

Use of environmental benefits in policy discussion process

Thomas Thaler

Flood Hazard Research Centre, Middlesex University

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Introduction

- Environmental issues are of increasing concern to the EU
- Several EU legislations such as the Water Framework Directive (WFD) and the Marine Strategy Framework Directive (MSFD), but also national climate change mitigation measures as well as air quality improvement and other environmental measures, explicitly acknowledge the importance of environmental benefits and costs and the need to integrate them into the policy making process.
- This applies to direct benefits as well as to wider environmental benefits and co-benefits, e.g. the WFD provides co-benefits for soil, biodiversity and climate change in addition to improved water quality.

Research questions and outcome

- To review how environmental benefits are presented in policy options with subsequent trade-offs in different countries;
- To review how environmental benefits are included in policy making in different countries,
- Develop a European wide inventory on environmental benefits considered in policy tradeoffs;
- To assess which methodologies countries use to monetise environmental benefits and to which extent these methodologies are used in the different steps of policy making (stage of the policy cycle, policy area).

Methodology

- Task 1: established a first screening (23 countries) to identify the relevant case studies for task 3.
- Task 2: an assessment template based on key questions was developed to undertake an in-depth assessment of the selected case-studies (12 countries) in task 3.
- Task 3: 23 in-depth interviews were conducted with experts of governmental bodies and research institutions selected by the assessors.

Use of environmental benefits in policy

- There is no EU-wide approach on how to deal with environmental benefits in the policy process.
- The EU Environmental Impact Assessment Directive requires considering environmental benefits of certain (large) projects.
- The Strategic Environmental Assessment Directive only applies to a wide range of public plans and programmes (e.g. on land use, transport, energy, waste, agriculture, etc) but not to policy actions.
- The role of environmental benefits differs across Europe. While mandatory benefit assessment for policy making is required (e.g. Norway, Sweden), other countries use voluntary and/or case by case examples (e.g. France, Germany). In some countries environmental benefits do not play a role at all (e.g. Austria, Hungary).

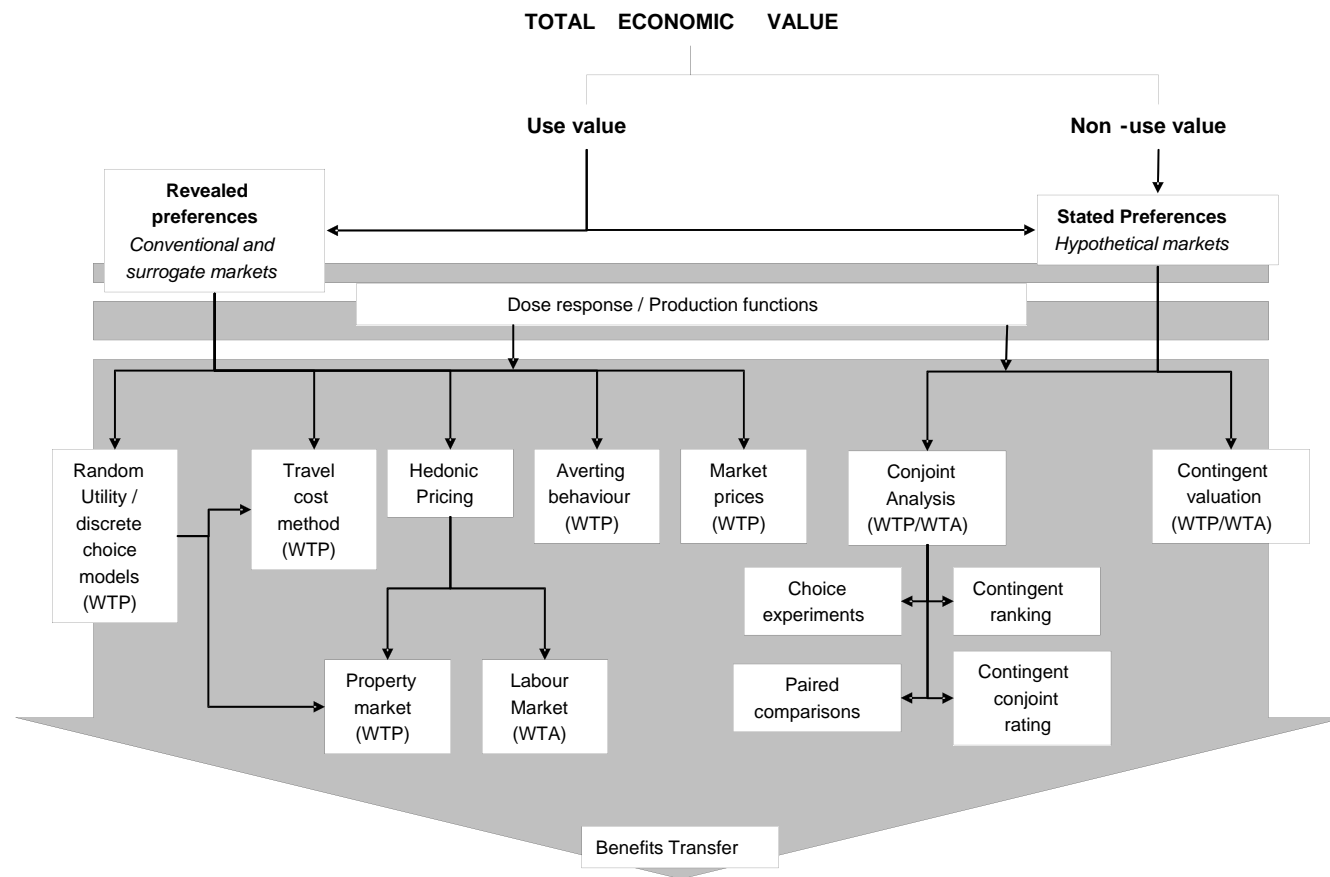
What are environmental benefits?

- Environmental benefits:
 - provisioning, such as the production of food and water;
 - regulating, such as the control of climate and disease;
 - supporting, such as nutrient cycles and crop pollination; and
 - cultural, such as spiritual and recreational benefits.
- Distinguish between the main environmental benefit of policy action (e.g. clean water) and related co-benefits such as improvements in biodiversity.

How are environmental benefits presented in the River Basin Management plan?

	Belgium	Germany	Spain	Finland	France	Italy	Sweden	UK
No benefits are described								
Qualitative description without any units		x			x		x	x
Quantitative description with physical units or environmental improvement indicators		x	x	x			x	x
Quantitative description and monetary units	x		x		x	x		x

Overview of possible valuation methods



Methodologies used for the economic valuation of environmental benefits (monetary and non-monetary)

Increase of biodiversity	Protection of nature	Increase/protection of water quality	Protection of water quantity	Soil protection	Reduction of air emissions	Aesthetic function of landscape
CVM	CVM	CVM	Market price	CVM	Costs of human health	CVM
CE	CE	CE	Benefit Transfer	Market price	Hedonic price	Market price
Benefit transfer	Benefit transfer and travel cost	Hedonic price	CVM, CE, MCA	Benefit transfer	Market price and benefit transfer	Stated preferences

Main obstacles of including environmental benefits

- Lack of financial and other resources such as knowledge, time, and experience in the use of environmental benefits.
- Lack of mandatory guidelines for benefit assessment methods.
- Public authorities lack the capacity to use cost-benefit analysis or other benefit assessment methods.
- Uncertainties regarding the robustness of the results of the assessments.
- A low perception that decisions are affected by formalised evaluation methods of policy making, so even if environmental benefits have been assessed their documentation is often poor.
- No 'long tradition' to calculate and use environmental benefits in the policy process as well as a general deep mistrust for economic valuation studies.
- A lack of transparency in the formulation and evaluation of public policy.
- Environmental benefit assessment methods can be difficult to understand.
- Difficult aspect is how environmental issues are valued in monetary terms, e.g. lack of methodological knowledge and lack of understanding about the differences between methods.
- Difficulties to communicate disseminate information related to the used methods, especially results.

Summary

- Environmental benefits are used at different stages of the policy cycle as well as for different purposes. In many cases they are not used to inform high level decision making.
- Environmental benefits are presented either quantitatively or qualitatively. Qualitative descriptors are most often descriptive text. Quantitative descriptors include non-valuated approaches (e.g. maps, graphs, figures, measurements) and valuated approaches (i.e. monetary terms). Quantitative assessments generally require more resource intensive analysis and examination.
- Use of monetary methodologies also has disadvantages, e.g. risk of providing a false justification, uncertainties etc.