



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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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?

FAO welcomes this draft and congratulates all experts from agencies and member countries who contributed to this excellent work. FAO considers that sufficient additional conceptual and technical work has been undertaken to warrant eliminating the term 'Experimental' from the title of this new standard.

FAO would like to provide the following comments:

First, while the Sections on physical assets and flows are well developed, Section D on valuation is not as mature, requiring explicit introductory language informing readers that this section is in need of further work, and/or warranting publication as a separate report on applications.

Second, the status of the SEEA EA as a statistical standard alongside the SEEA CF is unclear, given that previous methodological work in support of the SEEA CF (SEEA Energy, SEEA AFF) was instead approved as "internationally approved methodology in support of the SEEA CF."

Third, FAO welcomes the continued support to the SEEA CF land use and land cover classifications. However, land use and land cover classifications are never used in the proposed SEEA EA tables, whereas ecosystem status and conditions are preferred, with the result that it is not clear where on land the information provided in the various accounts take place.

Fourth, the accounting framework suggested by the SEEA EA for emissions and carbon accounting (Ch 13) is very different from the established international standards of the Intergovernmental Guidelines for Climate Change for country reporting. It is also very different from the standard conceptual frameworks used in the leading relevant literature. It also does not take into account, and in fact it also differs from, the GHG/carbon accounting tables of the SEEA AFF, where the concept of negative emissions (removals) had been developed to account for land-based fluxes in agriculture and forestry.

Finally, FAO suggests to compile (i.e., fill with numbers) all accounting tables provided throughout the document.

Comments by sets of chapters

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

FAO agrees that the word “*experimental*” can be dropped from the title. This text has been widely revised through global consultation and looks now a well consolidated document. FAO suggests to maintain the SEEA CF as standard, while the SEEA EA can be considered an extension of the standard, a methodological document of support with special focus on ecosystem services and geospatial data (see, for example paragraph 1.2.3, Status of the SEEA for Ecosystem Accounting).

Since the geospatial analysis is a key component of the ecosystem approach, the *FAO classification for land use and land cover* of the SEEA CF should be taken into account when approaching the ecosystem perspective. Kindly add in paragraph 1.4.2, when describing the SEEA CF, the following sentence: “It also supplies relevant land use and land cover classifications”.

In paragraph 1.5.3 Ecosystem accounting compilation approaches, we suggest to add a specific sentence explaining that *monetary valuation is not mandatory to have a complete ecosystem accounting process* – is more an additional step that NSOs, Research Centres etc may we to use, in line with this SEEA EA.

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

In general, definitions of *ecosystem extent*, *ecosystem conditions* and *ecosystem capacity* could be better clarified, including more information on the linkages among these three. Regarding chapter 4, consider using the FAO GEF geospatial analysis, presented at the 26th London Group, as an example to help further clarify distinction between ecosystem extent and ecosystem condition accounts.

We also suggest to *compile all accounting tables* presented as example in these chapters, as well as in all the others.

Specifically in Chapter 4, in the **Table 4.4 Ecosystem extent by type of economic unit**, p.69, it could be interesting to have under “Waste management”, also a hint to the handling of Persistent Organic Pollutants (POPs), which in Africa are heavily used.

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

FAO acknowledges with thanks the acceptance of our proposal of distinguishing between *Non-timber forest products* (NTFP) and other biomass provisioning services. A relevant reference to include to this end is: “Sorrenti, S. 2017. Non-wood forest products in international statistical systems. Non-wood Forest Products Series no. 22. Rome, FAO.” Secondly, FAO acknowledges progress made on *ecosystem contribution in provisioning service*, in particular on crop provisioning. Kindly include as reference Cerilli et al., 2020. A sustainability scoreboard for crop provision in Europe, Ecosystem Services 46:101194. <https://www.sciencedirect.com/science/article/abs/pii/S2212041620301364?via%3Dihub>

In chapter 6, **Table 6.3: Reference list of selected ecosystem services** p.112, we could propose a better specification of the role of Integrated Pest Management (IPM) and biological alternatives to pesticides for the pest control services. Same thing for the solid waste remediation services, a specific link to pesticides containers- sadly widely left in the fields in Africa- as waste could be made.

Re. Chapter 7, the above comment can apply also to the **Table 7.1 Ecosystem services supply and use account in physical terms (physical units) – Supply table-** p.134 , under Pest control services and solid waste management services

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

NA

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

Re. Chapter 12, There is no reference to pesticides management *per se*, there is- only- an interesting hint to their negative impact on the biodiversity, p. 221, para 12.17

*While the analytical framing and the valuation concept is different in externality assessments, ecosystem accounting information can provide inputs to the assessments through its recording of changes in ecosystem condition and changes in ecosystem services flows that arise as a result of a particular activity (e.g., **impacts of the use of fertiliser and pesticides on water bodies and biodiversity**). Thus, the accounts can provide baseline information for the derivation of total surplus measures.*

It would be good, if possible, also to have a paragraph on the impact of pesticides management on biodiversity and on the biocenosis.

Table 13.1. It is unclear why SEEA CF land cover classes are not included in this table, alongside the SEEA CF land use classes. In fact, the SEEA CF land cover and land use classes virtually coincide on what the SEEA EA refers to as “anthropogenic ecosystems”, particularly when it comes to agricultural land and forest land.

13.4.2. The GHG/carbon accounting framework developed in the SEEA AFF, which extends those in the SEEA CF, should be discussed and included.

13.40. “LULUCF” is not a SEEA class, it’s a IPCC class. First of all, it should be explained what it is. Secondly, it should rather be linked to the rules set out in the SEEA AFF

13.54 Kindly refer to the work developed in the SEEA AFF that allows to account for both emissions and removals

Table 13.1. The terminology used in the proposed accounting table is quite different from the one used in the SEEA AFF (for land assets and flows) but also from established carbon cycle literature. Furthermore, distinguishing carbon in the bio-geosphere as separate from carbon in the “economy” appears to be in contrast with the overarching principles of the SEEA EA themselves, i.e., that ecosystems services (e.g., carbon sequestration) are in some sense within the economy.

On valuation:

Ch.12 The several “Alternative” value concepts proposed should be organized into a more comprehensive statistical approach towards the description of values associated to ecosystems.

Instead of focusing on economic theory and the concept of welfare values, a statistical approach based on observations or on estimates in the form of costs and wtp is to be preferred. The more appropriate use of different values for different types and analysis could then follow more naturally. Conversely, economic theories’ interpretation of values in relation to welfare and preferences, etc., consumer surplus, etc. could be treated in an application chapter separated from the SEEA EA, or in an annex.