"ELO: contributing towards the EU Agricultural and Rural Development policy"

ICA Rectors & Deans Forum 2011
3-10-2011

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www.elo.org

ELO
European Landowners' Organization

Representing land owners in EU

ELO
European Landowners' Organization

'S MISSION

- ✓ **Promote the livelyhood of the Countryside**
- ✓ **Promote the role of private initiative**
- ✓ **Promote landownership and family businesses**

In 9 major areas of European importance

Land Owners provide
(9 “f words”)

Food and fibre

Flora and fauna

Forest

Fixing carbon

Farm buildings

Fuels

Fun

Farmed landscapes

Flood protection

ELO’s Activities

- **Agriculture and Rural Development** (Third generation agriculture)
- **Biodiversity**
- **Forestry**
- **Biomass**
- **Economic status of family Businesses**

(collaborating with Family Businesses and Historical Houses)

RISE
RURAL INVESTMENT SUPPORT FOR EUROPE

Friends of the Countryside

Young Friends of the Countryside

HEH
European Historic Houses

ELO

The European Landowners Organisation

Established in 1972, this NGO currently represents a vast number of associations throughout Europe. The ELO's area of expertise emphasises the essence of private properties in the sustainable development of the rural world.

Its mission is to convince key European Union decision makers as well as representatives from other pressure groups, to recognise land owners and rural entrepreneurs ' specific concerns as reliable economic actors of the rural world.

A common agricultural & rural development policy: Key Issues

A rural development policy should:

- be **truly** sustainable (Ecologic, Economic, Social)
- be open to innovative applications & new developments in biomass & agriculture
- focus on increasing resource efficiency

Universities need to:

- maintain collaboration with other sectors
- get more involved in societal dialogue & promote rational and scientific discussion Vs emotional campaigns

The THREE aspects of Sustainability

1. **Ecologic:**

Protection & good management of

Soil
Water
Biodiversity

+

2. **Economic:**

Keeping businesses within rural communities

Increasing their competitiveness

+

3. **Social:**

Food Vs Fuels, Food Vs Nature, employment. heritage, etc.

Global Challenges

⇑ Urbanisation

⇑ Population

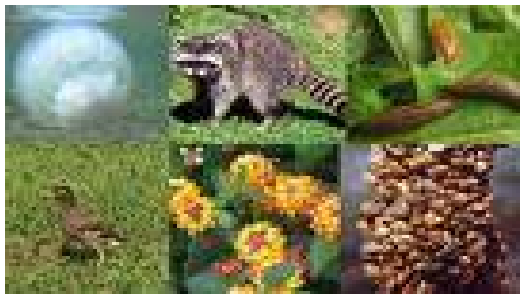
Poverty reduction

⇑ Demand for Energy & Materials

⇑ Demand for Food

⇑ Demand for Water

⬆ Climate Change



⬇ Biodiversity

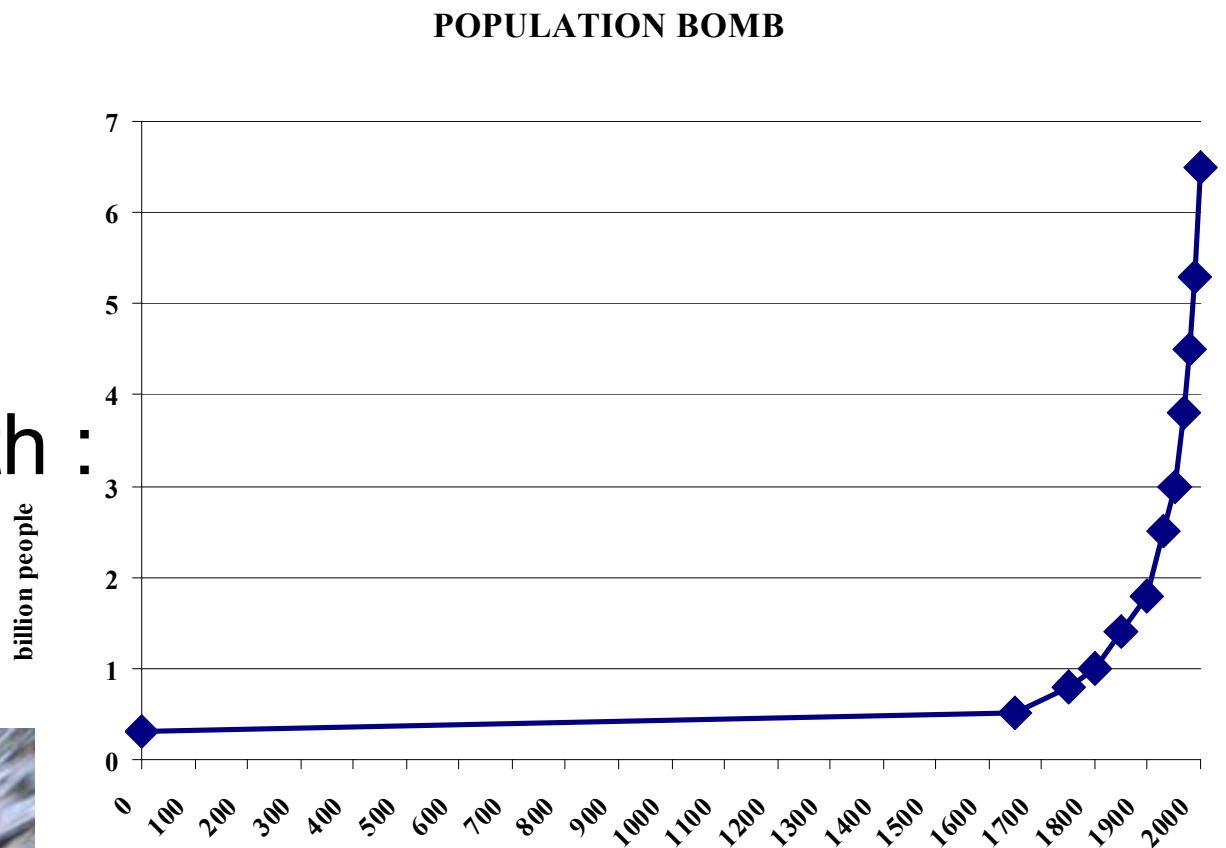
⬆ Public Health

World population growth

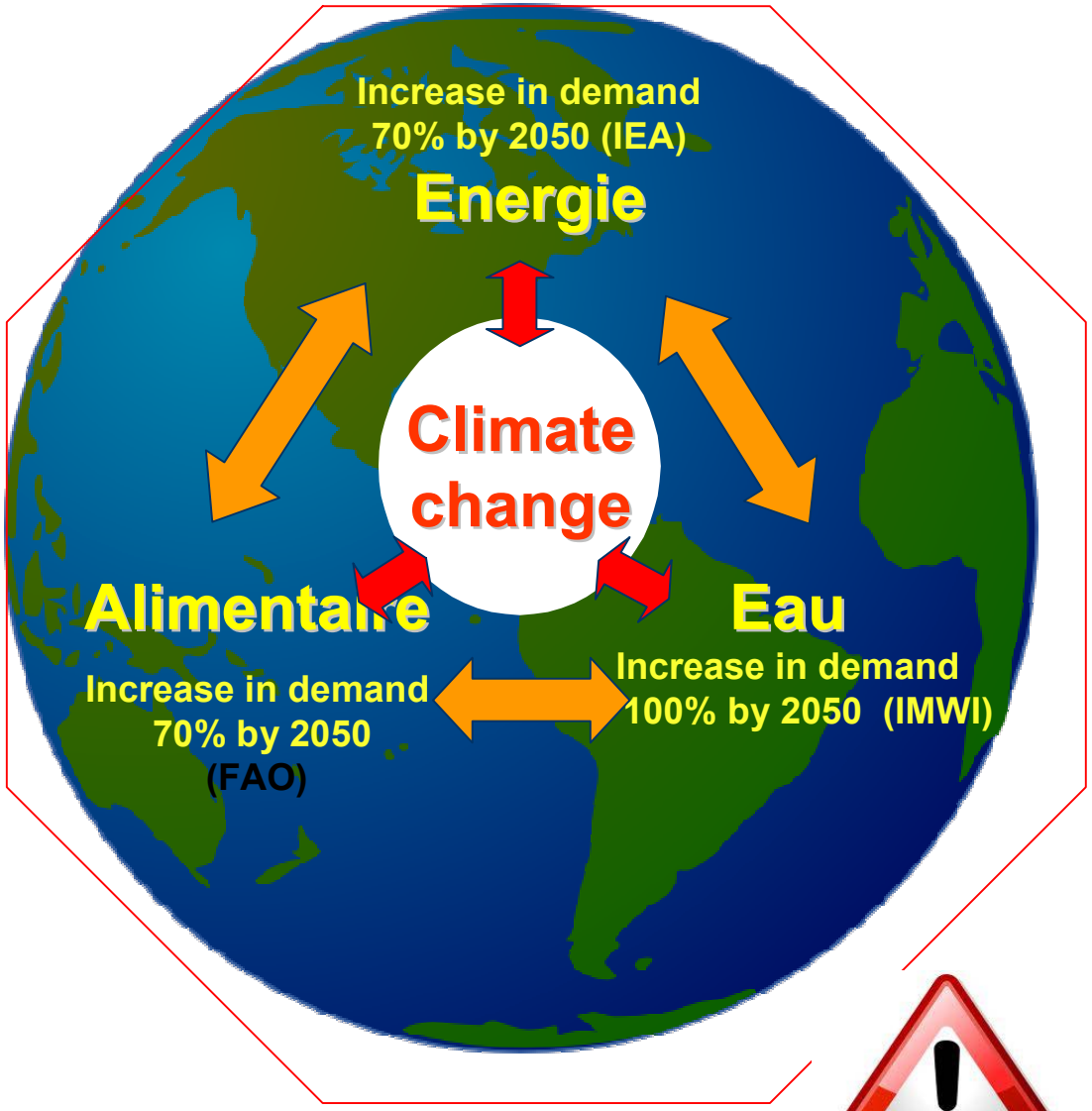
- Actual population :

  6.9 Billion

- Annual growth :
- **75 million** (1,1%/yr)



Climate Change, Food Security, Resource Security (energy, water, fiber, etc.)



Key Questions:

1. Can we feed 9 billion people sufficiently, affordably and sustainably?
2. How will we cope with future increased water demands ?
3. How will we supply enough energy to a growing population?
4. Can we afford to wait for the effects of Climate Change? How do we adapt?
5. Can we achieve population and economic growth and still preserve biodiversity in a healthy environment?

Biocapacity (potential)

22% of the Earth's surface is biologically fertile

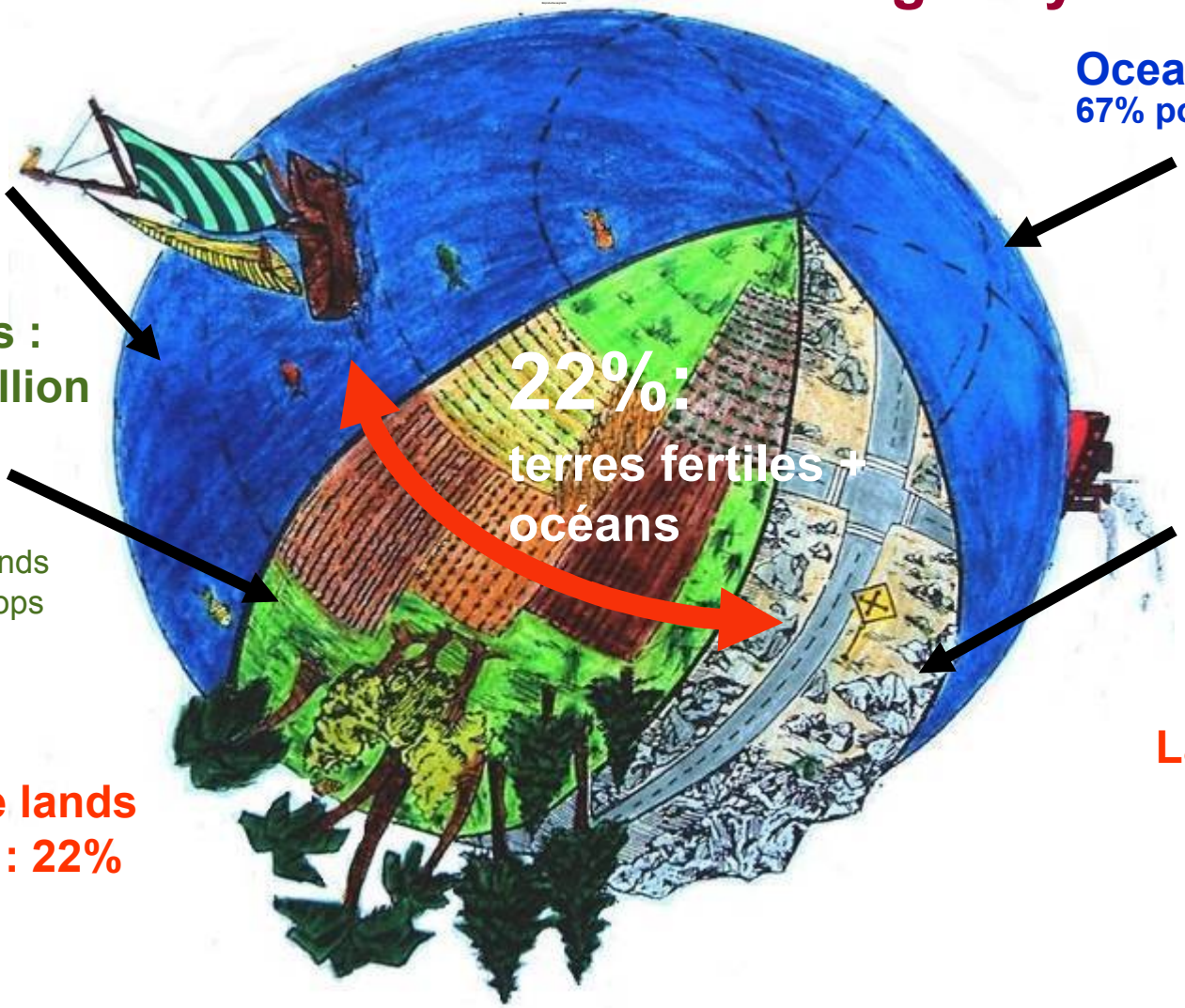
Oceans :
4%biologically fertile

Oceans :
67% poorly fertile

Fertile Lands :
18% (13,1 Billion ha)

Include :

1,4 M ha arable lands
0,2 M ha perm. crops
3,4 M ha praries
4,0 M ha forests
4,1 M ha other



Deserts, glaciers and dry lands : 11%

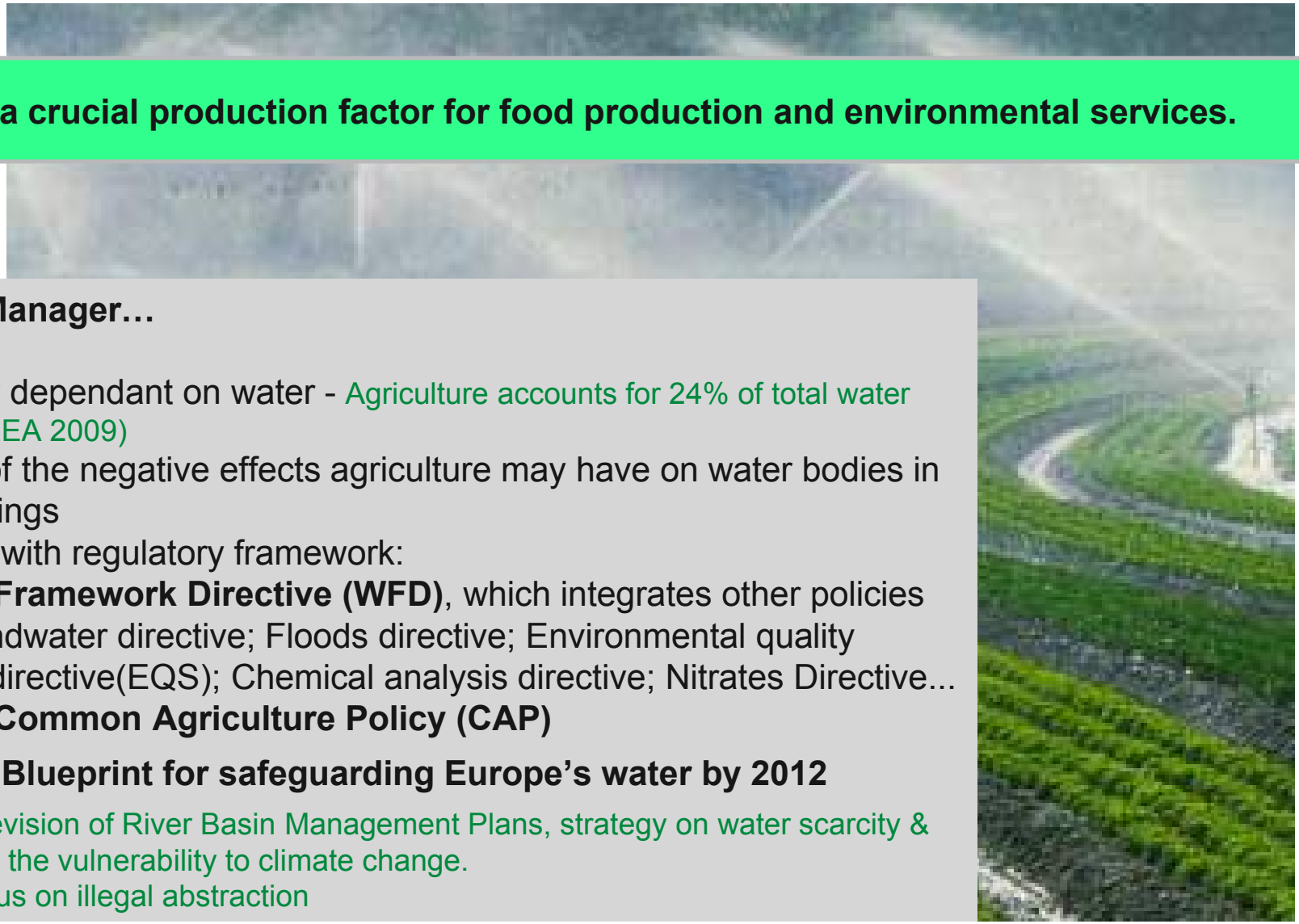
Productive lands + Oceans : 22%

Lands poorly or not fertile + oceans : 78%

Plants can be transformed into resources by using energy from the sun !
Animals consume resources while plants generate resources !

Water (I)

Water is a crucial production factor for food production and environmental services.



The Land Manager…

– is strongly dependant on water - Agriculture accounts for 24% of total water abstraction (EEA 2009)
– is aware of the negative effects agriculture may have on water bodies in its surroundings
– complies with regulatory framework:

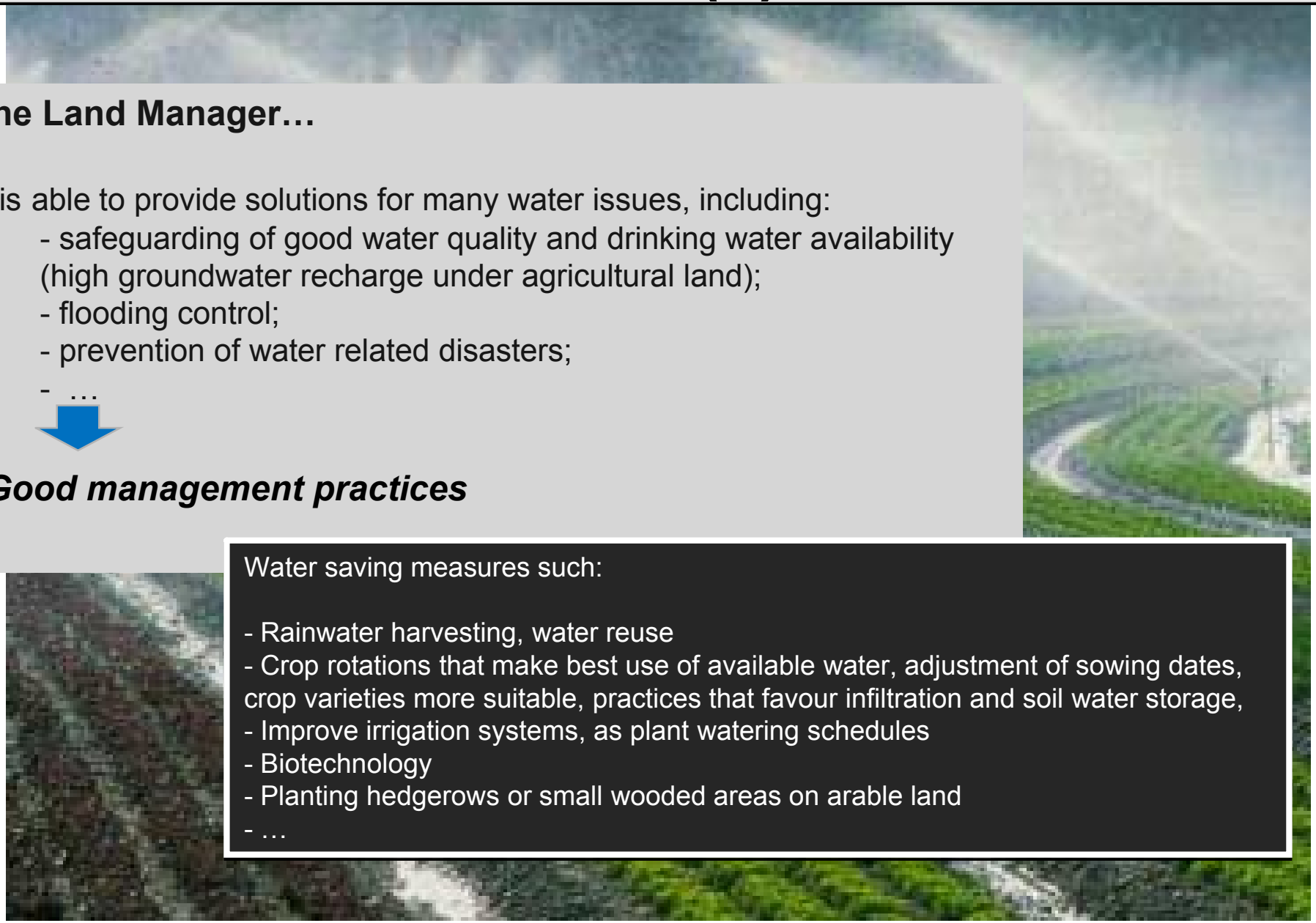
- Framework Directive (WFD), which integrates other policies such: Groundwater directive; Floods directive; Environmental quality standards directive(EQS); Chemical analysis directive; Nitrates Directive...

- Common Agriculture Policy (CAP)

+ Blueprint for safeguarding Europe's water by 2012

Will include revision of River Basin Management Plans, strategy on water scarcity & droughts and the vulnerability to climate change.
It will also focus on illegal abstraction

Water (II)



The Land Manager…

– is able to provide solutions for many water issues, including:

- safeguarding of good water quality and drinking water availability (high groundwater recharge under agricultural land);
- flooding control;
- prevention of water related disasters;
- …

Good management practices

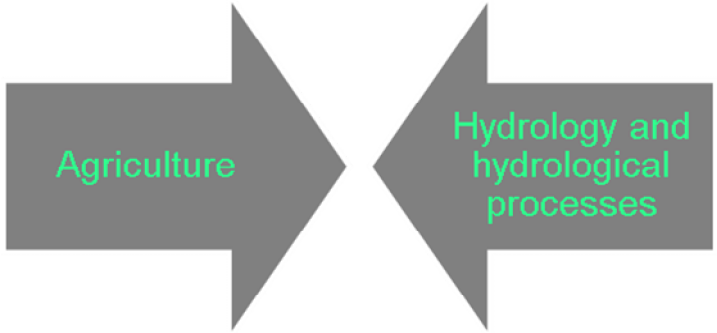
Water saving measures such:

- Rainwater harvesting, water reuse
- Crop rotations that make best use of available water, adjustment of sowing dates, crop varieties more suitable, practices that favour infiltration and soil water storage,
- Improve irrigation systems, as plant watering schedules
- Biotechnology
- Planting hedgerows or small wooded areas on arable land
- …

Water (III)

However...

Water services are still a frozen issue.



Asks for:

- Adapted to regional realities;
- Promotion of voluntary and cooperative action towards sustainable water management;
- Incentivise the provision of water related services;
- Support R&D and technologies.

Water crisis

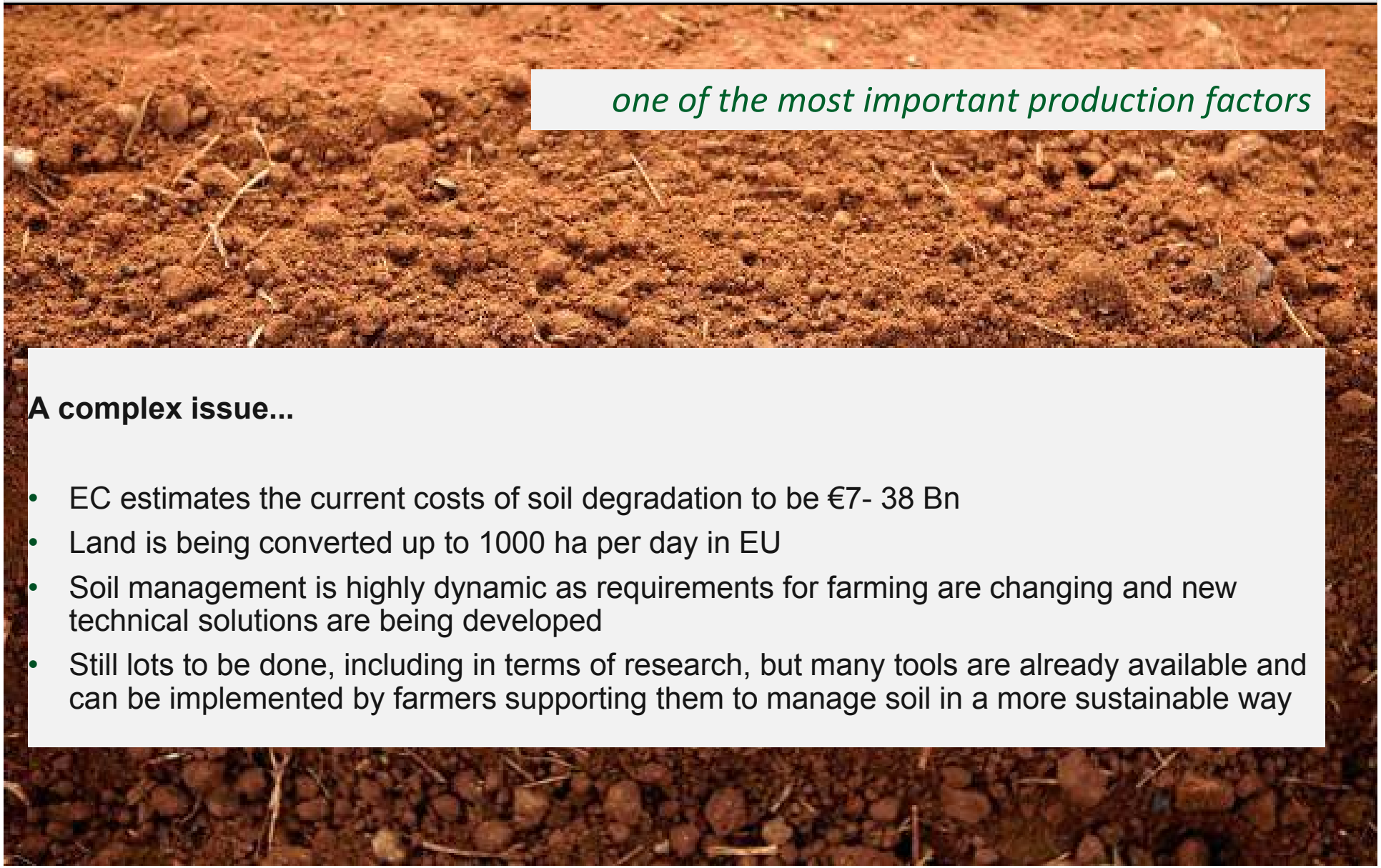
Water is a renewable but fragile resource : 6,9 billion people share the same amount of water on the planet today which 300 million inhabitants shared at the time of Ancient Rome

Water use	Liters of water
Drinking water	2-5 liters/pers./day
Domestic use	20-500 liters/pers./day
Wheat	500-4000 liters/kilo
Meat	5000-15000 liters/kilo
Biofuels	1000-3500 liters/liter
Cotton (ex: t-shirt)	2000-3000 liter

Source: IWMI (2007) In: Water for Food, Water for Life: A Comprehensive Assessment of Water Management in Agriculture, London: Earthscan, and Colombo: International Water Management Institute

ELO European Landowners' Organization

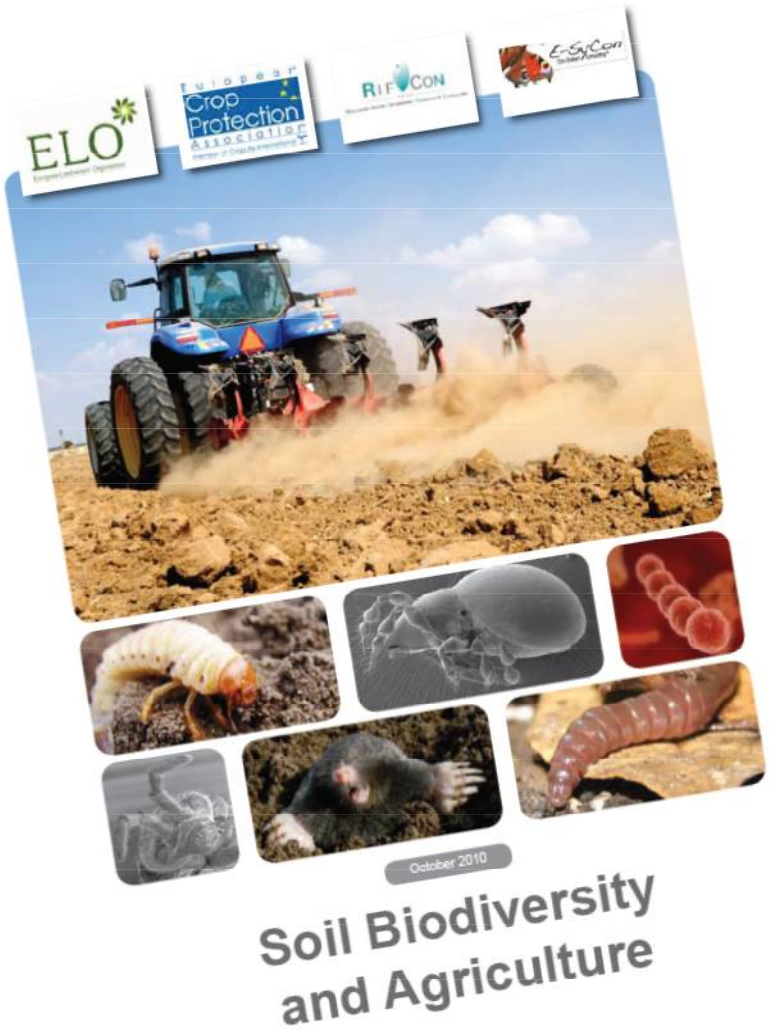
Soil



one of the most important production factors

A complex issue...

- EC estimates the current costs of soil degradation to be €7- 38 Bn
- Land is being converted up to 1000 ha per day in EU
- Soil management is highly dynamic as requirements for farming are changing and new technical solutions are being developed
- Still lots to be done, including in terms of research, but many tools are already available and can be implemented by farmers supporting them to manage soil in a more sustainable way



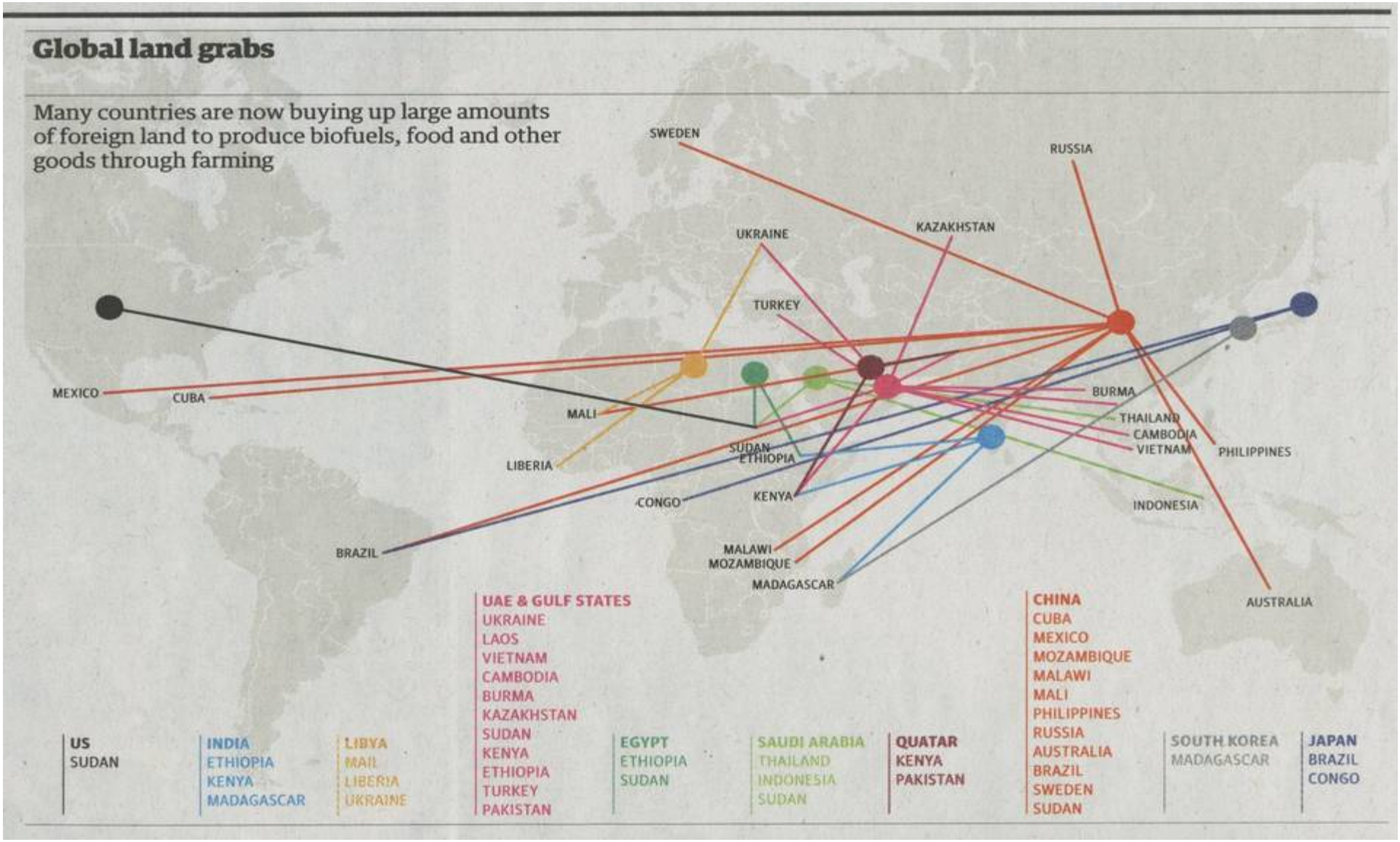
Soil Biodiversity

the number of organisms under a single footprint is tremendous!

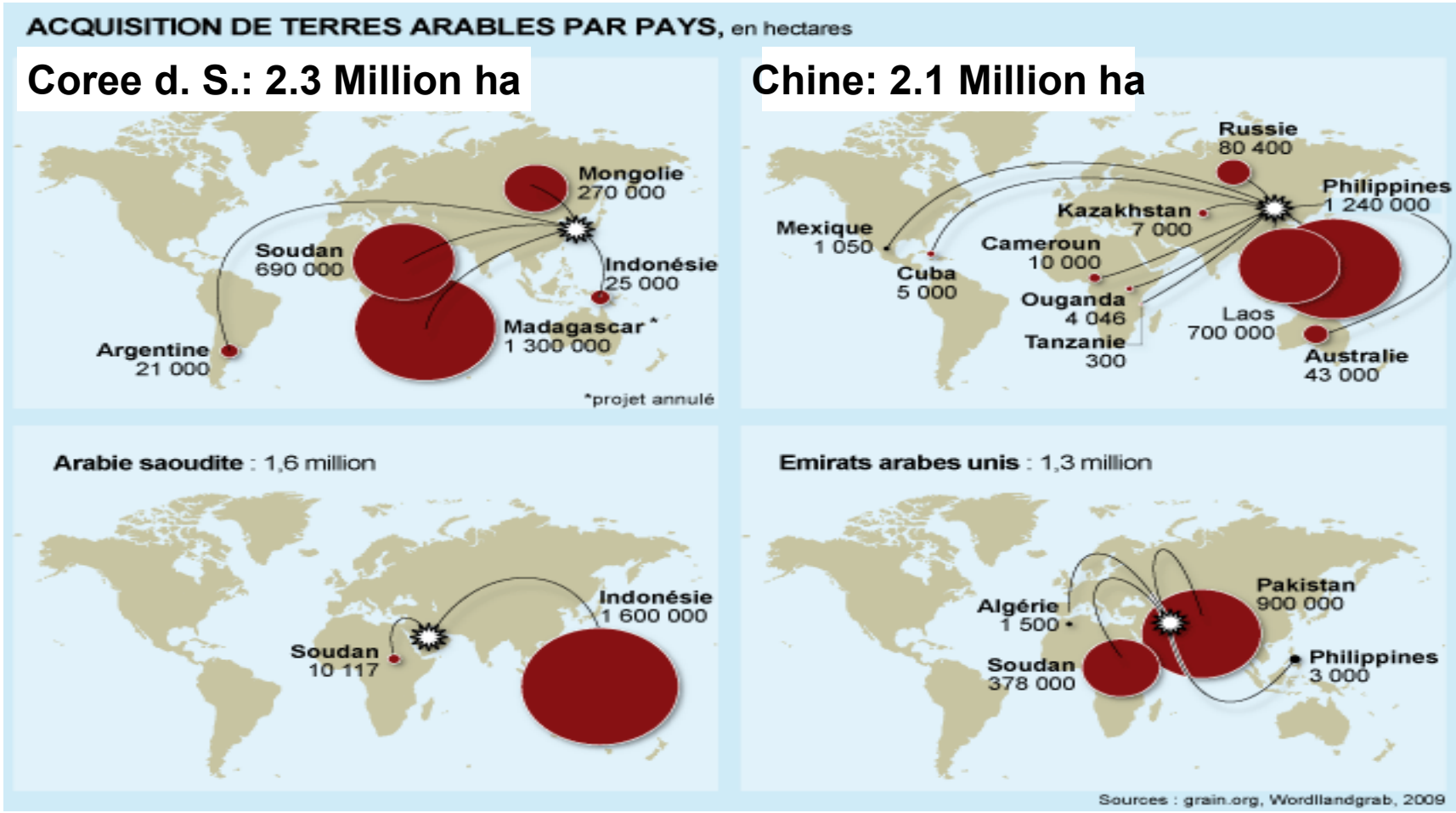
Essential for the provision of key "**ecosystem services**"

- **formation of humus;**
- **carbon cycling;**
- **fixation of atmospheric nitrogen;**
- **improve soil's physical properties**

Land Grabbing:
a dangerous trend?

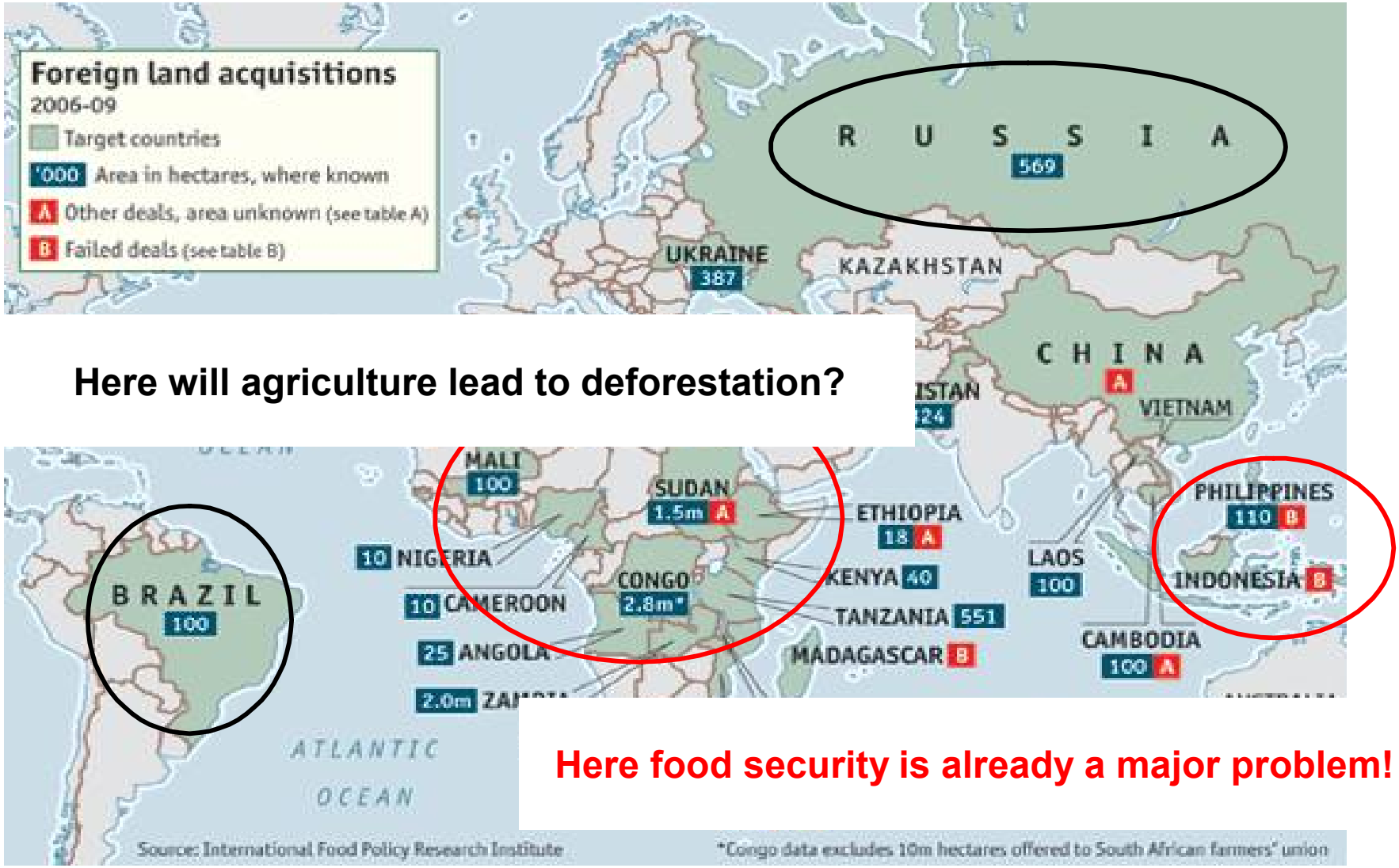


The large global investors in land



Rapport CAS, Juin 2010 – M. Clave

Countries hosting foreign (land concessions) between 2006-2009

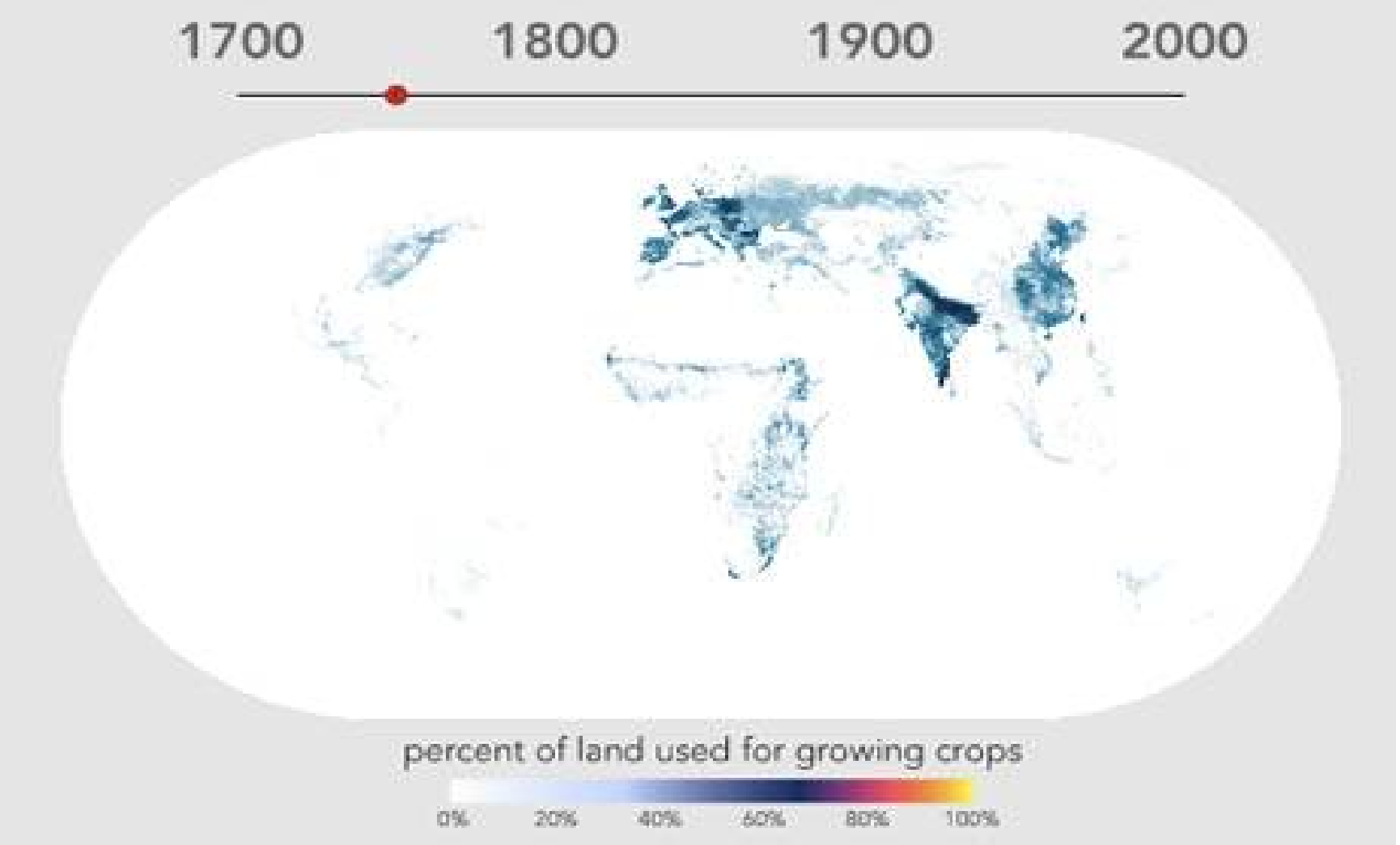


Here will agriculture lead to deforestation?

Here food security is already a major problem!

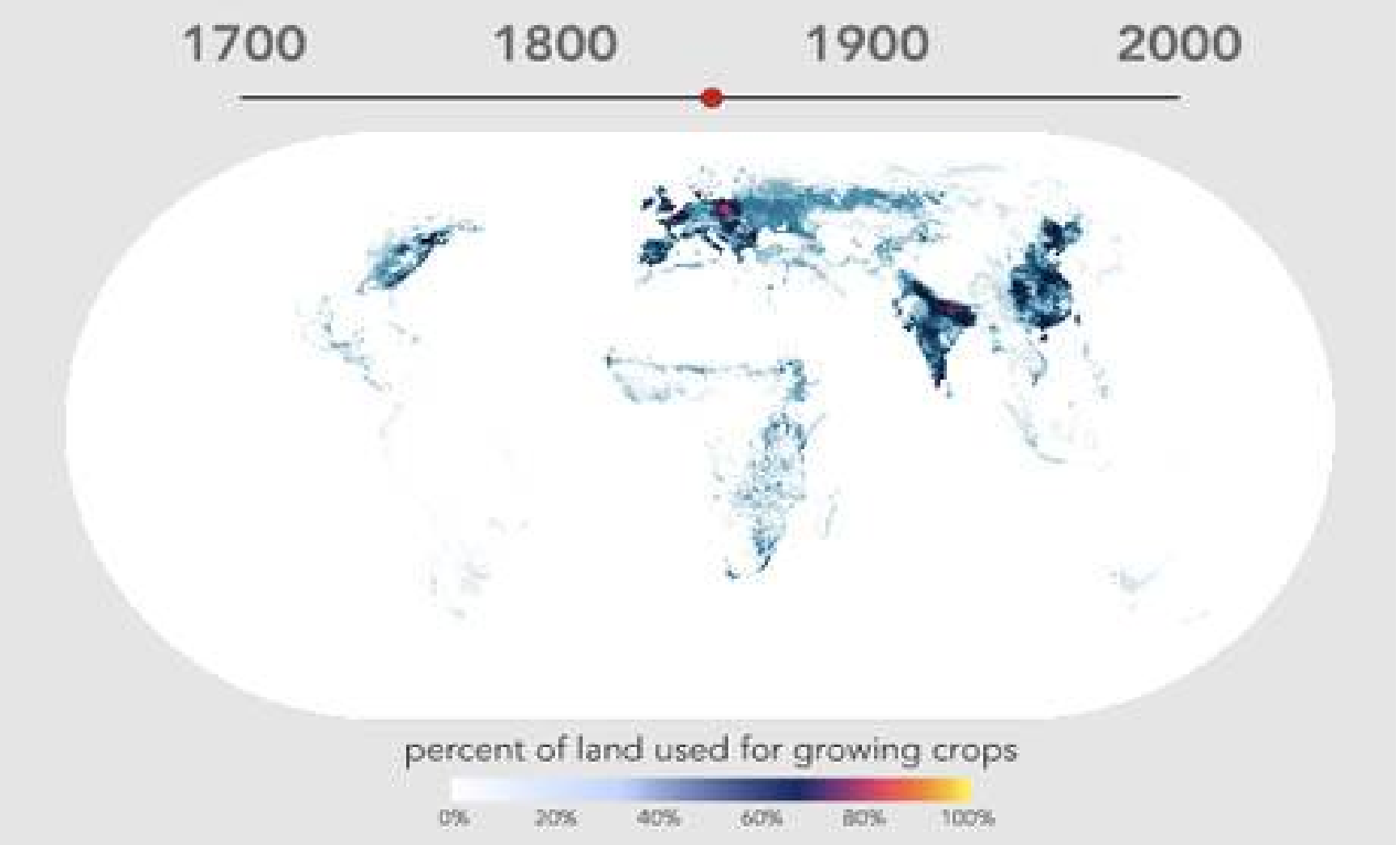
Source: Rapport CAS Juin 2010, M. Clave

Evolution of cultivated surfaces for agriculture 1/3



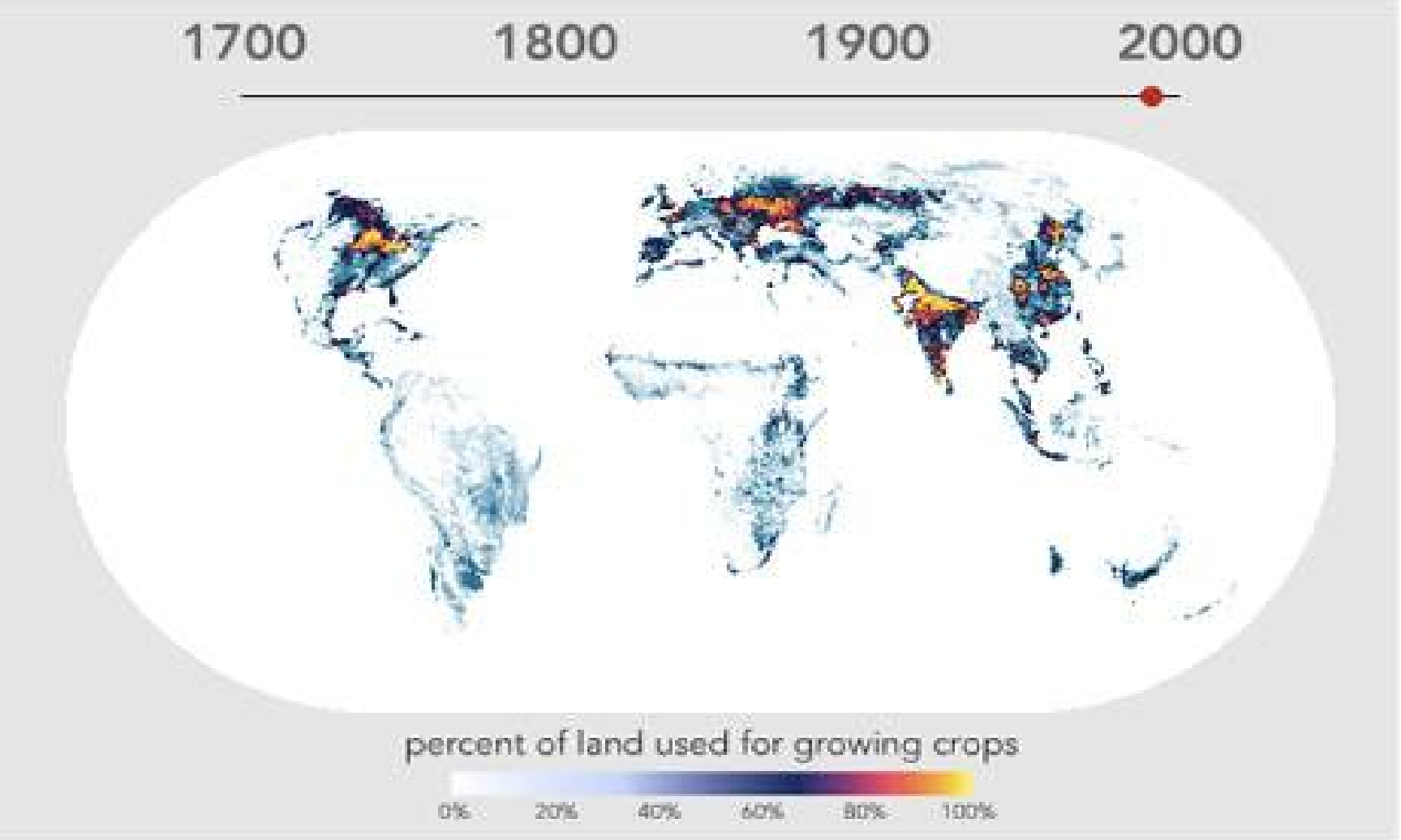
Source: Rankin, 2009

Evolution of cultivated surfaces for agriculture 2/3



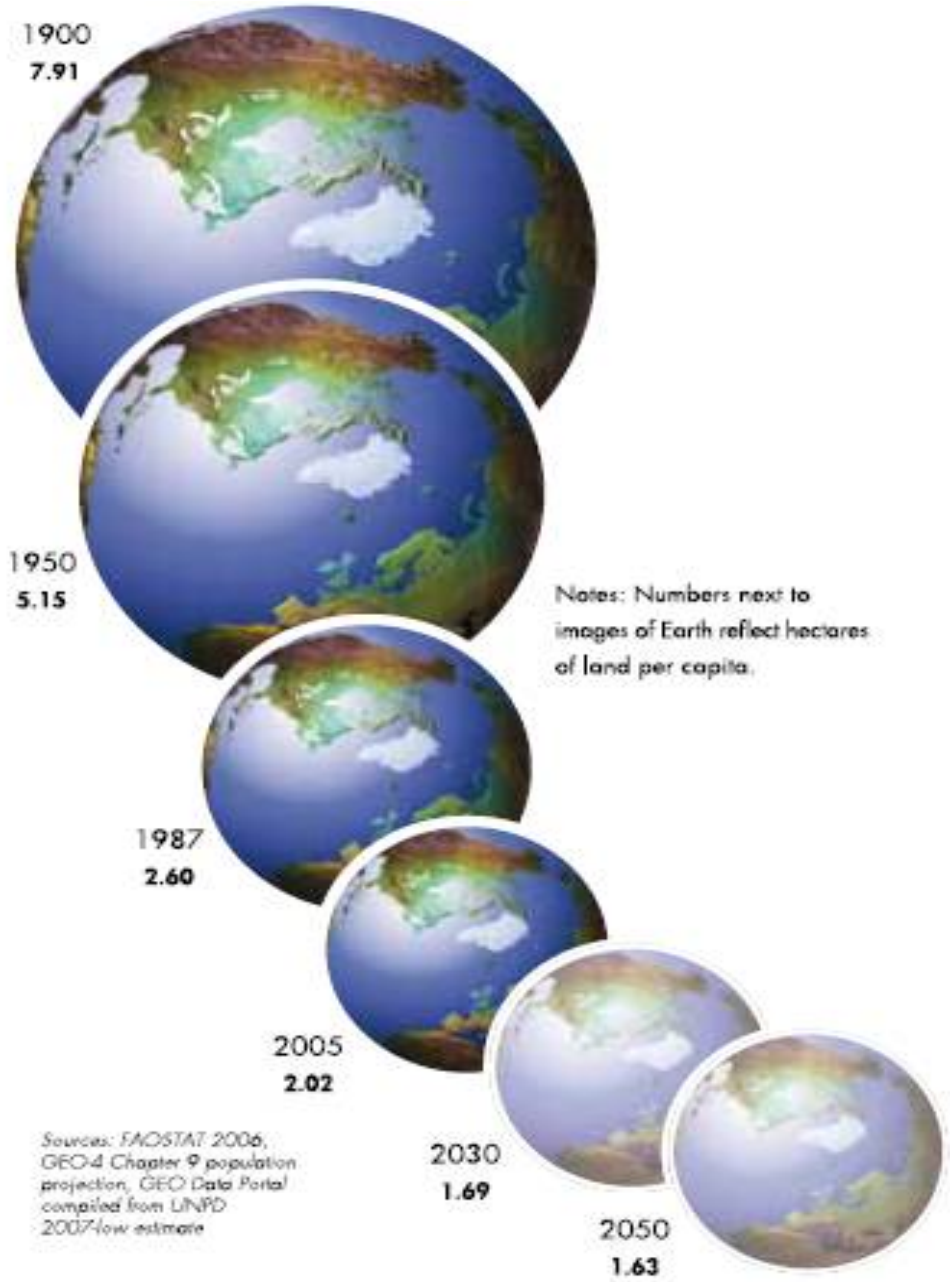
Source: Rankin, 2009

Evolution of cultivated surfaces for agriculture 3/3



Source: Rankin, 2009

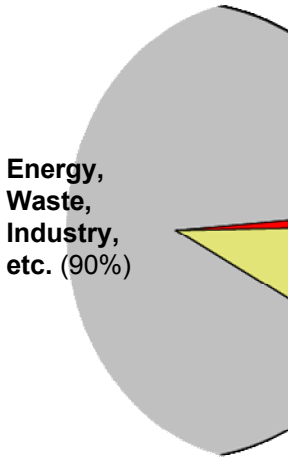
Diminishing availability of land per capita!!



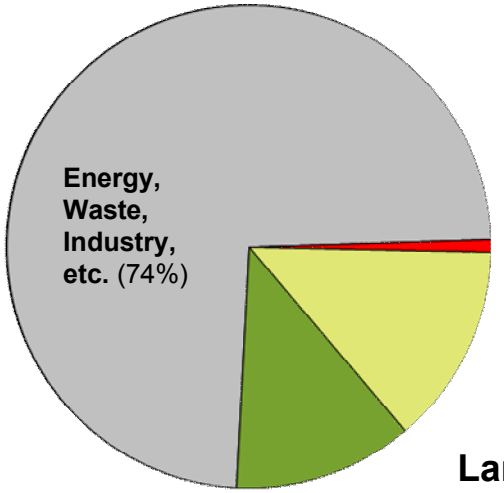
Source: UNEP, 2009

Contribution of Agriculture to Climate gas emissions

Europe (EU-27)



GLOBAL



Production of mineral N fertilizer (0.8%)*

Emissions from agriculture (14%)

Land use change for agriculture (12%) = ~ 6 bn t CO2)

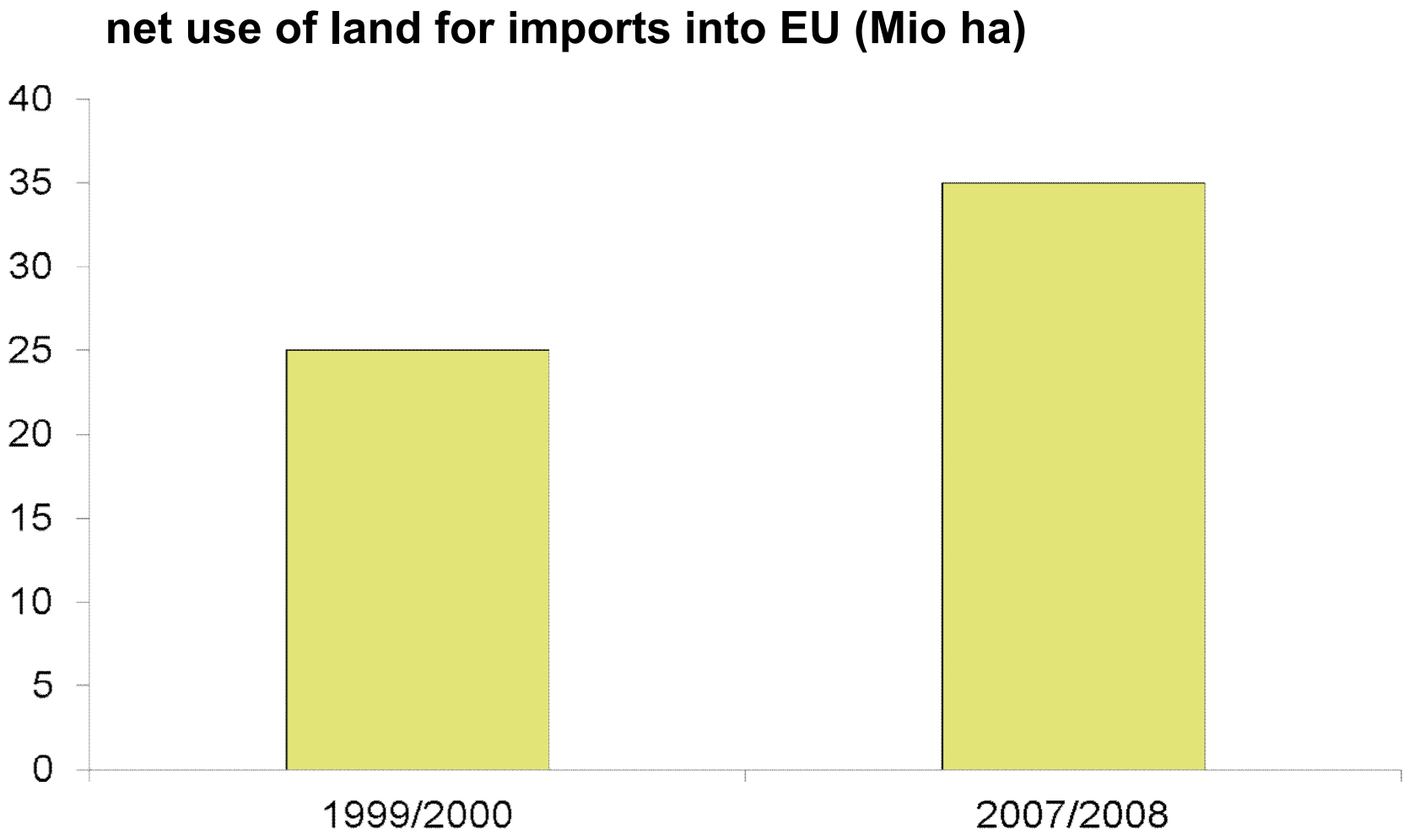
Total: ~ 5 bn t CO2eq

Total: ~ 49 bn t CO2eq

Producing less in Europe will increase ecological footprint elsewere !

Based on UNFCCC (2008), Bellarby et al. (2008), *Fertilizers Europe –
Courtesy of YARA

Land used outside Europe to produce agricultural goods for European consumption: Indirect form of land grabbing?



Source: Witzke & Noleppa (2010), Research Report – **Courtesy of YARA**

Key Messages:

1) **Wether or not coutries buy land the effects of land grabbing are the same (ex. EU imports)**

2) **Reducing agri-production in EU will increase ecological footprint globally (more land used for agriculture = more CO2)**

Biodiversity
ELO activities

- ELO is an active member of several experts meetings at the European Commission, as the **Coordination Group for Biodiversity**, **the Invasive Alien Species Working group**, the **Green infrastructure Working group** etc…
- ELO published a new publication with ECPA called **"Pollinator and agriculture "**
- **ELO, FCS and YFCS** participated to the **"Green Week" 2011 from 24 to 27 of June** at the European Commission

NEW EUROPEAN BIODIVERSITY CONFERENCE

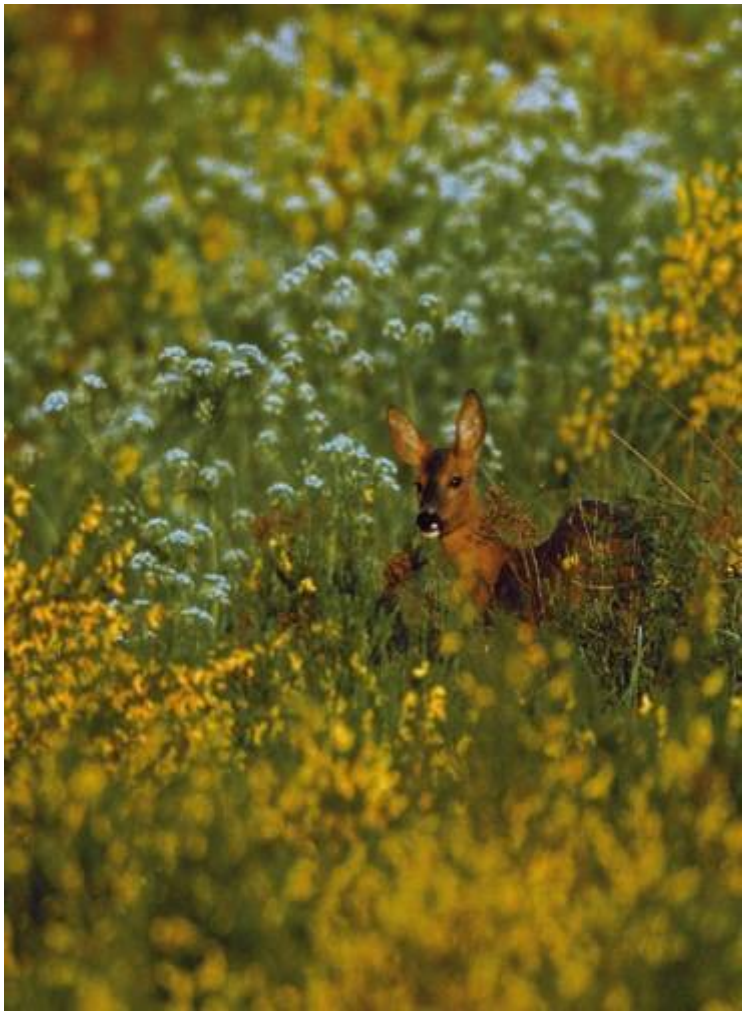
1st DECEMBER 2011- EUROPEAN PARLIAMENT
Brussels

Promoting Sustainable Land Management

Towards a label recognizing exemplary land management & nature conservation

- Objectives:
- Establish a network of exemplary estates/territories
- Create a new ”LABEL” according to specific criteria and indicators
- Taking into account the three pillars of sustainable development:
    - Environment (referring to Natura 2000 objectives);
    - Economic; (providing goods and services)
    -
    - Socio-cultural Aspects: (benefitting rural communities)

Working with Natura 2000 and anticipating upcoming strategy on biodiversity



Biodiversity
LIFE+ 3watEr

3WATER working together by nature

- The overall objective = to improve habitat types and species of Community importance, such as the Bittern and Tree frog, in the Pond area Midden-Limburg.
- a unique private-public partnership = landowners can ensure nature conservation more efficiently than public actors
- The European Landowners' Organization = The Coordinating Beneficiary
- Triple-E approach integrating a stronger going together of Ecology, Education and Economy.

- Communication and dissemination, regular visits of the project area
- Creation of a strong and sustainable basis for the long term conservation and further development of this unique wetland area

LIFE+ 3watEr project conference on the role of landowners in nature conservation

November 2011, Brussels

NATURA 2000

The Business and Biodiversity Platform

- **The EU Business and Biodiversity Platform (B@B)** = a unique facility within the European Commission's Initiative where businesses can come together to share their experiences and best practices, learn from their peers, and voice their needs and concerns to the European Commission.
- **Targeted sectors**: Agriculture, Forestry, Tourism, Extractive Industry, Banking, and Food Supply.
- The Platform was **presented at the Nagoya Biodiversity Conference**.
- **Open for all types of business organizations**, from SMEs to larger companies
- **Free participation for the FCS members**, first-hand information
- http://ec.europa.eu/environment/biodiversity/business/index_en.html

Economic Viability for Landowners (I)

- **Activities must be economically viable for landowners** – they should be able to live from their produce and be insured again excessive price fluctuations

- **They must obtain better conditions of fairer competition** – via more effective anti-trust policies and better bargaining power in the market. As well as food, landowners are expected to produce and contribute to (inter alia):

- **Ecosystems/Ecosystem Services/Public Goods** – production of these inevitably involves costs. Land used for production of these environmental services would otherwise be used for production of products paid for by the market. According to the LUPG, in the UK payments to land managers for these services are 1/3 the level they should be**.**

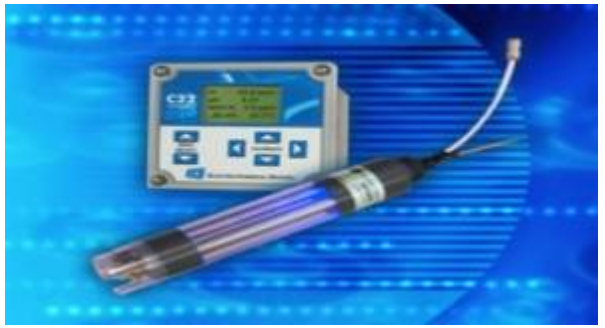
- **CAP reform must provide an appropriate framework for the provision of public goods by all active land managers who keep land in good agricultural and environmental condition.**

Agricultural biotechnologies: A need for more research, innovation and clearer political messages

- Thanks to technology, the EU has been able to become a key granary of food for the world. Opportunity to produce more food.
- EU's role cannot be consolidated without applying new, authorized technologies and further research and development
- This is not just a technical, but an ethical question, universities should promote a rational social debate (Vs emotional campaigns)
- Hunger in the world cannot be defeated without biotechnology
- An active and responsible role by Universities is urgently needed to ensure that EU embraces safe innovation including plant science innovation to the benefit of Europeans, the environment, farming communities and consumers.

New developments & innovation: NOT ONLY biotechnologies

- **AgBalance:** a new tool for measuring sustainability in agriculture using Life-Cycle-Assessment methodology (BASF)



- **YARA N- Sensor® technology** (YARA)
- **GPS** (satellite) based sensing of pests, diseases and abiotic stresses (water, soil, biodiversity)

- **New breeding techniques** including biotechnology
- **Use of enzymes** in agriculture to increase soil fertility

New developments & innovations: biomass Vs biofuels

- **Why ELO prefers Biomass over Biofuels?**

  - Biomass allows for the use of WASTE instead of LAND

  - No discussion Food or Fuel

  - Gives land managers option to diversify income but has lower impact on biodiversity (less intensification)

There is no "good" and "bad" solution!

Production of both biomass and biofuels must take into account sustainability and resource-efficiency criteria

Biomass

The MAKE-IT-BE Project (DECISION MAKING AND IMPLEMENTATION TOOLS FOR DELIVERY OF LOCAL & REGIONAL BIO-ENERGY CHAINS) focuses on the development and implementation of integrated bioenergy chains across Europe. Launched in 2008, the overall objective of the project is to develop decision-making and implementation tools for local and regional bioenergy chains within four project regions.

The MAKE-IT-BE Final Conference
5th October 2011, Brussels

Studies and methodology are available on the website in four project languages (DE, EN, IT,SLO) www.makeitbe.eu

Life science universities & ELO: a winning partnership

Publications

- Scenar 2020**: Wageningen University (LEI), Leibniz University (ZALF)**
- Wildlife Estates label: **University of Madrid (IIMA)**
- Soil & Biodiversity, Pollinators and agriculture: **RIFCON** (Germany)
- Make it Be project: **CRPV (Italy), EEE (Germany)**
- "Property rights: economy and environment": **University of Marseille (ICREI)**
- Multifunctional landscapes: **University of the Sacred Heart (OPERA)–** Piacenza (Italy)

Awards

- Soil Award: **University of Lubljana, European Confederation Soil Science Societies**
- Anders Wall Award: **Royal Swedish Academy of Agriculture and Forestry**

Future challenges for life-science universities

- **PLACING RESEARCH IN THE BIGGER CONTEXT**
  work towards an integrated strategy not only with specialized fields of research.

- **BETTER COMMUNICATION TO POLICY MAKERS**
  promote the integration of environmental, ecosystem and agriculture research into a clear and comprehensive rural development strategy

- **BETTER COMMUNICATION WITHIN SOCIETY**
  play a stronger role in channeling the societal discussion on sustainability, ecology, sustainable agriculture, GMOs, etc.

- **STRONGER PARTNERSHIP WITH LAND MANAGERS**
  maintain a strong link with business and universities should engage in the discussion on proportionality of regulation of innovations (precautionary principle Vs risk assessment) for example on GMOs and plant protection products

Academic knowledge needs to trickle down to local realities and be « user friendly »

Closing message

WORK WITH:

- **LAND MANAGERS**
- **INDUSTRY**

AND FOCUS ON TRANSLATING ACTIONS INTO MEASURABLE INDICATORS

(FOR POLICY MAKERS)

ELO CAN BE THE BRIDGE!!

Thank you for your attention

5th *Forum for the Future of Agriculture* (FFA)
27 March 2011 – Brussels