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?

Thanks to an effective and inclusive global consultation process, the manual has undergone an impressive evolution so that it is now based on a solid foundation in ecological science. We have identified some issues in individual chapters. Once these are resolved, we have no significant or red-line issues that would prevent acceptance of the SEEA-EA manual as a standard. We do suggest that the following less substantive issues and challenges in implementation could be resolved via the forward research agenda:

1. As identified in Section 5.5.4, ongoing research and development is needed to more effectively link assessment of ecosystem condition at local ecosystem-asset scale to the derivation of indicators suitable for reporting change in the state of biodiversity across whole ecosystem types or accounting areas, including for monitoring progress against CBD post-2020 goals and targets. Particular attention needs to be directed to incorporating the effects of compositional variation (beta diversity), and habitat connectivity, within and between ecosystem types into the derivation of habitat-based biodiversity indicators through spatial aggregation of local ecosystem-condition estimates.

2. As identified in Section 6.5.2, ongoing research and development is also needed to better account for resilience, insurance and option values of biodiversity in maintaining the long-term capacity of ecosystems to continue functioning effectively, and thereby delivering services, in the face of future environmental change, including climate change.

Comments by sets of chapters

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

No comments

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

- 5.35 (page 76): In the explanation of "Class C1 Landscape and seascape characteristics" here, and in Table 5.1, it needs to be made even clearer that measurements against such variables are assigned to individual ecosystem assets – i.e. these variables measure the effect of landscape/seascape context on the local condition of each asset – and not to an entire landscape or accounting area. Otherwise the logical approach to aggregating measures of ecosystem condition described in section 5.4 will not be applicable to measures of landscape and seascape characteristics.
- Section 5.3.3 (pages 81 and 82): The following recent publication is of very direct relevance to this treatment of reference condition – McNellie MJ, Oliver I, Dorrough J, Ferrier S, Newell G, Gibbons P (2020) Reference state and benchmark concepts for better biodiversity conservation in contemporary ecosystems. *Global Change Biology* 26: 6702-6714.
- Section 5.5 (page 89): Many of the variables described throughout Chapter 5 can be measured only through direct field (in situ) observation, or these variables are discussed in a way which seems to imply they will be measured directly. However, even in better-studied/sampled regions of the world, and certainly in less-studied regions, it is highly unlikely that direct field-based assessment of condition will be affordable for more than a tiny fraction of ecosystem assets across any sizeable ecosystem accounting area. Condition assessment across the vast majority of ecosystem assets around the world will therefore need to rely heavily on remote sensing. This reality does not seem to be clearly acknowledged anywhere in the current version of Chapter 5, but probably should be.

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

- 6.127 and 6.128 (page 127): It needs to be better conveyed here that the "literature on ecosystems and biodiversity (e.g., Mori et al., 2013) concerning the maintenance of ecosystem functions, and option and insurance values of ecosystem assets" referred to in 6.127 as focusing on "the ability of an ecosystem asset to generate a bundle of ecosystem services", in fact also focuses particularly on maintaining this ability in the face of future environmental change (e.g. climate change) – i.e. the issue touched on in 6.128, but which is not currently tied explicitly to the literature on biodiversity and ecosystem functions referred to in 6.127.

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

No comments

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

- 13.17 (page 239): The emphasis placed here on resilience, insurance and option values of biodiversity is vital, but the explanation of these values would benefit from inclusion of a bit more detail, including citation of a few more key references (as was done for this topic in section 6.3.3 "The link between biodiversity and ecosystem services").
- 13.30 to 13.35 (page 242): The material here on "Adaptations of species and extent accounts" is also vitally important, but this material clearly needs further development and refinement, and more explicit cross-linking to related material in Chapter 5 (e.g. 5.104) and to the technical note referred to in footnote 37 on page 94 of that chapter.
- 14.36 and Tables 14.5 and 14.6 (pages 277 and 278): While the indicators listed in these tables might indeed be relevant to assessing progress against CBD post-2020 goals and targets, it is far from clear why or how each of these would be "derived from SEEA based accounts". This could be addressed by including an additional column in the two tables, clearly identifying the particular SEEA account from which it is envisaged that each of the listed indicators would be derived. Examples of indicators for which such explanation is most needed are: "Biomass of selected natural ecosystems" against Goal A (would this be derived from ecosystem condition accounts and, if so, would not overall indicators of ecosystem condition per se be more appropriate to consider here?); "Proportion of land that is degraded over total land" against Target 1 (would this again be derived from ecosystem condition accounts and, if so, how would this derivation deal with the marked discrepancy between the concepts and purpose underpinning the SDG 15.3.1 land degradation indicator versus those underpinning SEEA EA ecosystem condition accounts?); and "Coverage of key biodiversity areas by … protected areas" against Target 2 (again it is not clear which SEEA accounts would provide the required information on protected areas, and on key biodiversity areas?).
- 14.56 (page 285): In raising potential linkages here between SEEA EA and scenario analysis, it would seem appropriate, and important, to point to the definitive methodological assessment undertaken by IPBES, of the role of scenarios and models of biodiversity and ecosystem services in policy and decision-support, and of available approaches to performing this role. See: IPBES (2016) *The methodological*

assessment report on scenarios and models of biodiversity and ecosystem services. S Ferrier, KN Ninan et al (eds). IPBES Secretariat, Bonn, Germany. https://ipbes.net/assessment-reports/scenarios