

# Valuation of ecosystem services from a national accounting perspective

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# It is relevant to account for WTP and costs

- The primary purpose of accounting is to describe what is going on in our economy reflecting the *existing institutional setup and markets* – first of all by **using observations and as few assumptions as possible**.
- Wtp and various types of cost estimates **reflect the existing institutions, preferences and technologies** of our economy. They can be observed/estimated. They provide important information for analysis
- In general we **cannot observe any exchange values for the ecosystem services**, because there are no monetary transactions
- We may **imagine** markets/institutional arrangements with transactions leading to **monetary exchanges**. This is modelling and scenario type analysis and **describes hypothetical situations**.



# It is not very precise to talk about the value of ecosystem services or assets – it is better to state the value concept

~~”The value of ecosystem service A is one billion dollar”~~

”The hypothetical exchange value of ecosystem service A is one billion dollars”

”The willingness to pay for ecosystem service A is one billion dollars”

”The cost of restoring ecosystem service A is one billion dollars”

”The avoided cost due to ecosystem service A is one billion dollars”

# Could we clarify the use of the concepts by introducing additional "SEEA terminology"?

For instance:

## For households' use of ecosystem services:

"Ecosystem service use at consumer/households' values" (wtp)

"Ecosystem service use at hypothetical transaction values"

## For degradation of ecosystems

"Degradation at consumer/households' values" (wtp)

"Degradation at replacement costs"

"Degradation at hypothetical transaction values"



# There are no consistency problems if we keep the different values in separate accounts/tables

- One physical account, one for WTP, one for restoration cost, one for replacement costs, etc.
- A **modular approach** based on appropriateness and availability of data
- In the national accounts we already have several types of **value concepts for the same transaction**: basic prices, purchasers prices, current prices, constant prices and chained volumes
- Some of these are **hypothetical values**/quantities, which cannot be observed: constant prices and chained volumes



## However, it is inconsistent to add ecosystem service values to the existing national accounts for "green GDP" calculations, etc.

- Actual market values are **mixed** with wtp, various costs or hypothetical transaction values
- **Is it a problem?** Not necessarily, if the results are useful and tell us something about our economy and the development - but it requires that we make clear what concepts are involved and how the results should be understood
- To some extent **we already have inconsistencies in the national accounts**: e.g. we estimate and add non-observable government output based on the costs.



# Do we forget something?

- **Scaling up is an important issue**

We need solid procedures and recommendations for transfers of values and scaling up to the national level and the macroeconomic context?

- Should that be part of the criteria for assessment of the valuation methods?

