



The European Plant Science Organization

**Strategic input
from European organizations and networks**

**The Future of Science
“Food and Water for Life”
Venice, September 24-27, 2008**

**Karin Metzloff
Executive Director
European Plant Science Organization
www.epsoweb.org**



Partner for plant research in Europe and beyond

Established 2000

58 Institutional Members

representing

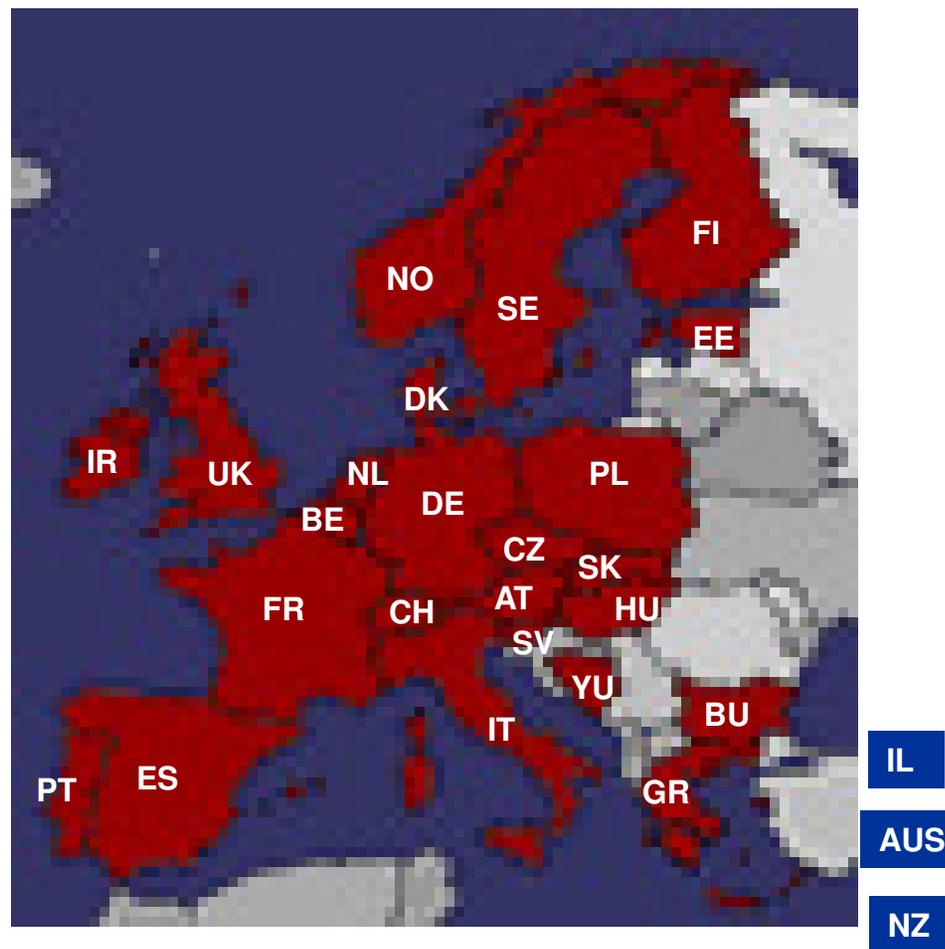
**178 Research Institutes, Universities,
and Research Departments**

> 24,000 Plant Researchers and Staff

> 1,000 Personal Members

27 Countries

5 Non-European Institutes





EP SO supports plant research and science policy

Represent the plant science community

Provide strategic recommendations

- from academia
- with industry and farmers

Promote interaction between different plant science disciplines and other disciplines

Information broker

Communicate with the public and decision makers

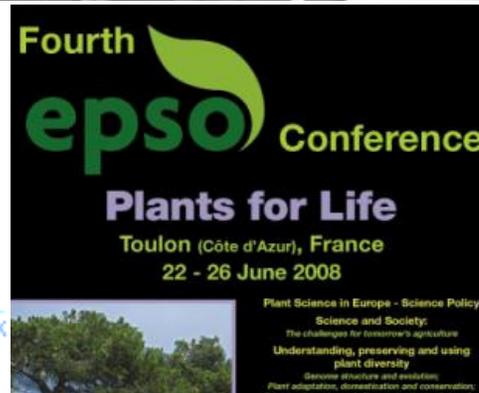
Promote new funding sources and instruments

Training and tutoring of young scientists

Initiative for Science in Europe



European Technology Platform 'Plants for the Future'



EP Member Chichester

EU Commissioner Potocnik





EPISO is working closely with all stakeholders of the European Technology Platform 'Plants for the future'



Vision 2025, **Strategic** Research Agenda

5 challenges for society to which 'Plants for the Future' can contribute:

1. Healthy, safe and sufficient **food** and feed
2. Plant based products: chemicals and bioenergy
3. **Sustainable** agriculture, forestry and landscape
4. Vibrant and competitive **research**
5. **Competitiveness**, consumer **choice** and **governance**



syngenta

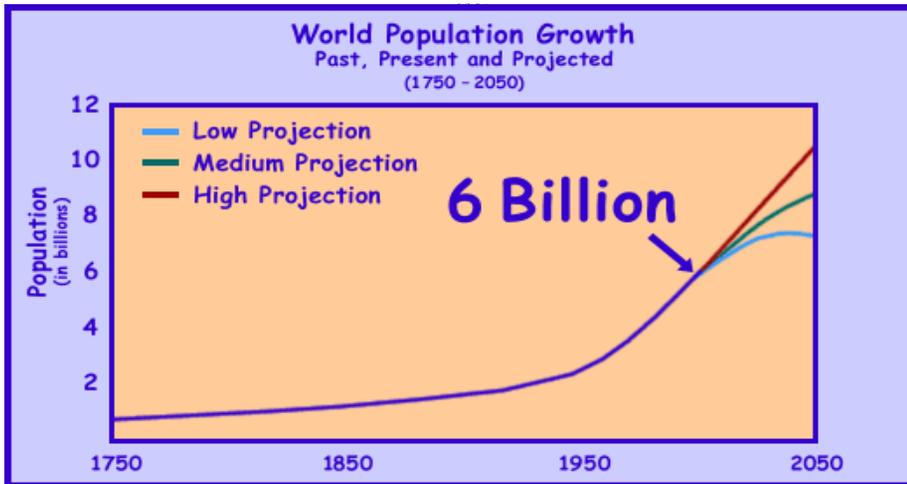


Etc.

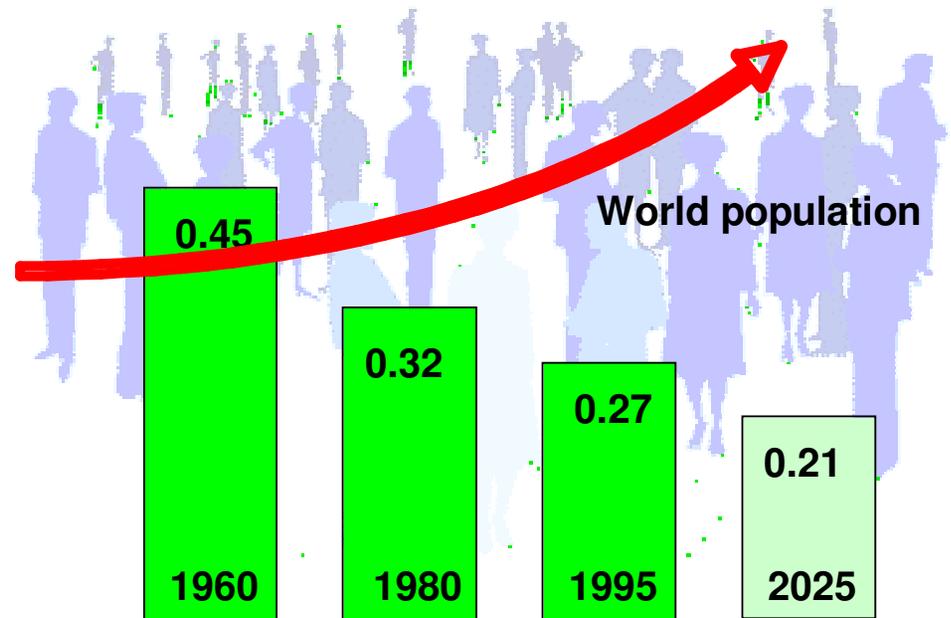


The food challenge: In the next 50 years we have to produce more food than ever before on less land per capita

2025: 90% of world agricultural production will be required in developing countries



Source: World Resources Institute



■ Available agricultural land per capita (ha)

Source: United Nations



The water challenge: We have to reduce the amount of water we use for agriculture – today 70%, not add 17% by 2025

NEWSFOCUS

Drying out. Australian farmers know all too well the devastating effects of drought, which has greatly reduced harvests.



PLANT GENETICS

The Blue Revolution, Drop By Drop, Gene by Gene

Researchers probe the secrets of how plants cope with water stress to improve crop yields



Science 320: 171-173, 2008

There's been "a constant increase in interest, particularly from the private sector," says Roberto Tuberosa of the University of Bologna in Italy. "Drought and tolerance to water stress are very hot topics at this moment."

Credit: W Gruissem



A balanced and integrated approach is needed

- **Critical mass of basic AND applied research**

at regional, national, European, global levels

Better use existing funds → Increase resources available

i.e. European
FP7 → FP8

Integrate R&D&I along the food / feed and the non-food chains

i.e. collaboration of nine Bio-economy Technology Platforms

- **Integrated approach to lower the effect of biotic AND abiotic stress**

Water use efficiency is part of this

Systems biology

- **Integrated support for developing countries**

Research & Development (Agronomy, modern technologies –
bridging traditional knowledge and science)

Innovation through to the market (Infrastructure, legal and
political support)

Longer term existence of this market

Network and coordinate better donors and participants



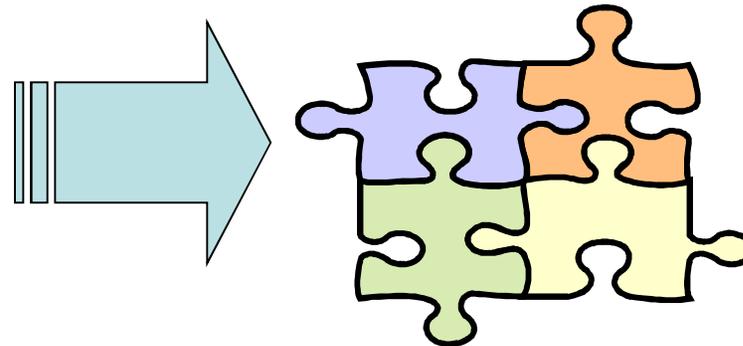
We need to advance by combining the advantages of all available technologies

Agriculture with traditional breeding, fertilizers ...



GM Maize cultivated in EU: 110,000 ha

- Combine the advantages of all available technologies
- stabilize and increase yield
 - reduce the amount of chemicals needed
 - improve soil structure



And continue to offer products with restricted technology use

Better for the environment
Real choice for consumers



The European Plant Science Organization

When if not now?

**Thank you
for your attention!**

www.epsoweb.org

