



DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS
STATISTICS DIVISION
UNITED NATIONS



System of
Environmental
Economic
Accounting

System of Environmental-Economic Accounting 2012 – Experimental Ecosystem Accounting Revision

First Global Consultation on:

Chapter 8: Principles of valuation for Ecosystem Accounting

Chapter 9: Accounting for ecosystem services in monetary terms

Chapter 10: Accounting for ecosystem assets in monetary terms

**Chapter 11: Integrated and extended accounting for ecosystem services and
assets**

Comments Form

Deadline for responses: 6 July 2020

Send responses to: seea@un.org

| | |
|-------------------------|---|
| Name: | Sven Kaumanns, Simon Felgendreher |
| Organization & country: | Federal Office of Statistics of Germany |

The comment form has been designed to facilitate the analysis of comments. There are twelve guiding questions in the form, please respond to the questions in the indicated boxes below. To submit responses please save this document and send it as an attachment to the following e-mail address: seea@un.org.

All documents can be also found on the SEEA EEA Revision website at:

<https://seea.un.org/content/seea-experimental-ecosystem-accounting-revision>

In case you have any questions or have issues with accessing the documents, please contact us at seea@un.org

Questions related to Chapter 8

Question 1: Do you have comments on the principles proposed to underpin monetary valuation for the revised SEEA EEA, including the use of exchange values and net present value approaches?

We appreciate the effort that has been made in drafting the chapters 8-11 on monetary evaluation. However, we think there are too many open questions and issues in the chapters to include them in the main part of the SEEA EEA handbook, especially if the term “experimental” will be dropped.

We are especially concerned about the calculation of net present values of ecosystem assets. Fundamental methodological questions are not sufficiently specified, namely how and which (social) discount rates should be applied, the valuation of return of ecosystems and future flow of services. For more detailed comments, see our answers to question 7 and 9. We therefore suggest that the evaluation chapters are moved to an annex or an “application” section of the revised SEEA EEA handbook.

Question 2. Do you have any suggestions for topics to include in Annex 8.1?

-

Question 3. Do you have any other comments on Chapter 8?

-

Questions related to Chapter 9

Question 4. Do you have comments on the range of valuation methods proposed for use in estimating exchange values of ecosystem services?

-

Question 5. Do you have any other comments on Chapter 9?

-

Questions related to Chapter 10

Question 6. Do you have comments on the definitions of entries for the ecosystem monetary asset account including ecosystem enhancement, ecosystem degradation and ecosystem conversions?

Click here and start typing (The length of your response is not limited by this text box.)

Question 7. Do you have comments on the recommendations concerning the selection of discount rates for use in NPV calculations in ecosystem accounting?

We have several concerns regarding the discount rate as described in section 10.3.7.

According to paragraph 10.65, *“in the valuation of provisioning services that contribute to SNA benefits, individual, market based discount rates are relevant”*. However, there is a large spread in market discount rates that can be considered, depending for example on the risk of the market investment. Hence, it would be good if the paragraph could specify, what kind of market based discount rates should be used and not only refer to it in general.

The same paragraph states, that for non-SNA benefits, *“rates should be sourced from government determined processes and further, they should be in active use in government decision making”*. At least for Germany and Europe, to our knowledge there or no such general discount rates in use that can be transferred to the context of the discounting of ecosystem services.

Also in the scientific debate, there does not exist a consensus on an appropriate social discount rate for environmental services.

Paragraph 10.65 also states that *“If such social discount rates are not available, market rates for long term government issued bonds are relevant”*. For some countries, government bonds have been negative in the last years while for others, they are still around 5% or higher. It is not clear which rate should be applied and implausible in case different countries will use different discount rates for the discounting of the same ecosystem services.

Due to the issues raised above, we think a lot more work is needed before recommendations on the discounting of ecosystem assets can be included in the SEEA EEA.

Question 8. Do you have comments on Annex 10.1 describing the derivation and decomposition of NPV?

Click here and start typing (The length of your response is not limited by this text box.)

Question 9. Do you have any other comments on Chapter 10?

In paragraph 10.1 it is stated that *“This account records the monetary value of ecosystem assets reflecting all of the ecosystem services supplied by the asset taking into consideration the expected future flows of those services.”*

We are highly concerned that an accounting for ecosystem assets based on this definition might be perceived in the public and especially among policymakers as a comprehensive measure of the value of nature. If the claim is to include “all of the ecosystem services”, where is the difference to valuing the entire nature?

In section 10.3.3 the valuation of returns is discussed. We think it will be extremely difficult to make plausible assumptions for future unit prices as stated in paragraph 10.49 and 10.50.

Paragraph 10.50 states: *“Therefore, where possible, future price changes should be taken into account, for example due to the effects of changing relative scarcity of resources or specific ecosystem characteristics.”*

Basically, it means that for the calculation of the monetary value of ecosystem assets, forecasting for periods far in the future for certain markets has to be done (e.g. on the development of the price of wood for the calculation of the NPV for forest). Such a forecasting will be highly uncertain by construction and hence yield highly uncertain estimates.

Section 10.3.4 discusses future flow of services in physical terms. Here again, in order to be able to calculate the NPV, forecasts have to be made far into the future which will be highly uncertain. As the example in paragraph 10.52 states, many assumptions have to be made to get any results on future services flow. It is impossible to base most of these assumptions on a solid data foundation since nobody can anticipate developments that might be decades ahead. Hence, also the estimates produced on future flows will be highly unreliable.

These concerns, together with our concerns regarding the discounting as stated in our comment to question 7, we think that Chapter 10 of the SEEA EEA should not include an accounting for ecosystem assets in monetary terms until a solution for the problems on the valuation of returns, the future flow of services and especially the discounting has been found.

Questions related to Chapter 11

Question 10. Do you have comments on the proposed structure of the extended balance sheet that integrates the monetary values of ecosystem and economic assets?

-

Question 11. Do you have comments on the approaches to assigning the ownership of ecosystem assets that underpins the structure of the extended sequence of institutional sector accounts?

-

Question 12. Do you have any other comments on Chapter 11?

-