



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?

The System of Environmental and Economic Accounting - Ecosystem Accounting (SEEA - EA) is a comprehensive, structured, consistent, coherent and spatially referenced framework that facilitates the integration and analysis of statistics, and the understanding of economic-environmental interrelationships, from which effects on biodiversity and climate change are derived, among other areas of interest. Based on the above, the logic and conceptual basis on which the SEEA - EA is based makes it possible, through the implementation processes, to respond to the questions arising from the effects mentioned above, and to deliver environmental and sustainability reports in a systematic way.

Additionally, the incorporation of an expanded vision of ecosystem richness from the extension of the scope of the SEEA - EA, in relation to the SEEA - Central Framework (CF) provides a more complete image of the state of the environment and the impacts of human activity, in accordance with the vision of countries like Colombia that have an important coverage of natural ecosystems. Given the high amount of environmental information and research, the establishment of the SEEA - EA as a measurement framework that shares concepts from the System of National Accounting - SNA, makes it possible to clearly establish the scope of ecosystem accounting, differentiating it from purely environmental research, and facilitating the integration and determination of the treatment of available information.

On the other hand, the current version of the SEEA - EA shows an important evolution in the conceptual development, in relation to its experimental version. Moreover, it is recognized that thanks to the structured revision process, it was highlighted that it was through-and thanks to the implementation process-that key findings and needs were identified. Considering the above, the importance of promoting these processes within the countries is highlighted, so that the content of the SEEA - EA is validated in practice, and not only in theory, and thus the continuous processes of revision and improvement are guaranteed.

Likewise, the importance of promoting the use (through the dissemination of the framework) in parallel with the implementation processes is recognized, so as to take advantage of the structured approach of the SEEA - EA, which provides greater possibilities for analysis.

Comments by sets of chapters

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

Taking into account that there are differences in the application of some environmental science concepts to ecosystem accounting, it is recommended to include in the introduction a text that explicitly and transversally recognizes this fact, so as to promote the exhaustive application of the guidelines and treatments established in the SEEA – EA.

Ecosystem accounting, by requiring explicit spatial data, recognizes the importance of place and the combination of biophysical and abiotic elements that occur there.

While the SEEA - EA promotes its full implementation, it recognizes that countries have different capacities and priorities. Considering the above, flexible implementation is very relevant, since it enables countries not only to advance in the compilation according to their possibilities and interests, while ensuring the comparability of such progress. In addition to the advantage of flexible implementation, but also foster country ownership. Moreover, it is recommended that the compilation should begin by determining the statistical unit on which the measurements of the extension, condition and flow accounts for ecosystem services will be carried out.

Additionally, the ease of integration of the different geographic and thematic measurement scales is highlighted, as long as a common accounting framework is applied to the measurement, which provides additional opportunities for flexible implementation without losing the coherence and integrity of the accounting system.

The relevance of motivating not only the countries but also the international organizations to support their reports in the results of the SEEA - EA is highlighted. This contributes to reducing the burden on countries by requesting the same information for different purposes.

International agencies should make additional efforts to ensure that multilateral processes are not aligned with other processes, generating possible duplications. Given the diversity of international initiatives and the current facilities for information exchange, new initiatives should ensure consistency with previous ones given their experience. This ensures the fluidity of the processes without overburdening the countries.

The role of the National Statistical Offices stands out, not only in leading the processes of implementation of the SEEA - EA, but also in promoting collaborative work, and in the integration and articulation of the different stakeholders. It should be noted that ecosystem accounting has a relevant sub-national focus, which requires the compilation of information from a greater number of sources and the active participation of more actors from different institutions and disciplines.

The use of the same statistical unit throughout the SEEA - EA, makes it possible to provide users with complete, coherent and integrated information for each type of ecosystem, which can be connected to measures of economic and human activities, so as to facilitate the use of the results for the effective management of natural capital at the national and international level.

The logical order of the accounting structure is highlighted, starting with the ecosystem extent account, which determines an appropriate set of ecosystem types that will support the structure of ecosystem service condition and flow accounts. It is considered appropriate to emphasize this aspect in favor of flexible but orderly implementation.

The establishment of measurement and valuation principles, concepts and limits derived from the SNA facilitates the comparison and integration of ecosystem and economic data, generating real possibilities for the measurement of coherently adjusted economic aggregates.

In the presentation and introduction to the accounts On chapter 2, it is advisable to specify the differences in the progress made in the conceptual development and standardization of the accounts in monetary terms, explicitly stating that in response to the challenges of the accounts, constant revision and publication of complementary documents are required. This suggestion is made as follow-up of the concern raised by some members during the 15th meeting of the UNCEEA, where some members expressed that the conceptual development for monetary measurement is still in an experimental state, as opposed to physical measurement which is more standardized.

Similarly, in line with the UNCEEA recommendations, at the end of the presentation and introduction to the accounts it is suggested to include text describing the concerns related to the presentation and interpretation of the results, with special emphasis on the monetary measurements (e.g. what does it represent and/or not represent?). The incorporation of this text favors the adequate use of the estimates derived from the SEEA-EA, which in turn can favor and motivate the implementation processes, and the active participation of environmental entities in the measurement processes.

inally, the stylized example discussed in section 2.6 is expected to provide a consistent illustration of the entries in the various accounts and the links between them. This example will facilitate understanding of the application of ecosystem accounting. While it is understood that the example can be developed with hypothetical data, it is important to ensure consistency and to clearly reflect the relationships between the accounts so that it is an effective reference for countries. Additionally, the example could be used to highlight relevant issues or relationships from which analyses of interest are derived.

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

In paragraph 3.14, the reference that layers of the atmosphere that are outside the scope of ecosystem accounting can be considered and treated as an environmental asset is not consistent with the environmental assets covered by the SEEA-CF. Therefore, conceptually and in accounting terms, these layers would be outside both the scope foreseen for the ecosystem asset (SEEA-EA) and the scope foreseen for the environmental asset (SEEA-CF). Based on the above, it is suggested to revise the wording of the paragraph and to expand the discussion and treatment of the layers of the atmosphere referred to, in order to guarantee the coherence of the two accounting frameworks

The content of Annex 3.1 is considered very relevant because it provides conceptual elements that facilitate the treatment of the ecological concepts that support the spatial units and the understanding and implementation of the accounting system.

We suggest to modify Paragraph A3.15 "Characteristics: Physical properties of the soil, such as water retention characteristics, control of moisture availability during dry periods" with the following "Physical properties of the soil such as texture, porosity, drainage, permeability, among others, that determine the characteristics of water retention and availability of moisture during dry periods".

The design of the table 4.2. ET change matrix (Units of Area) on page 67 is confusing, since the opening stock is at the end of the columns and the closing stock at the end of the rows. We wonder what is the logic of this arrangement? And if this does not have any mathematical implications. Even if it did not have any mathematical implications, the proposed arrangement does not visually present the addition and reduction logic that determines the changes between the opening and closing stock. In this regard, we suggest to use the design of the land cover change matrix set out in table 5.14 of the SEEA - CF. That is: the opening surface in the first column and the closing surface in the last one, so that it is always added and subtracted in the same direction (horizontally). This design is clear and easy to understand.

With respect to condition account accounting, the three-stage approach provides a logical order to the measurement process, starting with the variables, continuing with the indicators, and culminating with composite indices of ecosystem condition. In this way the reading advances from the "simple" to the complex, facilitating the understanding and integration of the measurement. This also ensures that the details and overview are reported in a way that responds to the interests of different user groups, promoting effective use of the results of the ecosystem condition account.

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

The information in table 6.2 and annex 6.1, supports the identification of ecosystem service flows and provides the required support for the correct incorporation of additional ecosystem services to those established in the checklist, in response to national needs.

The main criterion of relevance in various countries and contexts, used for inclusion in the reference list of selected ecosystem services, is considered very relevant. Similarly, the recognition of the dynamics of change and international progress in the development of a classification of ecosystem services leads to the importance of leaving the reference list open, so that it can reflect the needs for modification arising from future changes and progress in the classification.

The construction of the correspondence between the reference list and other classifications and typologies of ecosystem services, to be developed in Annex 6.2, will provide indispensable elements for the interpretation and comparison of results, as well as facilitate the correct use of information previously generated by the countries, through the use of other classifications.

Considering the relevance of the identification of ecosystem services for the monetary valuation of ecosystem services and assets, it is necessary to incorporate in chapter 6 a text that invites compilers to include a wide range of ecosystem services in a way that best reflects the monetary value of both the ecosystem service and the asset. This invitation is incorporated in paragraph 10.49, however it needs to be referred to in chapter 6 as well, as it is the chapter that includes the principles for ecosystem service accounting. The incorporation of the suggested paragraph favors the integration of the accounting system in physical and monetary terms from the beginning of the measurement.

The challenges of practical differentiation of water-related ecosystem services and abiotic flows are recognized. However, it is also recognized that implementation processes will make it possible to determine the magnitude of these challenges and identify solutions.

Paragraph 7.41 states that biomass related product flows are not considered ecosystem service flows and therefore are not recorded as exports in the ecosystem service use and supply account. Considering this guideline, the crossing of provisioning services with the export of products column is void by definition and should be highlighted as such in the use component of table 7.1. in coherence with what is later shown in table 11.2.

Paragraph 7.44 establishes the registration of imports and exports for cases of fish caught outside the exclusive economic zone of a country. In the use component of table 7.1, the column required for the registration of exports of ecosystem services referred to is missing and should be added, consistent with what is later shown in table 11.2. The column for the registration of imports if included

It is recommended to change the name of the column "export - products", of the use component of Table 7.1, to "export of ecosystem services" since the export record applies to maintenance and regulation services, and cultural services; as established in section

7.2.6. In the framework of ecosystem accounting, the export register does not in any case apply to products. In relation to this aspect, the column "export-product" could also be eliminated, and the record made for maintenance and regulatory services, and cultural services in the column of ecosystem service exports, suggested in the previous paragraph.

The name of the "total product use" column in the use component of table 7.1 should be changed to "total ecosystem service use" since this is what is being recorded.

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

We would like to suggest including an introductory text to the monetary valuation chapters, which in coherence with the proposal made for chapter 2, mentions the differences in the progress in the conceptual development and in the standardization that the accounts have in monetary terms, developing in more detail the challenges and future work to be done, for their updating and strengthening.

Efforts to make the valuation of ecosystem services consistent with the valuation of ecosystem assets are valued and the advantages of establishing clear relationships between the two accounts are recognized. However, the interaction foreseen in the SEEA-EA for the two valuations, evidences that any shortcomings and limitations in the physical identification and measurement and in the monetary valuation of ecosystem services, will also be reflected in the valuation of the ecosystem asset, which makes evident the challenges of measurement and the risks of comparison with the assets that are part of the SNA, if a sufficiently robust measurement is not available.

The content of paragraph 10.49 should also be referenced in chapter 6, to favor the integration of the accounting system in physical and monetary terms from the beginning of the identification of ecosystem services.

The stylized example in annex 10.1 provides useful information to clarify the approach to monetary valuation of ecosystem assets, however, approaches should be continued as foreseen in the future work suggested to be incorporated in the introductory text of the monetary valuation chapters.

The content of paragraph 11.21 brings to the table the importance of measurement rigour and the most relevant concerns in terms of the appropriate use and comparison of monetary valuation of ecosystem assets and economic assets. This fact ratifies the concern of the countries regarding the scope and content proposed for the monetary valuation in the SEEA-EA. Likewise, the paragraph presents the risks and limitations derived from the difficulty of incorporating future trends in the availability of assets and their interactions, so that prices evidence the scarcity of critical resources, as relevant analyses derived from ecosystem accounting.

The incorporation of the text suggested for chapter 2, regarding the interpretation of the results, may alleviate the above-mentioned concern. Similarly, additional details on the correct interpretation of the information can be incorporated into the assessment chapters, as appropriate.

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

The content of chapters 12 to 14 is indispensable for promoting the use of the SEEA-EA, by deriving welfare analyses, consolidation of thematic accounts, and the elaboration of coherent reports and statements in the framework of international initiatives such as the Sustainable Development Goals (SDG's) and the post-2020 global biodiversity framework, among others.

It also highlights the potential for analysis derived from the integration of the three accounting frameworks (SNA, SEEA-CF and SEEA-EA) and their contribution to the study and elaboration of coherent narratives, in the face of relevant problems including climate change, biodiversity loss and the complexity of the balance of relations in urban areas.

Similarly, the combination and integration of the three frameworks is decisive for the correct and coherent derivation of information that contributes to the effective management of ecosystems and the study of the link between biodiversity and climate change, among others, as long as the application of accounting principles, concepts and rules is guaranteed.

Table 13.1 provides information relevant to linking biodiversity and the SEEA-EA accounts.

the information contained in Annex 13.1 IS very important in terms of details for structuring and measuring the thematic carbon account, which is of high interest to advance knowledge, management, and slowdown of climate change.