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Economic Assessment of Climate Change-Caused Impacts on Biodiversity and Ecosystem Services

- Setting Up the Scene -

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12 September 2010 - 18 September 2010

**Belpasso International Summer School:
The Economics of Ecosystem Services and Biodiversity Conservation**



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Structure of the Presentation

1. Research Context
2. Research Hypothesis



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Research Context

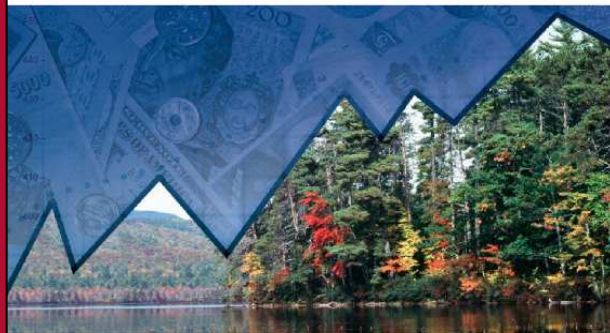
Scientific arena, policy arena, and the wider social economic context, including NGOs and cooperate sectors – raising interests in biodiversity.

1. Economic valuation of biodiversity: Sense of Non-sense (Nunes and Van den Bergh, *Ecological Economics*, 2001)
2. Millennium Ecosystem Assessment - MEA (UN, 2005)
3. The Economics of Ecosystems and Biodiversity - TEEB (EC-UNEP, 2008, 2010)
4. Global network on ecosystem services research and application, global network on BIOdiversity and Economics for CONservation (BIOECON)
5. 2010 International Year of Biodiversity (UN)
6. The Corporate Ecosystem Service Review by World Business Council for Sustainable Development (WBCSD-UN)
7. IPCC for biodiversity (Nature, June 2010)

Wanted: an IPCC for biodiversity

An independent, international science panel would coordinate and highlight research on a pressing topic.

THE CORPORATE ECOSYSTEM SERVICES REVIEW



Guidelines for Identifying Business Risks
and Opportunities Arising from Ecosystem Change

Version 1.0

Ecological Economics 39 (2001) 203–222

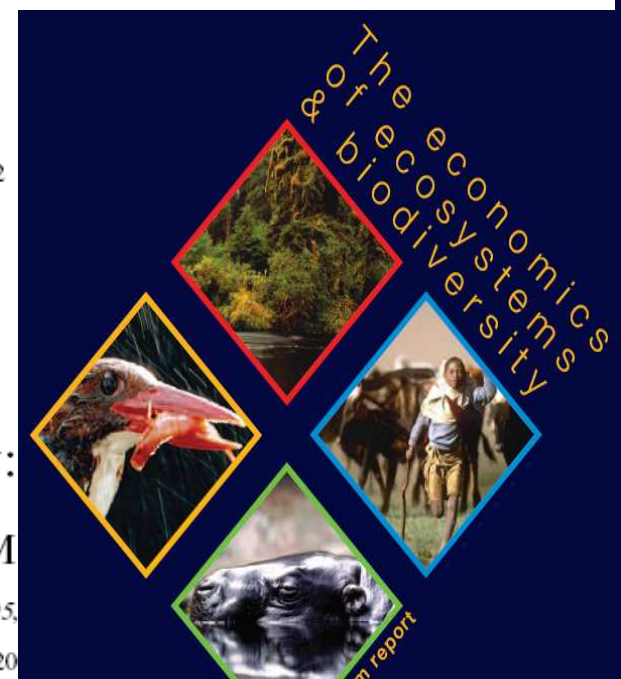
SURVEY

Evaluation of biodiversity:

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1081 HV Amsterdam, The Netherlands
Received 16 March 2000; received in revised form 19 July 2000



2010 International Year of Biodiversity

Biodiversity is life
Biodiversity is our life



Fewer creatures great and small

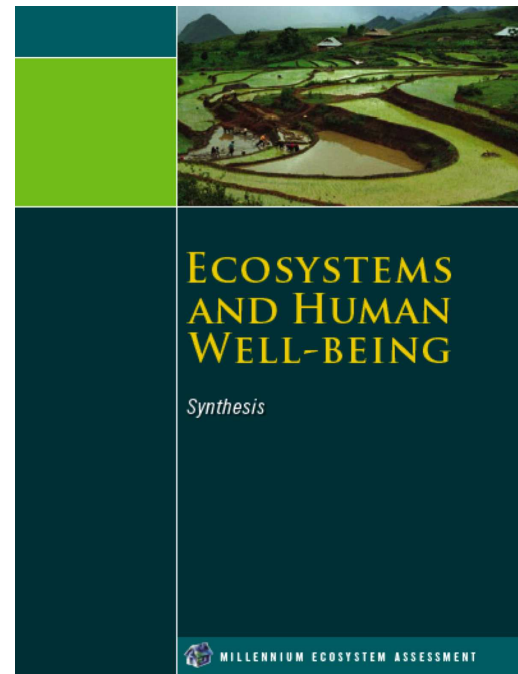
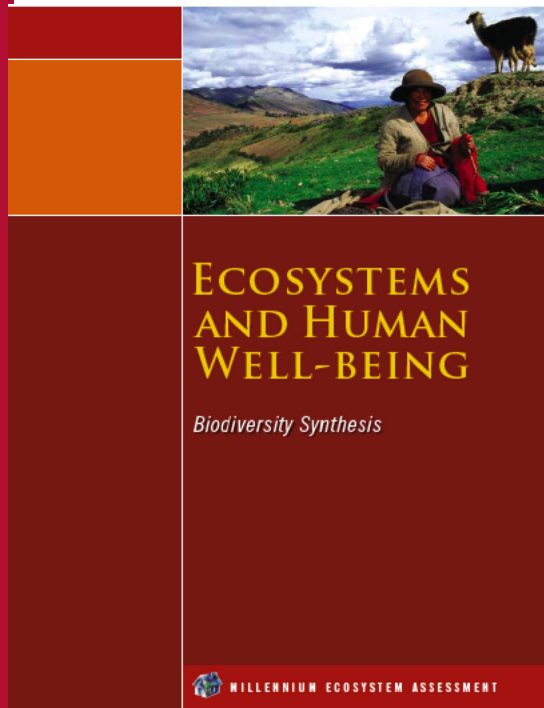
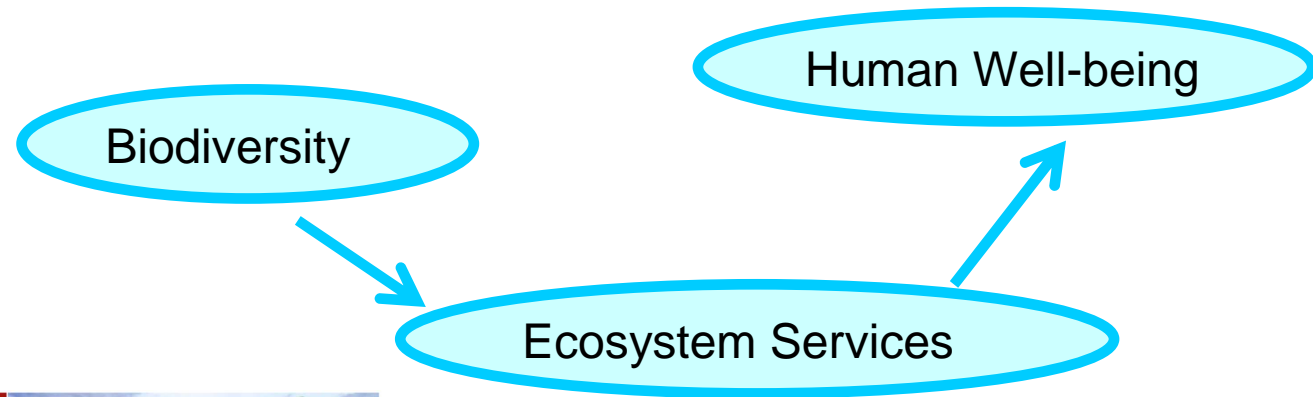
What does the loss of other species cost humans? Many congress-goers talked about valuing "ecosystem services": natural processes that benefit people, such as the pollination of crops, the purification of water in wetlands and the sequestration of carbon in soil and forests. A study released this year said the world was losing €50 billion (\$68 billion) in ecosystem services each year because of damage to nature.





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Millennium Ecosystem Assessment





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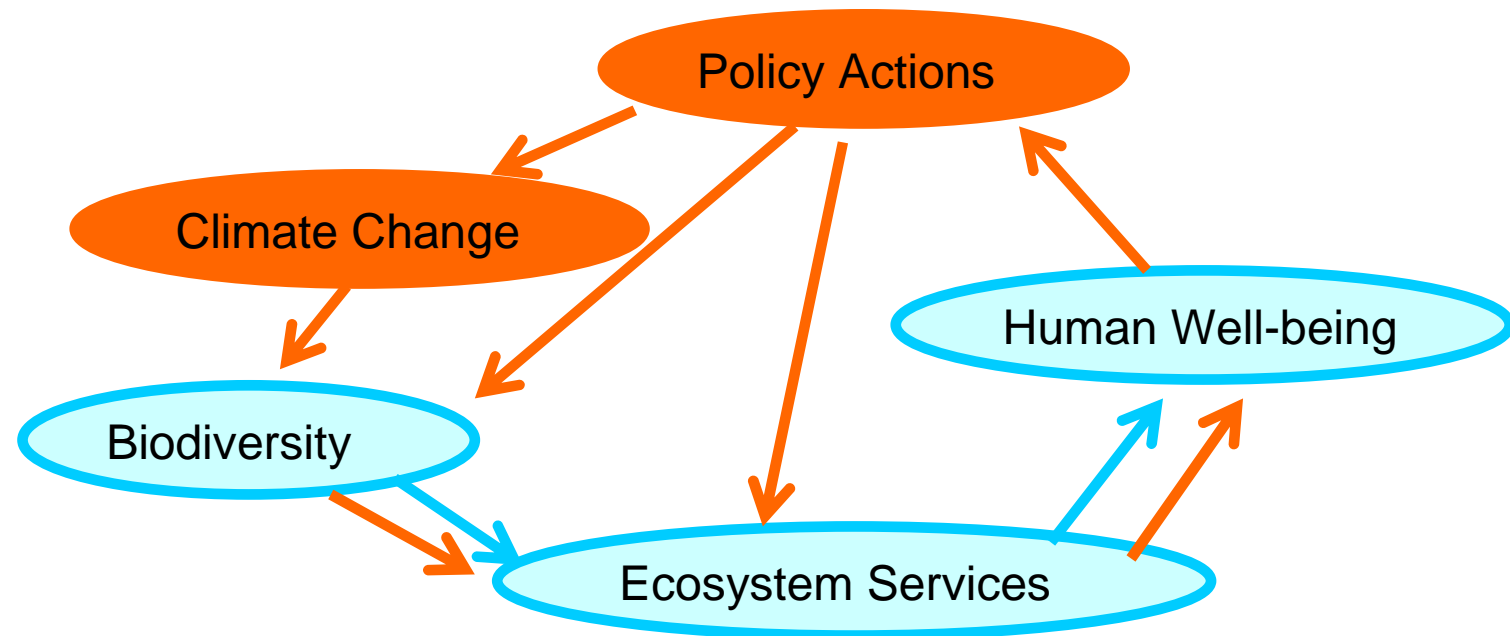
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Research Hypothesis



Main objectives :

- 1.To explicitly value the welfare impacts as a result of the changes in biodiversity and provision of ecosystem goods and services in the context of climate change.
- 2.To explicitly identify and map the welfare changes among the countries under consideration (winners and losers).
- 3.To contribute to the design of more efficient and cost-effective policies for biodiversity conservation and poverty alleviation, taking into account the induced income distributional effects among different countries.



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Impacts of Climate Change and Biodiversity Effects

European Investment Bank,
University Research Sponsorship Programme

by

Francesco Bosello

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