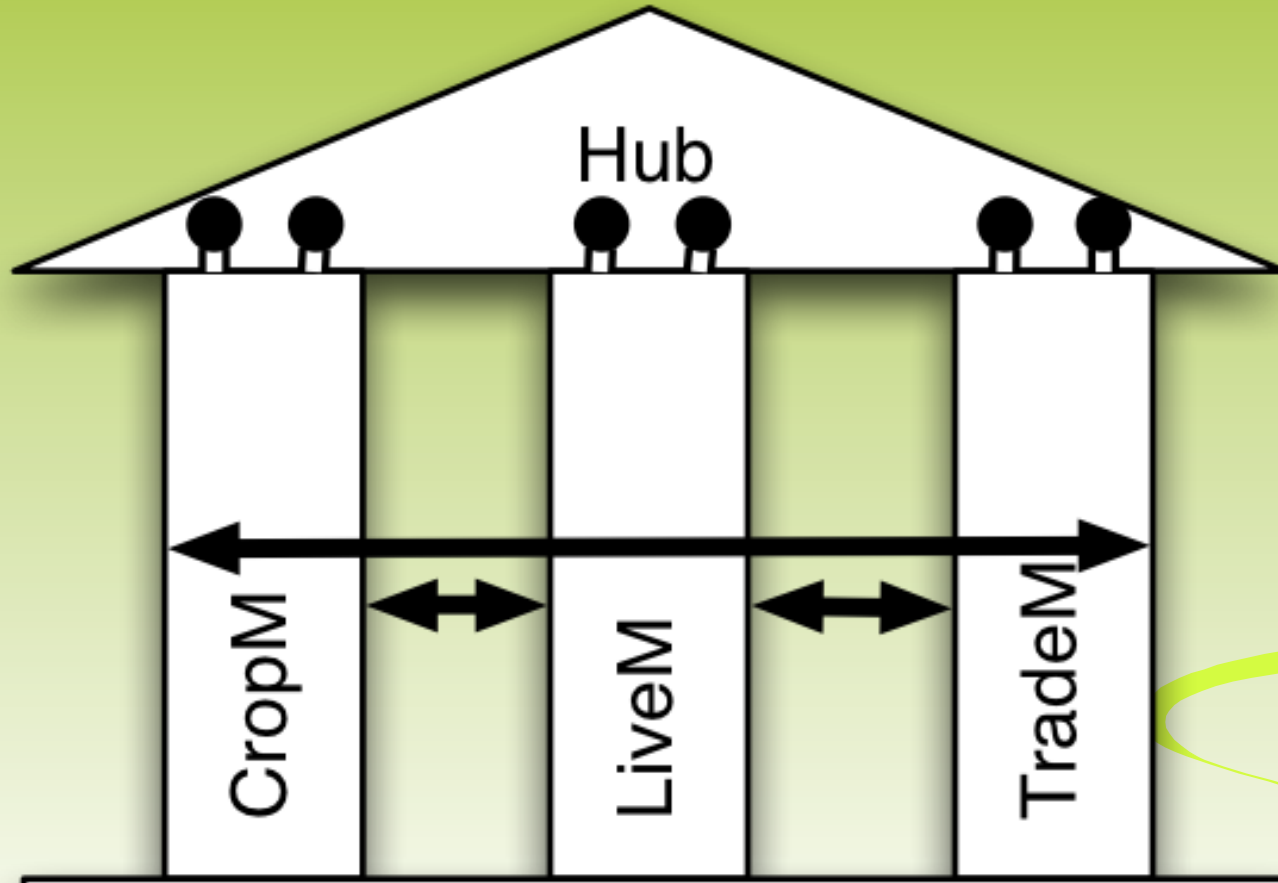


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→71 organizations, 300 scientists



MACSUR structure





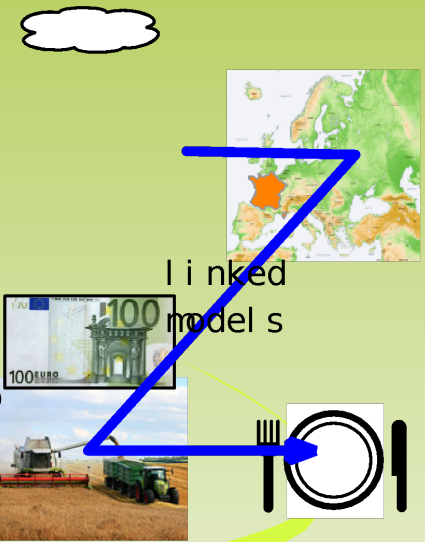
MACSUR's aims

- To analyze the effects of climate change for **farming conditions** in European regions
- To identify **risks for farmers**, to jointly develop mitigation and adaptation options
- To analyze consequences of mitigation and adaptation for farming **competitiveness**, the **environment** and **rural development**



MACSUR's mission

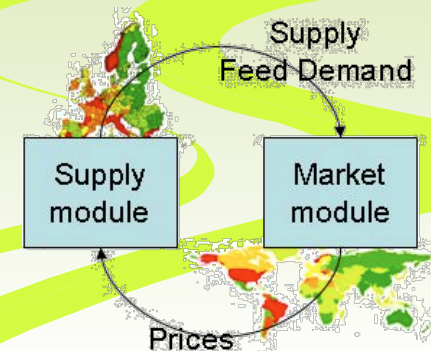
- **improve and integrate** models - crop and livestock production, farms, and national & international agri-food markets
- **demonstrate** integration and links - models for selected farming systems and regions
- provide **hands-on training** - young and experienced researchers in integrative modeling

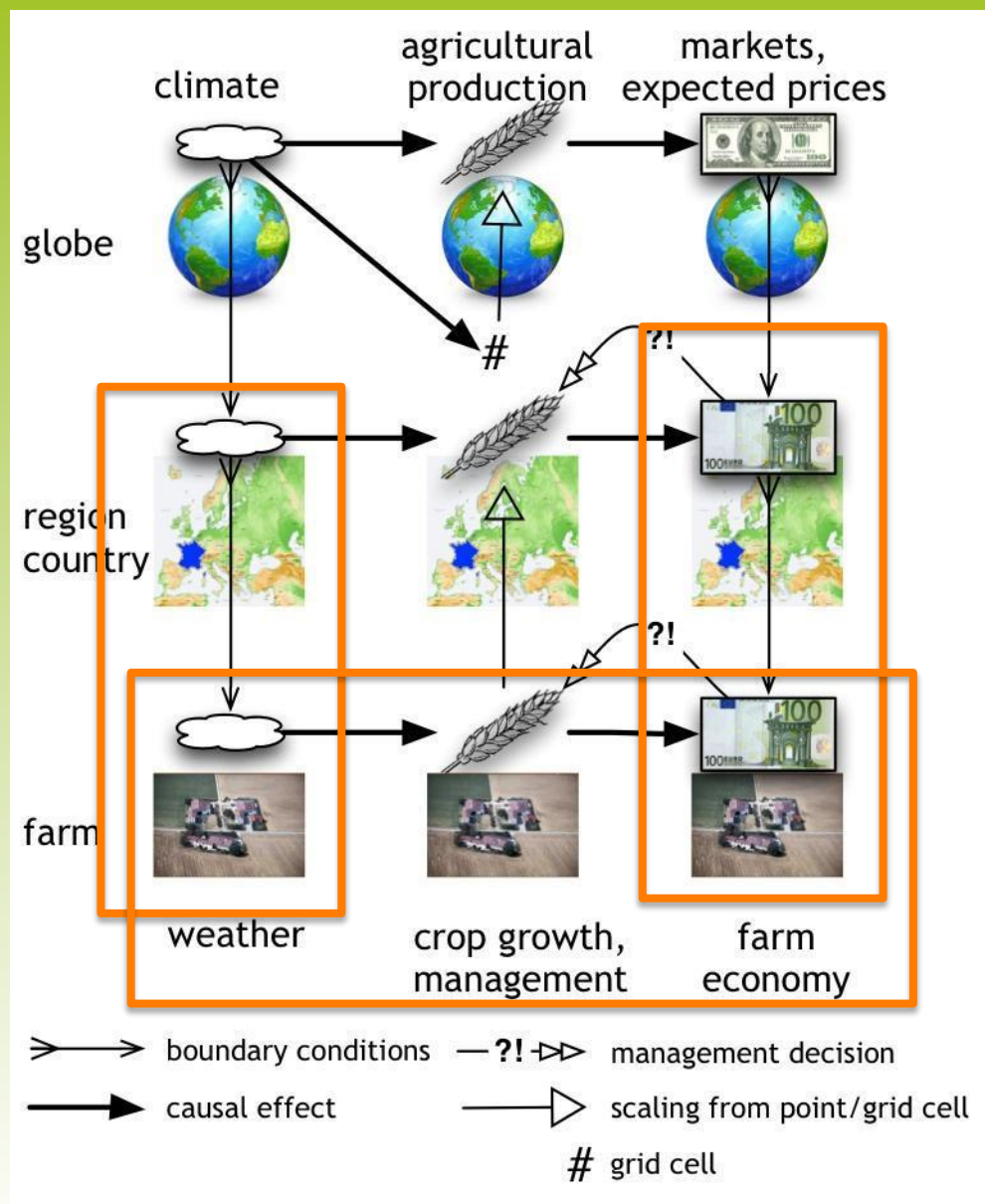




Different scales ~ different models

- farm-level models, diverse approaches
 - FAMOS, MODAM, mathematical farm investment models
- regional and national models
 - optimization of investment, resource use, or food security
- international and global models
 - international trade and policies
- sector models (farm-EU-global)





Integration and scaling





Regional Pilots

- Three different regional pilots
- Finland - Austria - Italy
 - where the consequences of climate change are felt
 - where we can identify mitigation potential and promising adaptation strategies
- high degree of reflecting climate change
- incorporating natural resources (e.g. water and soils)
- diversity of European farming systems



Mid-Term Review of MACSUR

What comes next until 2017?

- Model comparison & improvement
- Uncertainty and risk assessment
- Capacity Building
- Regional case studies
- Impact Assessment for Europe
- Overall scenario development



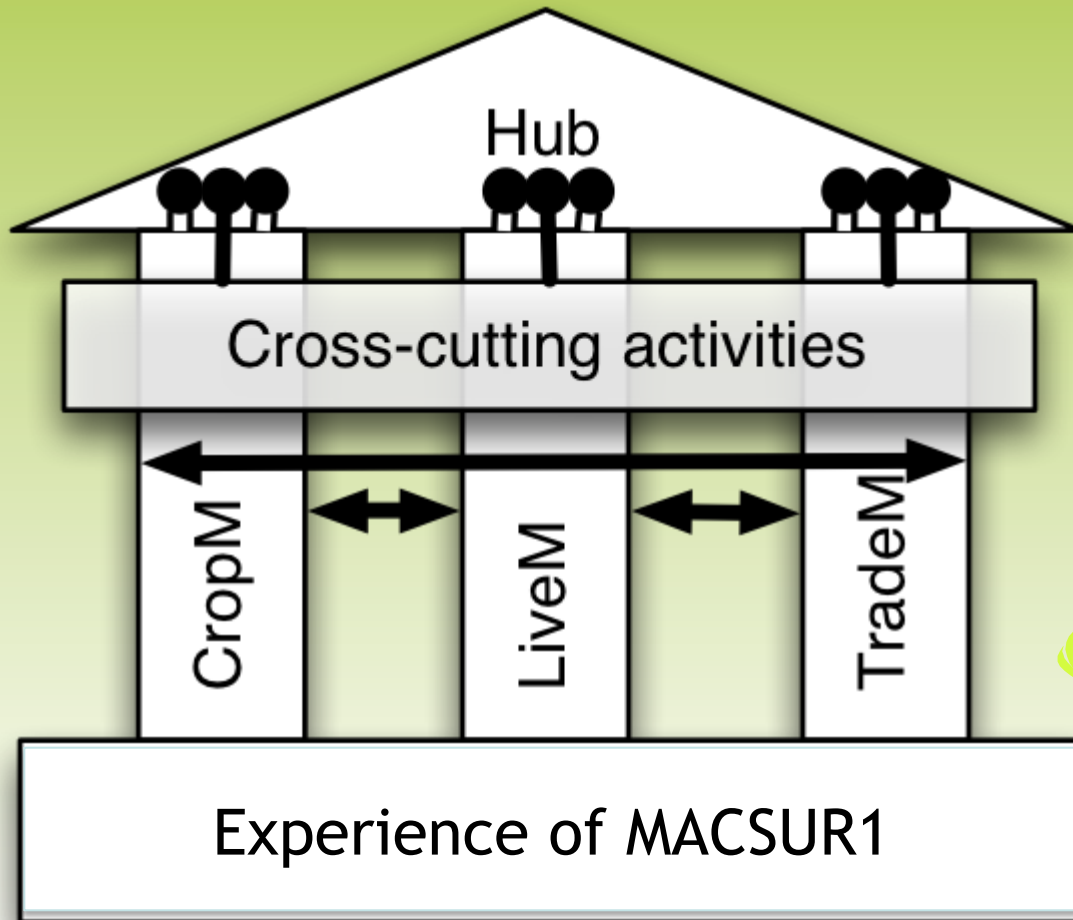
Mid-Term Review of MACSUR

What comes next until 2017?

- Variability and extreme climatic events
- Identifying sustainable opportunities to reduce yield gaps in Europe
- Feeding livestock
- Impact on ecosystem services and rural development
- GHG mitigation from agriculture



MACSUR2: Work in XC Activities





What do we expect today?

- Presentation of current achievements
 - Regional Pilots on climate adaptation
 - EU-level assessments
- Intensive discussion with all participants
 - What are your knowledge needs ?
 - What can MACSUR-2 contribute ?
 - How to collaborate ?
 - Next steps of interaction





For further information
please visit: www.macsur.eu