# Innovative solutions to foster agricultural productivity in a sustainable way





Bruxelles, 8<sup>th</sup> December 2010 **Prof. Ettore Capri**, Director of the OPERA Research Centre Universita Cattolica del Sacro Cuore

### Challenges for the new CAP

- Continued rapid growth in global food demand:
  - 100 % between 2000 and 2050;
  - Population growth to 9 billion;
  - Per capita income growth in developing countries.
- Additional challenges:
  - Water is becoming scarcer and more expensive;
  - Growing demand for natural resource protection;
  - bio-energy production;
  - Increasing energy price.
- Limited growth in global food **supply**:
  - Limited growth in agricultural land (arable land: +5% between 2000 and 2020)
  - Production growth predominantly through productivity growth;
    - But: Declining annual productivity growth:

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1961-1989: 4 %;
1990-2000: 2 %;
presently: 1 %.
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(Source: "EU Agricultural production and trade: Can more efficiency prevent increasing" land grabbing" outside Europe", OPERA and Humboldt University Berlin 2010,

www.opera-indicators.eu)

### EU strategy and policy framework

- "Europe 2020 A strategy for smart, sustainable and inclusive growth":
  - European competitiveness lagging behind
- agriculture sector increasing pressure in the internal and international markets
- Recent studies gaps in the comparative advantage, for some products 2-3 times lower production costs outside Europe.
- In the same time...
  - Market access through the WTO;
  - Series of free trade agreements under negotiation;
  - Series Economic Partnership Agreements

### EU strategy and policy framework

- Commission Communication "Meeting the food, natural resources and territorial challenges of the future ":
  - greener and more equitably distributed first pillar
  - a second pillar focusing more on:
    - Competitiveness
    - innovation,
    - climate change
    - environment.
  - ... "to release its latent productivity potential, [...] and contribute to the Europe 2020 objectives [...] remunerating the collective services they provide to society"

### **Smart CAP**

- We need a smart CAP which ensures:
  - Food security
  - Environmental security
  - Social security

#### Through:

- Unlocking the production and productivity potential
- Bridging solutions between food production and environmental concerns
- Ensuring economic stability for the agricultural activity
- Better targeting regional and local specificities

### Sustainable intensive agriculture

### A new production model is needed – Sustainable intensive agriculture, based on the following principles:

- productivity of affordable, accessible, quality crops on available land
- to avoid agricultural expansion into the remaining natural habitat vital for biodiversity and carbon storage
- resist pressures on land occupancy from non-agriculture sectors
- help farming sector to balance productivity with the efficient use of natural resources and deliver economic and environmental public goods.
- limit water consumption
- maintain biodiversity,
- provide tools for professional farm management
- help spatial planning at European, National, and Regional level

### Innovation

- Releasing the breaks on technological development
  - Friendly regulatory framework
  - Reducing red tape
  - Financial support for fundamental and applied research
- Promoting innovation in farm management:
  - of agricultural land (crop rotation, multifunctional field margins, sustainable exploitation)
  - of production risks (climatic conditions, pests, diseases, reduce harvest loss, variable standards, etc.)
  - of market risks (price volatility, share in value added, cooperation)
- Modern governance
  - Private-public partnerships
  - Flexibility in responding to crisis
  - Risk management schemes

### Innovation

- CAP needs to address four major problems faced currently by the research and innovation activities in Europe, to promote:
  - horizontal coordination of research priorities across the EU and vertical coordination with the needs of the agricultural production;
  - financial support to a level comparable with the resources employed in agricultural R&D by other competitors on the world market;
  - creation of a business environment to promote private research and public-private partnerships, along with information campaigns to change the negative public perception on the results on technological development;
  - delivery mechanisms at farm level to increase the uptake of the results.

### Sustainability

- Current regulatory framework already a basic filter for sustainability
- Additional requirements should receive incentives through the CAP – promoting public goods provision to society
- Criteria to judge sustainability should always cover the three dimensions:
  - Economic
  - Environmental
  - Social

### What is OPERA doing to help?

- Participatory multi-stakeholder process on the reform of the CAP:
  - Series of Roundtables (through our Brussels Office) on the future of CAP (already at the 4<sup>th</sup> edition) on issues like: competitiveness; markets; public goods; rural development
  - Implementation of EU legislation (e.g.Directive for the sustainable use of pesticides)
  - Working groups
- Studies, analysis and recommendations to bridge agricultural and environmental concerns:
  - EU production and trade
  - Agricultural Markets Stability System (working group of experts and agricultural economists across EU – proposal to be presented soon)
  - Multifunctional landscapes
  - Risk evaluation, risk monitoring and risk reduction technologies (BROWSE project; indicators and targets to reduce risks associated to pesticides; bio-beds)
  - Sustainability criteria (SOStain project)
  - Water management

## Join the process for sustainable innovation in policy, governance and production systems of the European agriculture!

Thank you for your attention.

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