

The Economics of the Global Loss of Biological Diversity 5 & 6 March 2008 Brussels

Session B2

Measuring Benefits from Ecosystem Services – Integrating Monetary and Non-Monetary Estimates

(5 March 14:00)

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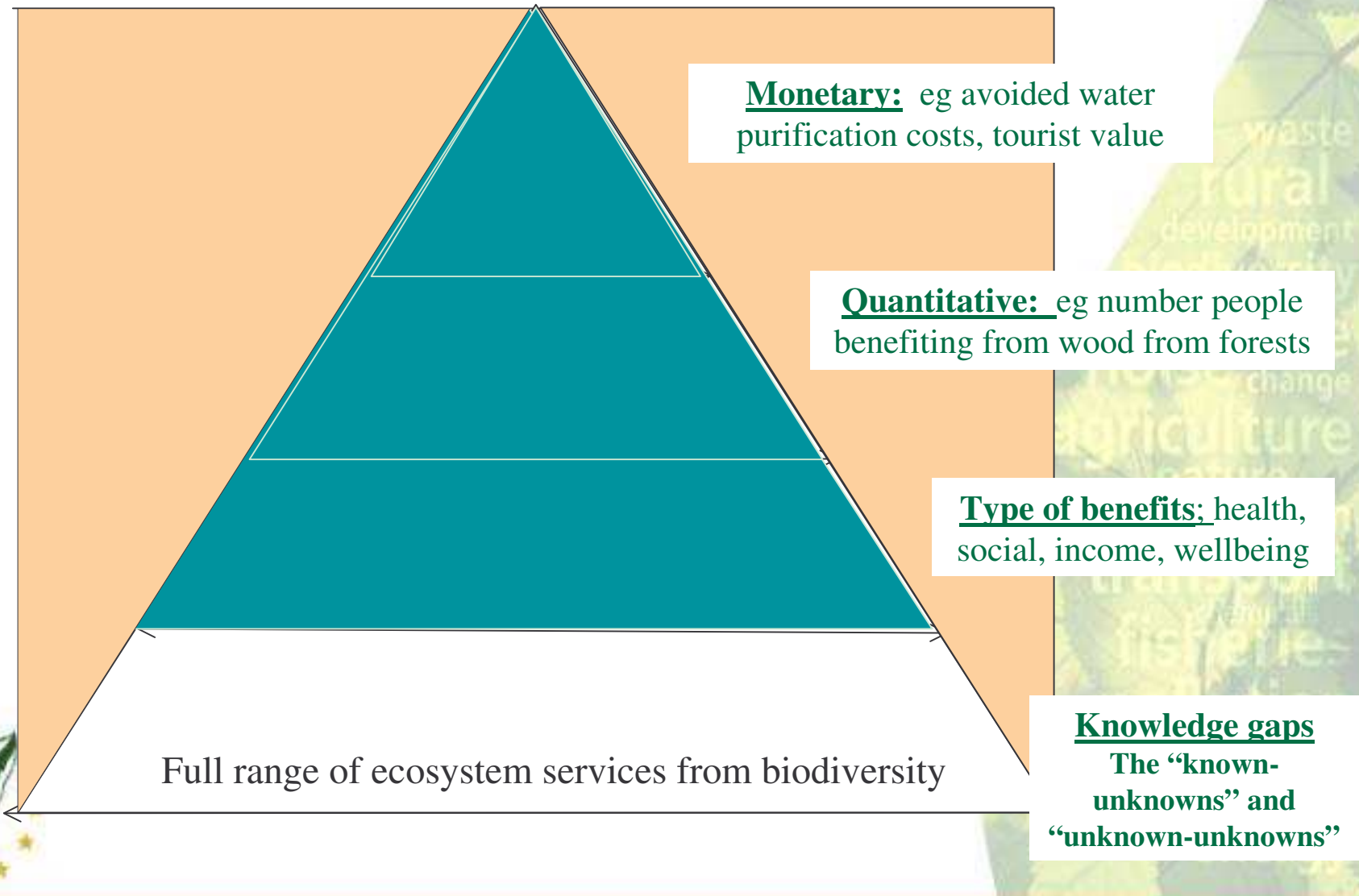
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Thanks for inputs from
Marianne Kettunen (IEEP)
Aline Chiabai (FEEM)
Ingo Braeuer (Ecologic)
Leon Braat (Alterra)

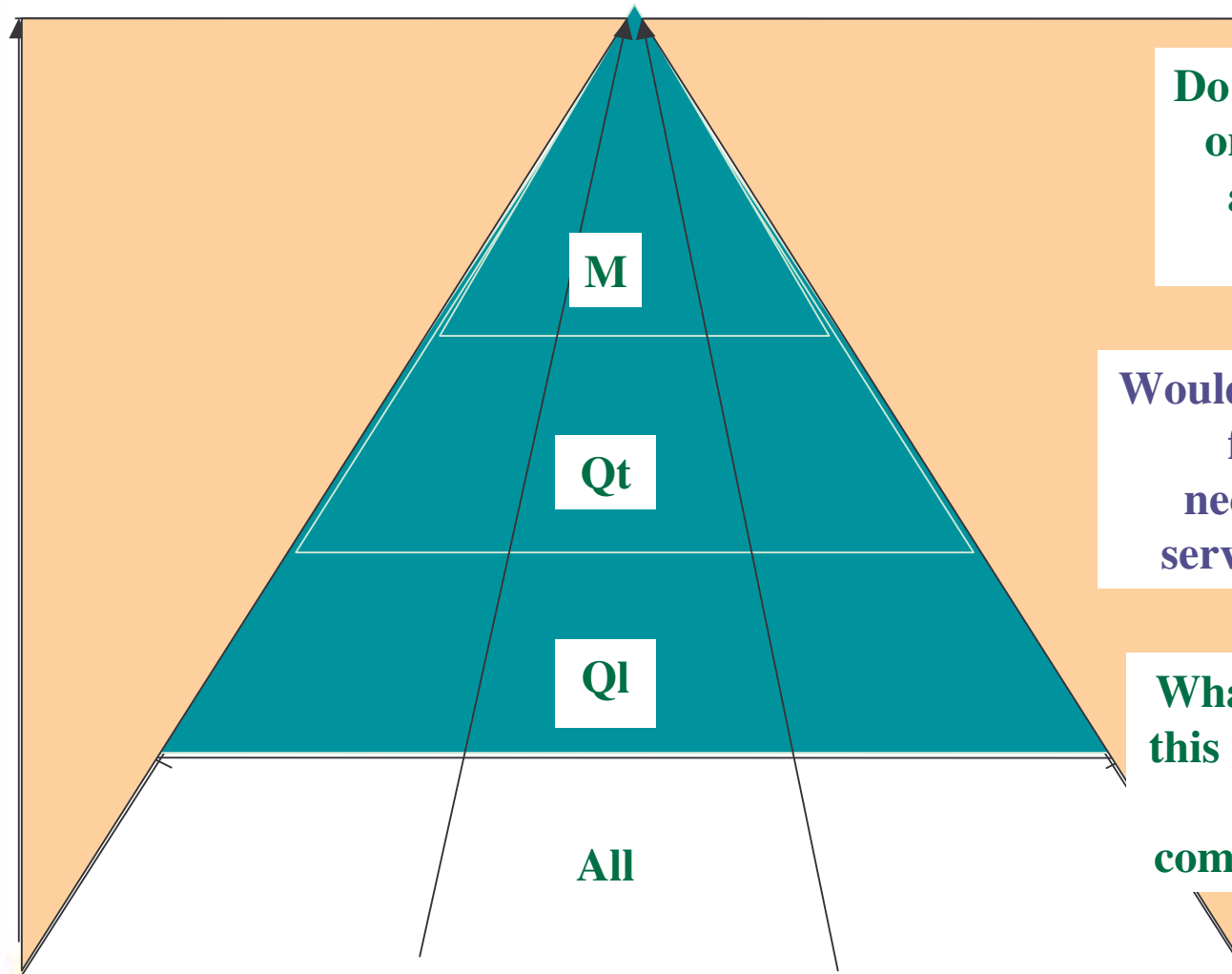


Measuring Benefits of Ecosystem services: The Benefits Pyramid

What can be said in what terms and what was explored?



The Benefits Pyramid – distinguishing types of ecosystem service



Provisioning

Regulating

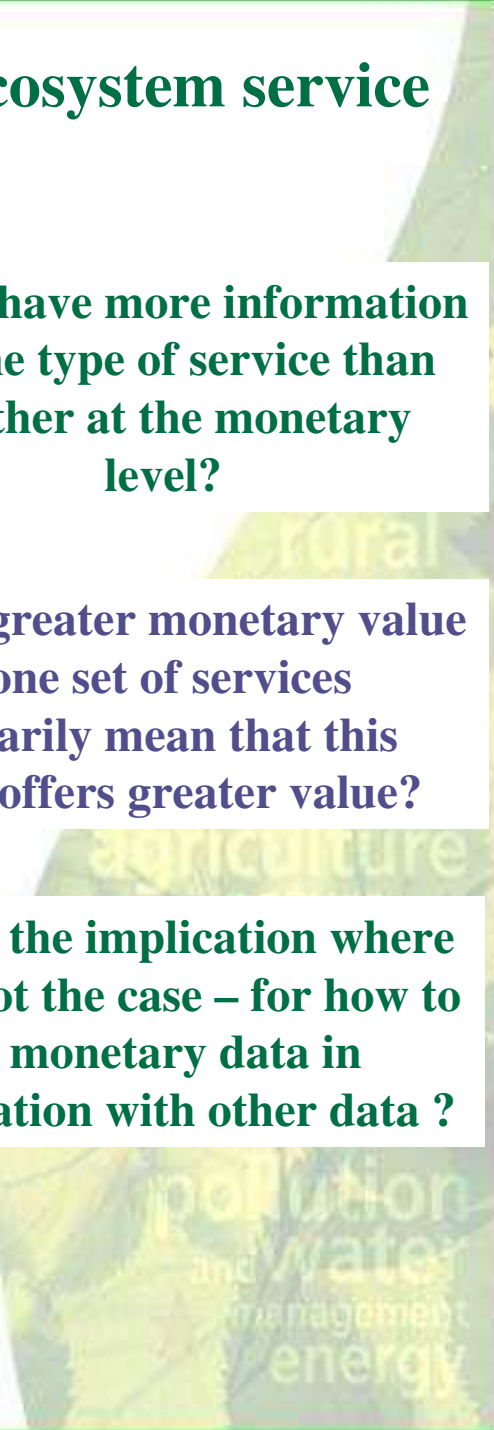
Cultural

Supporting

Do we have more information on one type of service than another at the monetary level?

Would a greater monetary value for one set of services necessarily mean that this service offers greater value?

What is the implication where this is not the case – for how to use monetary data in combination with other data ?



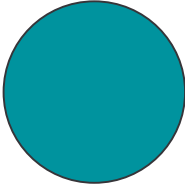


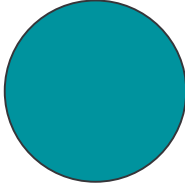
What monetary evidence can we base the message of the “*value of biodiversity loss*” on?

	Supporting	Provisioning	Regulating	Cultural	Overall
Number of valuation studies	3	34	40	55	132
Typical focus of valuation – nature of ESS	Soil formation	Food, fibre, fuel	Water regulation	Recreation and eco-tourisms	
Typical focus of valuation - region	Global	Europe	North America	Europe	Northern hemisphere

Source: ongoing work within the COPI database.

To what extent do the monetary valuations on their own provide a complete & representative picture of Ecosystem services & their contribution to wealth & wellbeing?

Interest and evidence

	<u>Level of information</u>	<u>Level of press/interest</u>
<u>Quantitative / qualitative</u>		
<u>Monetary</u>		

- There are different audiences, and different messages are needed for each.
- Different types of messages have different power and different reach.

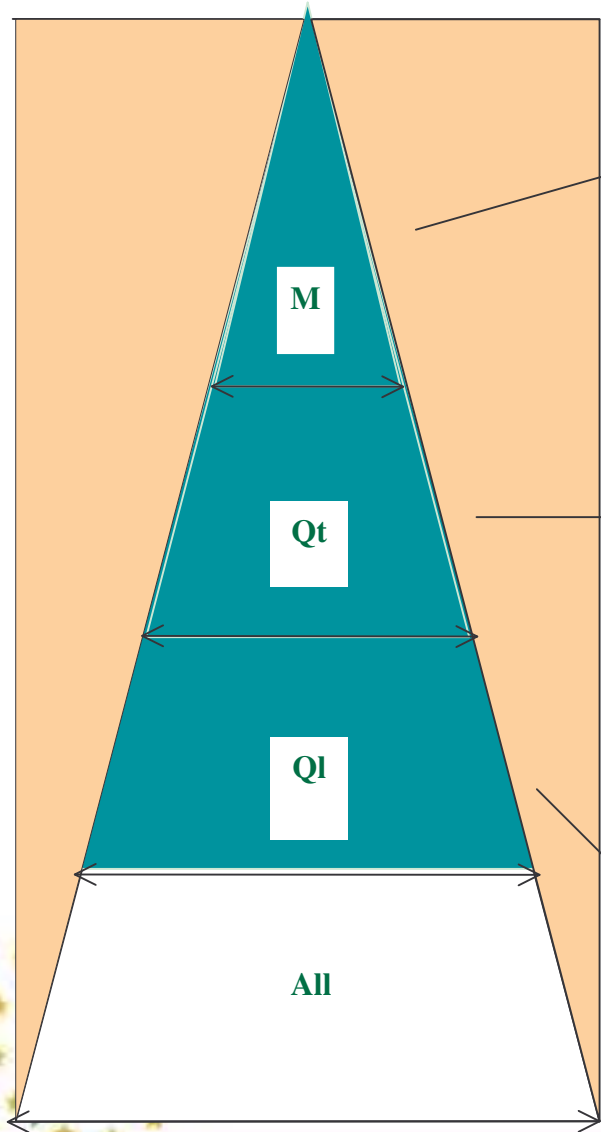
The overall aim is to get the message across to the (range of) key audiences – in a manner that is representative of the facts and that engages interest. Hence, we need to work out how best to combine monetary and non-monetary information.



How can one represent the monetary and non-monetary benefits?

Who is interested in what & how can they best be combined?

Key objectives- understanding, representativeness, and getting the message across



- The single global number



Politicians, media,
general public

- Ranges

- Local / national numbers

- Partial aggregations

- 1 locality, 1 service numbers



Economists;
local politicians

- Indexes (eg living planet index)

- Indices (eg species richness)

- People/population (share) affected

- Species at risk, endangered

- Risk assessments



Scientists
Policy analysts

- Loss of forest cover (ha)

- Aggregates and cases

- Surveys

- Story lines / uniqueness / indispensable

- Hotspots



All

- Maps

- Critical thresholds

- Stakeholder perceptions

What do you see as important? What quantitative measures can give an indication of value? What other measures are valuable?

How can they best be combined?

How do we address the following issues ?

How should one combine information on biophysical terms with monetary estimates

- ⑩ **Risks and Scientific Uncertainty**
- ⑩ **Substitutability (or lack of) and irreversibility**
- ⑩ **Linear vs non-linear changes**
- ⑩ **That some costs are unknown**
- ⑩ **Some costs only have an effect in future generations**
- ⑩ **Inherent biases in the economic valuation system?**
eg greater focus & ease of analysis for commodity prices related valuations (*re Review contribution*)
- ⑩ **Biases in the application of valuation - certain priorities and not others?**
eg global issues focus rather than local? (*re Review contribution*)
- ⑩ **Gaps – how can we work with the gaps before we fill them?**
eg Indigenous knowledge (*re Review contribution*)



What other issues are important for you ?



Key questions to discuss in this session

- How should one combine information on biophysical terms with monetary estimates ?
- What measures should be used?
- How does one deal with specific issues noted earlier?
- What other issues are critical to take into account?

In short, what should be an appropriate balance of information to communicate the biodiversity loss message?

In CBD COP9 Bonn ?

In a full assessment of the value of biodiversity loss?

