System of
Environmental
Economic
Accounting

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# 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: | Kaia Oras |
|---|---|
| Organization & country: | Statistics Estonia |

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

**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?**

General comment: please provide throughout the chapters 8-11 numerical examples in order to illustrate the proposed principles for monetary valuation.

Please give examples on the net present value calculation as a lot of the assumptions need to be made for the future not just for the present. Please justify the use of discount rates for the cultural and regulative services. Also explain how to determine the discount rates of the respective services.

According to the proposed methodology the ecosystem services supply table which provides an estimate of the total annual flow that is generated during specific year is main input into the monetary asset account. The value of the ecosystem assets can be estimated by capitalizing annual flows of services over the projected period, i.e. the expected lifetime of the ecosystem, using a net present value method. We are of the opinion that in order to estimate the projected service flows, the capacity of the ecosystems to sustain the provision of these service flows needs to be taken into account. On the other hand, the capacity will depend on the condition of the ecosystem. Please describe how the extent and changes in the condition are considered in the aforementioned ecosystem assets.

It is probably essential to link the lifetime of the assets and their sustainability levels. Please explain these aspects.

Exchange values capture only partly the value of the ecosystem services. Please give more specific examples on the applicability of the "imputed exchange values" and the practical applicability of the results.

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

As point 8.1 is still under development we suggest you describe, draw parallels and give examples on how other non-SNA services and assets are handled in national accounts. It would be useful to have the examples from the area of economic capital/assets, human capital/assets in addition to ecosystem capital/assets valuation.

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

What is the ecosystem contribution to the services which have been estimated using general government activity data (transactions)? In case of general government the surplus is equal to zero.  Should the whole expenditure be considered as ecosystem contribution due to surplus not being generated (Referring to the point 8.12: "Cost-based techniques are commonly applied in estimating the value of government supplied services including education, health and defense. In these cases, it can be assumed that the amount of expenditure reflects the revealed preferences of a country or community")?

**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?**

Please give numerical examples, e.g. when using rent price methods to measure the value of providing ecosystem services (fodder production, etc.) on which costs should be deducted to calculate the contribution of ecosystems?

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

 Please describe the rules for the aggregation of the services values. Please give several examples for each service group.

It does not read out clearly from the  text of the chapter if the proposed concept implies that in practical ecosystem value accounting services having a market price (e.g. hay from grassland ecosystems) and other which do not have a market price (i.e. psycho-social values, value of grassland services  identified using  CVM) are treated equally in statistics when calculating the (total) monetary value of ecosystem services.

As the resource rent figures could be relatively low, zero or even negative, please elaborate on the semantics behind resource rent indicators as a "potential signal for the better policies", as stated in several expert discussions (LG).

Please add examples on the use of the monetary aggregates values for informing policies, scenario analyses, alternative use of ecosystems, etc.

Please give practical examples on how to measure the export and import of ecosystem services.

Please also add the semantics on the use of resource rent type of residual values for the approximation of ecosystem services as these residual components are derived from

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existing values (accounted/recorded in national accounting). The residual values describe the ecosystem contributions to economy as relatively negligible. Please also describe how these figures should be placed/used in broad framing of UN SEEA EEA.

**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?**

Please describe the cases when ecosystem services exclude each other, for example timber value and other forest ecosystem services(for example habitat provision), or the aesthetical and electricity production value of waterfalls.

The chapter needs more examples. Practical cases and examples are essential in this chapter.

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

Could standard discount rates be provided in the chapter 10?

The calculation of net present value is hindered by the big numer of assumptions needed to be made for the future, not just for the present. Should every country eventually make a decisions on the assumptions to be made on their own?

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

The chapter misses practical cases and concrete numerical examples on regulative and cultural ecosystem services. The examples are absolutely necessary in this chapter if one wants to account for these assets as well.

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

According to ESA 3.54, growing crops, standing timber and stocks of fish or animals reared for purposes of food are treated as inventories of work-in-progress during the process, and transformed into inventories of finished products when the process is completed.

Please describe the linkage between the treatment in SNA and the treatment of these services in UN SEEA EEA. Please also elaborate on how the value of standing timber that is treated as inventory of work-in-progress in SNA is considered when estimating forest asset value in UN SEEA EEA?

Economic systems often do not recognize the critical decline in the potential for the provision of ecosystem services and continue to use the services until the asset is irreversibly reduced. In practice, it is perhaps more important to notice and assess the reduction in the potential for the provision of ecosystem services than to assess the services used by the economy (in certain time period, i.e during one year). The value of services and the value of the potential to provide services are linked. Please describe how to assess the reduction in the potential to provide services.

**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?**

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**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?**

Regarding point 11.55 "Using these national accounting principles of ownership, and solely for the purpose of integrating ecosystem accounts data with the standard sector accounts of the SNA, it is considered appropriate to partition the ownership of ecosystem assets using a focus on the users of different types of ecosystem services" – please give examples on how the partition can be made.

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

Please specify if the ecosystem condition account influences the discount rates, and if yes, how to take the changes in condition into account .

Please describe the meaning, semantics and the practical applicability of derived indicators, e.g. degradation adjusted net value added and degraded adjusted disposable income.

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