System of
Environmental
Economic
Accounting

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System of Environmental-Economic Accounting 2012 – Experimental Ecosystem Accounting Revision

First Global Consultation on:

Chapter 3: Spatial units for Ecosystem Accounting

Chapter 4: Accounting for Ecosystem Extent

Chapter 5: Accounting for Ecosystem Condition

Comments Form

Deadline for responses: 30 April 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 nine 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

Question 1: Do you have any comments on the definition and description of ecosystem assets and ecosystem accounting areas and the associated measurement boundaries and treatments?

- I think that some to land accounting and using the same spatial scale approach in the introduction would be useful. Additionally, I see land accounts as the first step of ecosystem accounting and perhaps this should be mentioned. To me land cover is the starting point and I think this needs to be described for readers in the beginning not after 10 pages.
- Ideally, for major and dominant ecosystems type like forest, freshwater, agriculture , a typology of asset would prove helpful.
- Production and asset boundary for each ecosystems should be standardised, the approach should be specific and unified.
- For oceans I think that atmospheric boundary layer is also important, wind speed, air pollution and temperature increases directly related to the sea surface, but are not really part of the sea surface (it is missing from the figure 3.1b).
- In section 3.15 these are for terrestrial systems. If we want to make this apply to oceans then it would need to include Regional Seas, EEZ, ABNJs. Alternatively, it should be stated that although oceans are mentioned in the intro the guidance is primarily for terrestrial systems. Also, UNEP and many others us the hydrosheds and hydrobasins layers of WWF and thus using these terms as opposed to just water catchments might be useful.
- Following up on the earlier point, 3.17 would be a good place to mention land accounts.
- I find section 3.30 a bit confusing. It is not only streams that are vector data. Any traditional cartographic mapping is likely to be vector data – where a surveyor marks the boundary of an ecosystem and then details the attributes within that boundary? I would expect that you also have some point based data – reservoir locations or dams for example.
- In section Annex 3.3. I think that it might be good to mention the increasing possibility of use new data to better understand ecosystems an biodiversity. GBIF or BirdLife are examples where data from citizens is being used to better understand ecosystem health (and to delineate key biodiversity areas in the SDGs), thus I think that it is not only data from remote sensing, surveys and national accounts that should be mentioned on page 25.

Question 2. Do you have any comments on the use of the IUCN Global Ecosystem Typology as the SEEA Ecosystem Type Reference Classification?

- Theoretically, we think the IUCN definitions are logical, but practically I wonder if this will create obstacles in the roll-out.
- Illustrative examples from application of IUCN classification would be helpful.
- How many countries have experience in using the IUCN categories in this way? I think that land cover (using MODIS or CCI-LC of FAO) is the easiest starting point for most countries and thus I think that there is a need to provide a link between the current global datasets and the reference classification that is selected.

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- We understand land cover is not an ecosystem type, but I also don't think a river is an ecosystem type – a river is just a part of an ecosystem, e.g. the Amazon River is part of the Amazon forest.
- Many of the SDG indicators relate to 'mountains' another good link would be to using some useful definition of mountain (based on ruggedness).
- In conclusion, to me, this section is too abstract and not something that I personally think will be useful for rolling out EEA in countries.
- Also the marine ecosystem types are so different, for consistence shouldn't marine ecosystems also relate to latitude, features in some way (the way that the terrestrial ecosystems do).

Question 3. Do you have any comments on the recording of changes in ecosystem extent and ecosystem condition, including the recording of ecosystem conversions, as described in chapters 4 and 5?

- On ecosystem extent, I agree with the accounting structure, however, I still think the IUCN categories will be difficult to roll out. Additionally, I think that table 4.2 is an easier starting point than table 4.1. (For example, without seeing what a forest changed to, it is difficult to say why it changes.)
- On ecosystem extent, it also may be useful to make a link with land degradation somewhere as these changes in extent are what countries are using to define land degradation (as a headline indicator).
- On ecosystems extent and health, there is also a strong seasonality element – for example a lake might only be a lake for some of the year and nutrient loading differs drastically over the year. I think that somewhere in this section seasonality should be mentioned.
- It will be helpful if the chapter suggests to get the localised economic data so that issue in ecosystem asset pricing can be implemented. This would be needed esp for the policy questions.

Question 4. Do you have any comments on the three-stage approach to accounting for ecosystem condition, including the aggregation of condition variables and indicators?

- We find the ecosystem condition variable account confusing for water quality. If I take water quality, then I will have a map of a lake with maybe 10 monitoring stations within that lake. If I want to track nutrient loading then what I am looking for is flare-ups and not necessarily the opening, closing average. I would expect that there are differences across the seasons with seasonal differences also linked to precipitation. If I take a different type of pollution (like macroplastics or metals) then it could be a more steady increase that would be of interest, but averaging across a lake still doesn't seem like the best idea as I really would need to know where the problem is the worst and thus it seems that you need the ecosystem condition per pixel if possible and then as opposed to looking at the overall condition of the ecosystem, you might want to estimate the percentage of the ecosystem that has a problem in terms of condition on the basis of the chemical

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state indicators. (also, the % of ecosystem with a problem would match out approach for SDG 6.6.1 and SDG 14.1.1).

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