



DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS
STATISTICS DIVISION
UNITED NATIONS



System of
Environmental
Economic
Accounting

System of Environmental-Economic Accounting— Ecosystem Accounting

Global Consultation on the complete document: Comments Form

Deadline for responses: 30 November 2020

Send responses to: seea@un.org

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Organization & country:	Conservation International

The comments form has been designed to facilitate the analysis of comments. There are six 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: seea@un.org.

All documents can be found on our website at: <https://seea.un.org/content/global-consultation-complete-draft>

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

General comments

Question 1: Do you have comments on the overall draft of the SEEA Ecosystem Accounting?

The completion of the SEEA EA guidelines is a remarkable achievement and its global significance as the definitive framework to systematically measure, monitor nature's values, and to report them as official environmental statistics, cannot be overstated.

We have carefully reviewed the document in its entirety, and find that

- concepts are clearly explained, easy to follow, and understand; the examples provided help facilitate even greater understanding;
- the rationale for the chosen approaches/methods is well elaborated, and aligned with the latest scientific literature and other guidance/practice on the measurement and valuation of nature and its benefits.
- the description of the techniques/methods for both ecosystem services and assets physical measurement and monetary valuation is a considerable advance. It is detailed, well-documented and clearly explained, and most importantly, based on experience in piloting and testing valuation in an accounting setting.
- a compelling advancement has been made in the monetary valuation component in the Ecosystem Accounts. We find that that it is technically sound and compatible with accounting principles, and closer to feasibility for different country contexts for implementation. This is important because this step is ultimately needed for a clear comprehension of the magnitude of nature's contribution to the economy.

We are convinced that the adoption of the international scientific standard for natural capital measurement and valuation, as proposed by SEEA Ecosystem Accounting, will play a critically role in enabling uptake and ultimately scaling up of accounting efforts globally.

Based on our experience implementing environmental accounting in a range of contexts over the years, we wholeheartedly support these guidelines and its release, and recommend for it become statistical standards in its entirety, and for the monetary valuation to be an integral part of such standards.

Comments by sets of chapters

Question 2. Do you have comments on Chapters 1-2 of the draft SEEA Ecosystem Accounting?

Both introduction and principles of accounting chapters present concepts very clearly and provide excellent explanation and background information on environmental-economic accounting. We propose a minor addition of a glossary synthesizing key terminology in a synthesized way.

We very much appreciate the framing of values in ecosystem accounting, and more specifically, the clear discussion on the multiple value perspectives and challenges associated with overlapping and nested values. Most importantly, we fully agree with the notion that a standardized statistical framing of the value will be critically important for ecosystem accounting – and a needed milestone that will allow us to implement accounts encompassing different value perspectives, with both physical and monetary perspectives presented.

Question 3. Do you have comments on Chapters 3-5 of the draft SEEA Ecosystem Accounting?

There is a significant body of work on spatial units, extent, condition, providing clarity on the initial set of accounts. Overall these chapters are well written, clearly laid out, and provide a good mix of ecological theory and accounting applications. We find the relationship between spatial units in ecosystem accounting very intuitive and well-presented.

We are particularly impressed with advances in the guidelines on conditions accounts, arguably one of the most challenging accounts to be implemented. Table 5.1 on the SEEA Ecosystem Condition Typology (SEEA ECT) is an important breakthrough that we expect will greatly help in the development of these accounts, while support data additional data gathering efforts, such as with rapid assessment survey, forest inventories, etc. The addition of the two annexes in Chapter 5 is also very welcome. The example of ECT characteristics and variables per ecosystem type is very useful, but we propose alignment of text around ecosystem type (see note below on consistency with GET level 3). The table that outlines the methods for developing reference periods is also very useful for countries that may want to assess the various options for determining reference condition.

There are a few points that we noted to improve these chapters:

It is recommended that when explaining the ecosystem type that the examples align with the GET level 3 classifications. In the text, for example, when referring to the aggregation of ecosystem assets to types (and in other places throughout all 3 chapters) the guidance says “Forest” or “Wetland”, however, those are not ecosystems, per se. It would be clearer if the GET level 3 classes were used in the examples for consistency.

The ecological annex at the end of Chapter 3 is very useful but seems a little out of synch with the other chapters. We completely agree that this information is important and provides a nice overview of the ecological side of developing ecosystem accounts but wonder if it could be better suited elsewhere. Alternatively, it sets up the Extent and Condition discussions nicely.

Another outstanding issue in Chapter 4 on ecosystem extent is the lack of mention of the role of accuracy assessments. This is common practice when creating satellite derived maps and generating area estimates. At the very least, it should probably be addressed as an important consideration in developing extent accounts, perhaps with error-adjusted area estimates would be necessary to adjust for map bias.

It would be great to provide some reflection on accounting for transboundary areas as an EAA, which though unusual, could provide opportunities for coordinated management perspective of critically important areas (e.g., Amazon, Okavango, the Mekong).

Question 4. Do you have comments on Chapters 6-7 of the draft SEEA Ecosystem Accounting?

Here we note and praise the draft on its tremendous progress and resolution of many challenging issues, such as the ecosystem services typology, treatment of abiotic flows, capacity, ecosystem disservices, etc. Overall, we find these chapters very clear, helpful and pragmatic. A few notes:

- the proposed logic chain is very helpful and should be required for any analytical framework design for accounting.
- the proposed treatment of water/hydrological services, as something that is very context specific, and that needs to be carefully treated, is well done and aligned with our latest understanding of such services.
- the discussion on intermediate services, imports and exports of ES (beyond EAA), and measurement baselines is an important development and great to see it there.
- there is great clarity on the linkages between biodiversity and ecosystem services, and on the treatment of ecosystem disservices.

There are a few points that we noted to improve these chapters:

In the section describing matched supply and use entries (7.24), add a bullet point describing multiple transactions of an ecosystem service (where there are multiple users). Explain how the allocation is made in that case, e.g., for regulation of flood mitigation to households, businesses, etc., is it done proportionally with equal proportions or proportions that are based on the distance from the ecosystem assets supplying the service or, for sediment erosion control, should it be in the proportion of actual amount of avoided sediment load to each user? The examples we provided above could be potentially used to accomplish that and this could be potentially explained in Section 7.3.

Consider also explaining how the benefit is distributed across different economic sectors. Proportionally? See my previous comment (7.24). An example here would be helpful.

There are references to non-existent section 7.4. (7.24 and 7.47) which does not exist and we assume refers to section 7.3.

Question 5. Do you have comments on Chapters 8-11 of the draft SEEA Ecosystem Accounting?

Perhaps of the entire set of guidelines, this is where progress is most remarkable and where critically important advances are achieved with respect to the rationale, focus, and of principles and methods for monetary valuation of ecosystem services and assets in an accounting context. Indeed, chapters 8-11 represent a reflection of the hard work that it has taken to culminate with a standard set of methodological recommendations drawn from many decades of time-tested research and experimentation in environmental economics.

These chapters logically flow from principles of monetary valuation (Chapter 8) to valuation of individual services (Chapter 9), valuation of assets (Chapter 10) and finally

integration into supply use tables (Chapter 11). Specifically, Chapter 8 makes the strong case for, despite some challenges and limitations, how the recommended valuation methods and techniques are compatible with SNA principles. Valuation of regulating services will remain a key challenge due to the complex relationship between ecosystems assets, services and beneficiaries.

There are a few points that we noted to improve these chapters:

The TEEB database (8.4) has been an important milestone in synthesizing existing primary studies but we are not aware of it being updated anymore. Add a reference to the recent database or drop this line.

It is worth mentioning why scaling up nationally is problematic (9.36). Challenges in deriving a production function may be associated with heterogeneity in landscape/watershed types and the level of demand for a service in different places. Please offer some solutions to these challenges, since most EA projects will attempt national scaling with limited site-specific data. Suggested solutions will be highly valuable for practitioners.

We recommend for limitations associated with CV methods (9.56), e.g., implicit consumer and producer surplus in the stated values be clearly stated.

Alongside economic modelling (9.59) please consider adding a paragraph on “econometric/statistical modelling” that is particularly useful for replication and scaling up.

The role of ecosystem capacity (10.22) in the context of measuring degradation need to be discussed explicitly. Capacity has been mentioned elsewhere but for degradation it is particularly important.

Consider revising to ensure consistency, e.g., a constant rate of discount has been recommended in the text but in this stylized example (Table 10.2) a decreasing rate of discount factor has been used.

Consider adding text on the need/utility for counterfactual scenarios alongside the baseline for attributing values to ecosystems

Question 6. Do you have comments on Chapters 12-14 of the draft SEEA Ecosystem Accounting?

We found chapters on complementary valuations, thematic accounting and indicators to be greatly expanded since the initial guidelines, and a reflection the great testing and development since their publication in 2014.

A few additional thoughts:

We are unclear on the purpose of Chapter 12. We appreciate that Chapters 8-11 focus on accounting standards and to ensure monetary valuation is consistent with accounting principles. Chapter 12, on the other hand, reflects on valuation approaches beyond constraints imposed by accounting. We recognize that those, i.e., welfare values, externalities & disservices, polluter pay principles, defensive expenditure, unrealized values, green economy and corporate NC assessments etc. are important issues but wonder whether devoting a Chapter on those topics alongside the key valuation chapters (Chapters 8-11) would create considerable confusion.

On Chapter 13, we expect that accounting for environmental themes will receive a great deal of attention, given the specific policies they are most likely to support (e.g., biodiversity management). As the thematic accountings as currently a high-level synthesis of otherwise fairly complex accounts, many of which are currently under development, we would encourage a disclaimer on the 'nascent' notion of some of those (e.g., oceans) and its expected development in time.

On Chapter 14, the "combined presentations" section is particularly useful addition, especially given its goal (14.2) to "describe a range of ways in which data from the ecosystem accounts can be combined with other environmental-economic accounting data and national accounting data to demonstrate the links between the economy and the environment and to compare trends over time." Its set of suggestions and options though helpful, do not seem to achieve this objective. This is particularly the case of the discussion of trends, which we argue could be further expanded to achieve that goal.

On the discussion on indicators, we appreciate the treatment of the relationship to CBD, SDGs, MEAs and in what context the EA indicators should be understood on their own. We recognize that it ought be suggestive given ongoing processes that are taking place beyond the scope of this document, and that will most certainly evolve with additional R&D.

Finally, the discussion of environmental pressures (14.9) is limited to linkages with the SEEA CF. Going into more detail on separating out pressure and externality and the broader notion of threats would be a helpful addition.