

# Landscape services in support of biodiversity targets

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Stresa, Italy, May 2008

# Outline

1. Landscapes and their implications for biodiversity
2. Landscape (ecosystem) services and their relation to CBD
3. Creating incentives for maintenance of biodiversity on landscape level
4. Integrated policy approaches

# Landscape and Biodiversity I

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- **Landscapes in Germany and most parts of Europe are cultural landscapes**
- **Landscapes are the result of the interaction between natural conditions and human use / impacts**
  - **Biodiversity is a major component of landscapes**
  - **Landscapes “host the biodiversity”**
- **On a regional level landscapes are forming important components of the overall biodiversity**
- **Landscapes are the “shape” of the biodiversity in this spatial context**

# Landscape and Biodiversity II

- **Spatial dimension:**
  - **Biodiversity is expressed on different scales – from the genetic level to a global scale**
  - => there are dimensions of biodiversity below the landscape level as well as above (regional or global scale)**
  - => Landscapes are larger than biotopes and biotope complexes but smaller than biomes**

**Landscape**

**Biodiversity**

Gene-specimen - ecosystem - ecosystem-complex - bio-geographic region - world

# Protecting landscapes

## Protecting landscapes

- is a central objective of the German Federal Nature Conservation Act
- “landscape protection areas” and “landscape planning” are statutory instruments for the protection and development of landscapes
- comprises more than the protection of landscape components and functions
- is an important aim of the German National Strategy on Biodiversity: (referring to wilderness areas, cultural and urban landscapes)
- could be encouraged by Germany joining the European Landscape Convention



# Landscapes as a base for well-being

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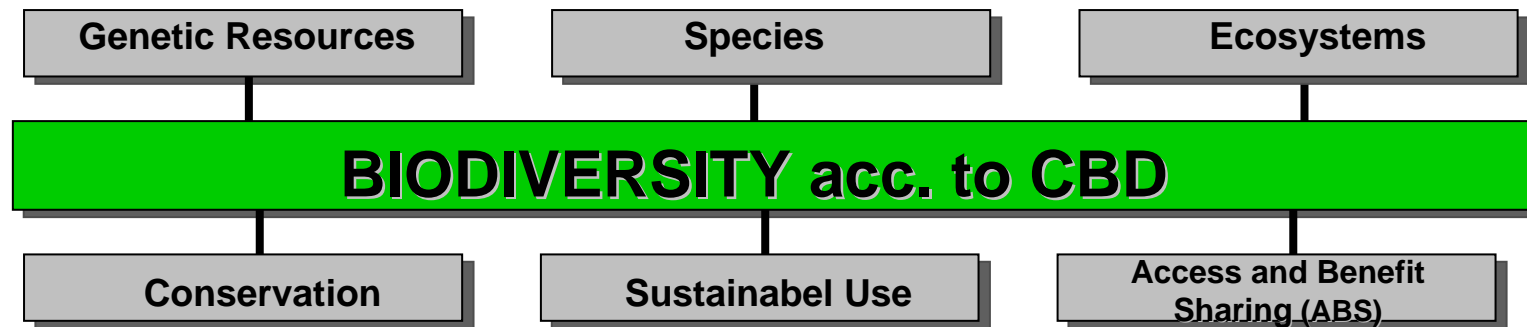
" Everyone in the world depends completely on Earth's ecosystems ... "

- „Wellbeing is a positive physical, social and mental state; ... it requires that basic needs are met, people have a sense of purpose, they feel able to achieve important personal goals and participate in society
- It is enhanced by conditions that include supportive personal relationships, strong and inclusive communities, good health, financial and personal security, rewarding employment, **and a healthy and attractive environment**
- Governments role is to enable people to have a fair access now and in the future to the social, economic **and environmental resources** needed to achieve wellbeing. An understanding of the effect of policies on the way people experience their lives is important for designing and prioritising them, “

**People live, work and seek recreation in landscapes, not in ecosystems, they identify with landscapes, not with single species.**

# Ecosystem Approach I

## Aspects covered by the CBD:



## 12 Principles of ecosystem approach acc. to CBD:

- (1) The objectives of management are a matter of societal choice
- (2) Management should be decentralized to the lowest appropriate level
- (12) All relevant actors from society and scientific disciplines should be involved

➤ **Socio-economically user-founded concept**

# Ecosystem Approach II

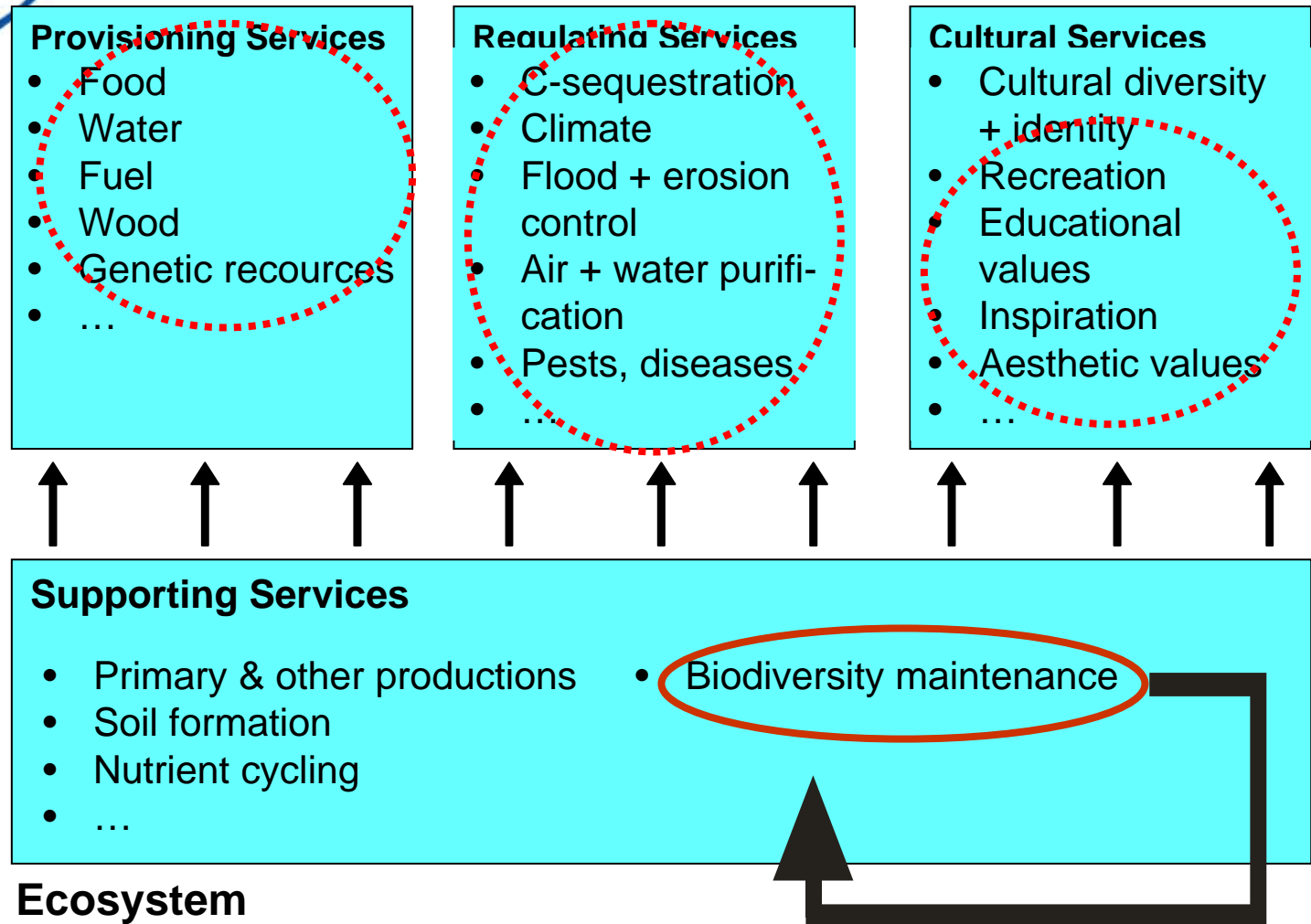
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**...according to the Millenium Ecosystem Assessment (MEA):**

- 1. Provisioning services** (food, fibre, fresh water)
- 2. Cultural services** (recreation, aesthetic experiences)
- 3. Supporting services** (such as soil formation and retention)
- 4. Regulation services** (regulation of climate, water and some human disease).

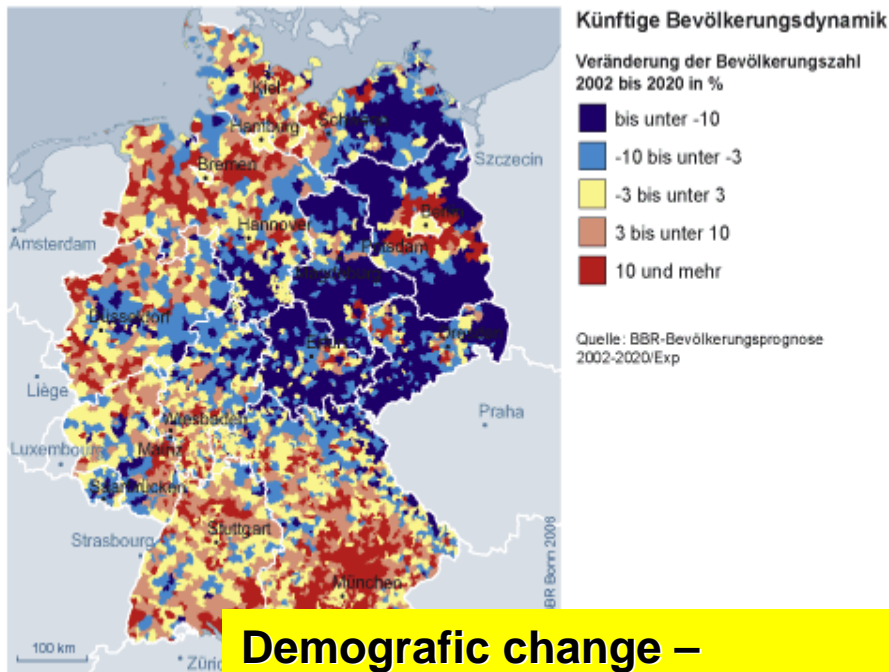
➤ **Biophysically founded concept**

# Contribution of Biodiversity to Maintenance of Ecosystem Services



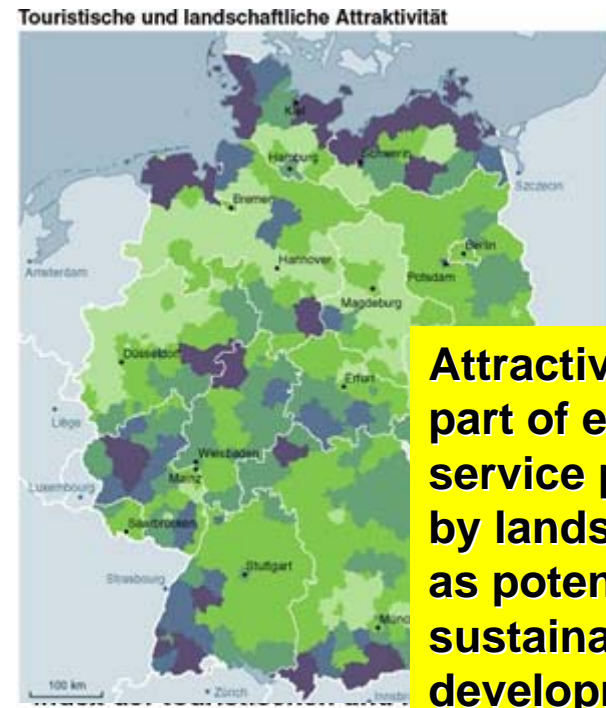
# Challenge for achieving biodiversity targets

## Aesthetical values of landscapes as a chance



**Demographic change – suburbanisation**

**New balance between cities & rural areas required: Energy, agriculture, tourism**



**Attractiveness as part of ecosystem service provided by landscapes & as potential for sustainable rural development**



Kreise, Stand 31. 12. 2001  
Quelle: Laufende Raumebeobachtung des BBR

# Biodiversity as a public good

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“Recognizing potential gains from management there is usually a **need to understand and manage the ecosystem in an economic context.**”

Any such ecosystem-management programme should

a) reduce those market distortions that adversely affect biological diversity

**b) align incentives to promote biodiversity conservation and sustainable use**

c) internalise costs and benefits in the given ecosystem to the extent feasible.” (Decision V/6, Annex 1, CBD COP 5-Decision 6 UNEP/CBD 5/23)

- **Biodiversity provides life-support services, part of it being a public good**
- **Protection and management of biodiversity that also serves the maintenance of ecosystem services should be focused on the landscape level**

# Multifunctionality of agriculture

## White Services

Food security and safety

## Yellow services

Role of agriculture for rural cohesion and vitality, ambience and development, exploiting cultural and natural heritage, creating a regional identity and offering hunting, agro-tourism and agro-entertainment.

## Blue Services

Water management, improvement of water quality, flood control, water harvesting and creation of (water)-energy.

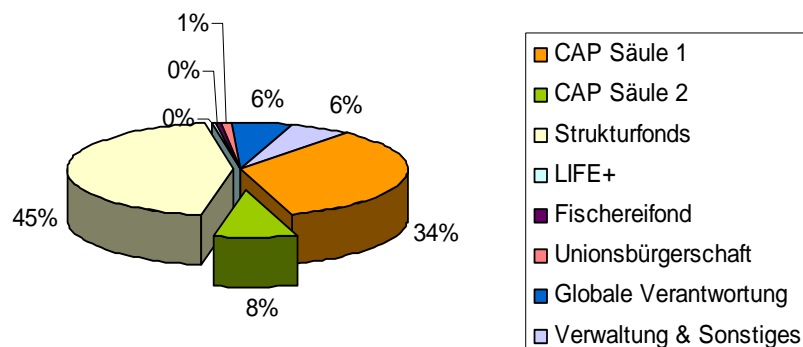
## Multifunctionality of Agriculture

## Green Services

Landscape management and the upkeep of landscape amenities, wildlife management, the creation of wild life habitats and animal welfare, the maintenance of biodiversity, improvement of nutrient recycling & limitation of carbon sinks

# Supporting the benefits of biodiversity – Role of the European budget

## EU-budget 2007-2013



864 bio. € 2007-2013

**Health Check of the CAP is a step in the right direction.**

**Modulation is necessary :**

- to stabilize the existing level of agri-environmental commitments and to increase their competitiveness in the light of rising food prices ,
- to finance the new challenges such as demographic change and to stop the loss of biodiversity and to protect Europe's diverse landscapes valued for both recreation and tourism.
- to meet the challenges of improving both water quality and water management and tackling the challenges resulting from climate change.

# Supporting the benefits through integrated policy approaches

Supporting multifunctionality is more than supporting a sector...

Attractive landscapes

Jobs

Sustainable tourism

Sustainable use & consumption of local resources

Sustainable land use

Cooperation between farmers & society

Preservation of biodiversity

... need a landscape approach (?)

In Germany, the development of landscape planning to a landscape information and management instrument could be a good foundation for such an approach!

Picture: S. Lehrke

# Conclusion

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- Ecosystem and Landscape Services require public funding
- Rural areas and the valuable landscapes need integrated policy approaches and appropriate governance units, because the people live, work and seek recreation in landscapes, not in ecosystems, they identify with landscapes, not with single species.
- Policy at EU, national and regional levels must provide clear signals, have a long-term orientation and demonstrate its credibility

# Landscape services & Landscape planning in support of biodiversity targets

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Thank you  
for your attention!

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Stresa, Italy - May 2008

