

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

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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?

Exchange values must be used if SEEA accounts will integrate with SNA accounts. This constraint, and the extension of the concept to ecosystem services is handled clearly. Net present value (NPV) is a standard economic and accounting tool.

p5, 8.26, I am hoping that the considerations listed in 8.26 in actual accounts be discrete and easy to discover as applied to each iteration of every ES monetary value account. Far more useful for future analysts who are not national accounting specialists. This is implied or stated in Chapter 10, but this should be explicit repeatedly.

p6, 8.27, refers to the “common supply context” from which multiple ES flow from a single EA. There is a synergistic production system that has been reduced to a flow of a known number of discrete and separable ES. Is the synergy lost in this approach? Probably not, given proper assessment of ecosystem condition and assessment and valuation of ecosystem degradation or enhancement. However, this may not fully address the substitutability problem reflected in replacement cost. Humans cannot by manufacture replicate ravaged ecosystems, as this is a complexity barrier created by millions of years of evolution. The hotel example in 8.27 does not address this in parallel, as a decimated hotel can be rebuilt in an economic and not ecosystem process, but a lost cloud forest (lost natural capital factory) cannot. In a way, losing the cloud forest (conversion to a skymall) loses not only the future flow of ES from it, but has sacrificed the irreproducible past evolution of the highly specialized and unique productive capacity embodied in the cloud forest. This makes high discount factors doubly painful, shortening the value in the future, but also ignoring the unique history that brought the value from the past to the present.

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

The inappropriateness of using welfare values in an accounting/exchange-value framework is referred to briefly in prgh 8.8. The topic may not be adequately handled. It may help to add (/reiterate with more detail) in the introduction of Annex 8.1 a discussion of the difference between exchange value and welfare value, and of why welfare is not generally an accounting subject, perhaps including a brief treatment of reactions to the inadequacy of measures of wealth based on GNP alone, including setting up why measuring income and wealth matters w.r.t. national accounting and w.r.t. environmental accounting. The latter is an important setup to Annex 8.1 Outline point 4, if not also point 3. Whether to include a brief overview discussion of why welfare values are not an appropriate focus for accounting may hinge on who the expected reader base for this is. If only account compilers, then no such case needs to be made. My understanding is a wider reader base is expected, including environmental economists that need to have explained why the “values” they empirically derive for ES don’t fit in accounts (e.g., bc they include consumer surplus).

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

p1. prgh 8.1 “**or**” is better than “and” in “scarcity and quality”, otherwise “there **are** no economic signals”

p 1 prgh 8.2, first sentence, the words “in the context” can be dropped, enhancing flow and not changing meaning.

p 2 prgh 8.8, last sentence, “concepts” needs to be plural or a different grammatical structure employed for that clause.

p2 prgh i.9, middle sentence, “; and **to** ii)” needs to have “to” again, bc the listing structure with “and” breaks the carryover of “to” for the numbered list.

p4 prgh 8.18, second sentence, not “who” but “**that**”. Accountants do not anthropomorphize factories or ecosystem assets.

p5 prgh 8.23 last sentence, “valuation **of** ecosystem assets”

p 6footnote 7, first word “**There**”

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 clear from the text that the methods in Figure 9.1 are for imputing exchange values, and these are presented and discussed adequately, given the note placeholders for further development of the text moving forward. The range is well-defined in the literature. The text allows for no other methods, and I am not certain that this constraint will hold forever, but this text is adequate to purpose for now.

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

The structure of Tables 9.1 and 9.2 are useful and as expected. Some of the current column and row labeling may create incompatibilities with other parts of the text.

In the columns, under ecosystem type, there is Croplands, but (other than submerged artificial surfaces) no other ecosystem type with any human activity or structures. In other classifications these are sometimes referred to as (low-med-high) developed areas. The omitted ETs would include for example Central Park in NYC, or the large grazing parks in Dublin, and include the suburban housing developments where millions of Americans enjoy birds and deer. This seems like an extreme oversight of this level of analysis.

In the rows, “crop provision” is an inadequate abbreviation for the way ES is defined in the Glossary, as crops include economic inputs, which are carefully forbidden in Chs 10 and 11 (at least). There is room in the rows to be clear. A required separation of human inputs and their value from nature-based inputs (ES) and their value is not evident from any of the phrasing under “Biomass provision.” This problem was evident in a very similar table in Chapter 7, while the text below the table in chapter 7 was quite correct and clear. This is a labelling problem within the tables, not an understanding problem or compatibility problem with other chapters.

Similarly, for accuracy, it may help to reverse the language in all of the labels under Cultural Services. That is: “services related to (fill in the blank)” e.g., “services related to local recreation [opportunities].” Because the current list there all looks like economic services, or what people do, and not the ecosystem contribution to the production of benefits. A list of uses is not a list of ES. I think better labels in these tables may help avoid misunderstanding.

p 3 prgh 9.3, sentence 3. “in many cases” may be cut, bc there are almost no cases where unit prices for ES would not have to be imputed (see, e.g., prgh 9.18). It is rather “in all but very exceptional cases” but the equivalent is achieved simply by removing the phrase that implies that there are many cases where imputation will not be necessary.

p3 prgh 9.5, first word, perhaps “**A test**” or “**An example**” should replace “The”, particularly as i) there is a table note explaining that this depiction is not final (so calling it “the” table is logically incorrect, implying a vetted finality that admittedly does not exist), and ii) there are objectionable flaws in tables 9.1 and 9.2. See comment above, in this question.

p6 prgh 9.6 “households may”

p7 prgh 9.15, sentence 1 is easily read to mean “describes the conceptual basis for valuing” using exchange values *versus another type of value*. Very little text is devoted to that. So the sentence must mean “describes the conceptual basis for” **how to value** ecosystem service for ecosystem accounting **using exchange values**. Which is fine enough, but more should be added to support the first understanding in chapter 8 (as I noted in comments for ch 8), and this should be reworded to more accurately capture what section 8.2 does.

p8 prgh 9.22, not “ecological contribution” “on” but “**by**” or “**from**” ecosystems...

p12 prgh 9.40, line 1, “**in** which”

p13, footnotes 5 and 7 have no closing punctuation

p16, prgh 9.63, last sentence is not a sentence, but a string of draft fragments.

p18 prgh 9.68, no “,” after “Given”

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?

Definitions very clearly explained.

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

Definitions and guidance are very clearly explained. It appears that when confronted with the problem of handling intergenerational equity for accounting, the answer provided is to just do what accountants do when there is not an intergenerational equity question that challenges conventional use of a discount factor. "There are challenges" may not adequately address this, when many issues in SEEA EEA may be so described. Perhaps another paragraph or two (or a table) would help on what the theoretical and practical challenges are that make each of them and any combination unworkable for ecosystem accounting (results in infinite values, what the time inconsistencies are,...).

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

Very clearly written.

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

As with my response to Question 5, for Table 9.1, I believe something is fundamentally missing by using the IUCN EFG Level 3 ETs that do not present developed areas on any scale other than as Croplands or Submerged artificial structures. The argument is made under Question 5.

p2 prgh 10.8 "ecosystem assets (e.g.,"

p2 10.8 and, e.g., p4 10.12, there is inconsistent application of a "," following "e.g."

p3 footnote 1, no closing punctuation.

p18 last prgh, remove "of" before "for climate regulation 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?

Clearly written and makes sense as described.

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?

Clearly written and makes sense as described. The establishment of the new sub-sector "ecosystem trustee" makes sense and seems like the most productive compromise to the problems it solves. The idea of a broad human ownership resonates on a deep conceptual basis.

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

p4, 11.10, last line on page, "consumption **by**" rather than "of"
p5, 11.13, add determiner so "compiled at **a/the** national level"