



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:	Pushpam Kumar, Jillian Campbell, William Speller
Organization & country:	UNEP

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?

Paragraph 8.2 could mention that monetary valuation of ecosystem services facilitates comparison of trade-offs between different ecosystem services (e.g. crop provisioning versus soil retention) that is more difficult if comparing different physical units.

Section 8.1 could mention that many environmental policy instruments are monetary in nature (e.g. taxes, subsidies, payments for ecosystem services) and thus their calibration is aided by monetary accounts.

In agreement with the focus on exchange values in order to support consistency with the SNA. This document should, and does, provide a clear intellectual linkage between exchange and welfare values. The bridge table that is under development would be a worthwhile inclusion. It could be worthy explicitly making the point that price is not the same as value, as this is a phrasing UNEP has found to resonate with audiences.

We think that it is important to note at the beginning that it is not possible to capture the actual value of an ecosystem type – for example, we cannot put a value on oceans or rainforest, as if they disappear all life would also disappear. Thus while we are looking at the value of individual ecosystems, these cannot be aggregated at the global level to get a ‘global value’. Therefore, it is important to complement monetary valuation with a strong physical accounting.

We think that the discount rate should also be described in more detail – perhaps by giving an SNA example. Monetary valuation is highly sensitive to the discount rate and thus the valuation will vary greatly based on the chosen rate.

Additionally, there is almost no mention of biodiversity across the 4 chapters.

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

The list of topics seems comprehensive.

Assets that cannot be valued. I think it may be necessary to a section under 4 to discuss assets that cannot be valued and what to do with them (or externalities that cannot be estimated). Additionally, I think that it might be useful to add some sort of a discussion at the end of this chapter which mentions that this approach is still something that is under development and that there is ongoing research on valuation.

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

On the whole, it is a clear and well-framed discussion that should be understandable to environmental economists and statisticians alike.

Would the terms ecosystem enhancement, ecosystem degradation, ecosystem conversions and revaluations be defined in earlier chapters? Even so, it could be worth cross-referencing the definitions here.

Somewhere, not necessarily chapter 8, there should be discussion on the selection of the appropriate discount rate, and this should be referenced in Chapter 8. Most readers would be automatically suspicious of the influence that the selection of the discount rate can have, so quelling their doubts early would be beneficial.

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?

It is comprehensive and well-structured.

We think that it would be difficult to apply this framework to marine ecosystems as the benefit might not really be kept within national boundaries.

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

This is generally excellent; a clear and well thought-through summary of valuation techniques and their applicability to accounting. The authors are to be commended for clarity of exposition.

The term 'resident economic units' is unclear and could be defined.

Paragraph 9.11 could be confusing because examples (resource rent, hedonic pricing) are introduced before they have been explained.

Figure 9.1 is very useful. Across all the chapters there is rather a lack of figures and visualisations. Perhaps an additional, expanded version of 9.1 can be produced (in an annex if need be) in which an example is included for each technique. These examples are in the text, yes, but it could be worthwhile to bring these together for the readers' benefit.

Paragraph 9.30. It is suggested to add an example (e.g. crop provisioning) alongside the rows of the resource rent calculation.

Paragraph 9.36. The point is well made, but it is unclear what 'evidence' would be relied upon here. I am not sure this is the best example.

Paragraphs 9.50 – 9.52. It could be worth mentioning that design of these experiments, and interpretation of the results, is a science in itself, and that this is no straightforward matter.

Table 9.2 is a neat summary, but it could potentially serve more practical purposes by expansion, to include a fuller list of ecosystem services and with a few words of text example, rather than and X.

Again, I think that it is necessary to mention that the idea of replacement values or even valuation does not imply that ecosystems actually can be replaced – once it is lost it is lost and this includes all the biodiversity (and the value of biodiversity within ecosystems is very difficult to value as we cannot get it back and there might be implications that go beyond the locality as ecosystems are connected).

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?

“Ecosystem enhancement is the improvement in the value of an ecosystem asset over an accounting period that is a result of an increase in the condition of the ecosystem asset.” Shouldn't improvement and increase be switched, so that the increase in value results from an improvement in the condition. An increase in the condition does not seem to make sense. In the explanatory text, increase and improvement are used interchangeably, so it would be good to be consistent.

Paragraph 10.6 (and elsewhere they are listed). Apologies to be pedantic about grammar, but I think you need the oxford comma after “assets” to make clear that “other changes...” are a separate item in the list from “revaluation...” So: “ecosystem enhancement, ecosystem degradation, ecosystem conversions, other changes in the volume of ecosystem assets, and revaluations as a result of price changes.”

Paragraph 10.11 the concept of ecosystem conversion is referred to before it has been explained.

Paragraph 10.12 the distinction between restoration and rehabilitation is unclear. Examples would help. Would not reclamation be a form of ecosystem conversion?

Ecosystem degradation is the decline in the value of an ecosystem asset over an accounting period that is the result of a decrease in the condition of an ecosystem asset. Again, the terms decline and decrease are used interchangeably and a decrease in condition does not seem linguistically correct. It would be simpler to refer to increase/decrease in value and improvement/deterioration of condition.

This comments here are only suggestions. We are aware that significant thought and discussion has gone into this terminology. Perhaps it is impossible to please everybody, and it will have to be a case of people getting used to the terms, as they are defined. Examples of each would perhaps make clearer the way in which the document intends each term.

We think greater explanation is needed. For example, measuring 'rocky shores' (one of the IUCN classes) would be extremely difficult and valuing it even more complicated. Perhaps it should be mentioned that this approach is not currently possible for all the IUCN classes. Additionally, I think that it may be useful to mention that satellite data and remote sensing are making the monitoring of these classes easier, but valuation still is a bit farther off.

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

It is a challenging issue, and the discussion is well-balanced. It is questionable what readers should infer from the assertion that particular rates are "relevant" (10.65). Is this intended as a recommendation, or a softer suggestion?

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?

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

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?

no comments from me on this chapter. However, I think that overall, all the chapters should include warnings to the compilers that valuation data should not be used in isolation and while it is useful for informing economic policy there is a need to contextualise the information and provide underlying physical accounts – especially due to the number of assumptions that are made during the valuation process.

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?

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

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

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