



DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS
STATISTICS DIVISION
UNITED NATIONS



System of
Environmental
Economic
Accounting

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

First Global Consultation on:

Chapter 6: Ecosystem services concepts for accounting

Chapter 7: Accounting for ecosystem services in physical terms

Comments Form

Deadline for responses: 20 August 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 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 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

Questions related to Chapter 6

Question 1: Do you have comments on the concepts and definitions for ecosystem services, benefits and associated components of the ecosystem accounting framework?

The ecosystem extent and conditions in physical terms is understood and a valuable contribution to the SEEA.

The monetary valuation is however considered to be an application and use of the statistical system rather than a framework of objective information, and would need to be presented as suggested applications or analyses more than statistics. We have also before produced reports called “applications and extensions”, for example showing the way input-output calculations can bring together the data in the SEEA to answer pertinent policy questions. As has been discussed in the user community, there are now several ways of creating reference levels and different ideas on how much of the ecosystem interaction that is of interest. Thus, if the valuation parts are described as applications, then there is more reasons for compilers to maintain enough information for a multitude of users.

A general difficulty with measuring the quality of ecosystems in a policy context is that the time aspects are very different from the human activities that we are typically recording on a yearly basis. Looking one year at a time, can be good to trace investments or rules, subsidies or taxes that affect the ecosystems in the long run or to follow the trends of emissions. Once a damage is done to an ecosystem it can take a long time to recover, and sometimes it will not recover. This aspect is not discussed, and would still be of importance for the ecosystem services that are in focus.

Paragraph 6.22 and 6.24. Avoid defining ‘final ecosystem services’ and tie them to a business, government or household as a ‘transaction’. This risks to underplay the function of the ecosystems and does not seem to be a necessary step. Rather it can cloud the way that a piece of land have a multitude of uses that will be enjoyed by actors not only of today, but also of tomorrow. The examples given of air filtration gives a higher value to the ecosystem the more toxic particles are in the air. Are human lungs more valuable in a dirty environment as they absorb some of the pollution? Calculating pollination this way would look away from the pollinators that do not directly pollinate crop land, but that maintain an ecosystem. If you change to wind pollinated crops, then the value of pollinators would go down. It seems an arbitrary way of trying to simplify the measuring. Thus it is an application more than a calculation that would give a possibility to investigate the interaction between human activities and the environment.

The first sentence of 6.24 is appalling and should be deleted. “The focus on accounting for final ecosystem services is sufficient for recording, in a comprehensive manner, the connection between people and ecosystems”. The comprehensiveness is not easy to understand. "The connection between people and ecosystems" is a very broad concept, and there is much that lies outside the suggestions made here.

6.29 “an ecosystem asset supplies an ecosystem service to and economic unit”. - 'supply' sounds like someone is offering this in a trade situation but the ecosystems are not actors in that sense.

An ecosystem asset 'is being used' sounds more correct.

6.30 On benefits: ‘The benefits of reduced air concentrations will be received by both individuals with respect to their health and building owners in terms of damage to property.’

Reflection: In a country with standards on air pollution and a non-fossil fleet of vehicles, this would not be recorded then as it would not be needed. Is regulating ecosystem services partly another word for ecosystem waste management of economic activities? The vegetation will be valued for giving a good living environment in general, would that be seen as a cultural benefit then?

6.32 “While ecosystem, species and genetic diversity are not considered ecosystem services in themselves” This is a worrying statement. There would be many reasons why the accounts should be able to describe measures for the state of these components and thus be able to provide statistics relevant to policy makers. Which brings us back to the same comment as above: This definition of final services is an analysis rather than a full set of the data that would be asked by analysts. This more an application than a standard and would be better presented separately as such.

Question 2. Do you have comments on the content and descriptions in the reference list of selected ecosystem services?

We appreciate the reference list as it makes it clearer what type of issues that are identified.

The regulating services in particular are difficult to tie to a yearly system of accounts, and it would be good to have some more text on how it is anticipated to be presented. The scale and the modelling that would be needed to provide time series on these, who would be providing such data? It all seems to be speaking more to bigger hydrological models or very specialised software from experts on a specific topic.

Question 3. Do you agree with the proposed treatments for selected ecosystem services described in Section 6.4 for biomass provisioning services, global climate regulation services, cultural services, water supply and abiotic flows?

6.51 We note the recommendation on using gross quantity of biomass. It seems to be a very specific recommendation while there are so many other things in the text that are left without any specific detail. As noted above, the issue of time is not mentioned. Biomass comes from many types of different crops and the types of questions that will be asked is likely to concern both gross and net flows. Also, the methods to obtain such numbers are complex and likely to give rise to system boundaries by means of lack of data.

6.58 ‘the animals are not in direct connection with an ecosystem’ then no ecosystem services should be recorded’ – How will the compiler differentiate the industrial

production from the intensive one? It is interesting to have this division, but for a compiler it is important to know how to find this distinction.

6.72 Cultural services is a new categories for us. Do you know of studies that quantify spiritual services? We have seen monetization of tourism being allocated to natural parks, but this was new. It sounds interesting, but also builds that impression that these chapters are better to present as applications. We are struggling to implement the central framework as it is being considered too complex for countries. It is important to give advice on components where there are ideas on how to measure them in an objective and consistent way. There is much to say for producing standards that really give advice on measurements where there are experience in how to quantify the items that are being considered.

6.81: How would we quantify forests retaining sediments? This must be a modelling exercise and extremely difficult to make time series for.

Question 4. Do you have any other comments on Chapter 6?

Click here and start typing (The length of your response is not limited by this text box.)

Questions related to Chapter 7

Question 5. Do you have comments on the proposed recording approaches for ecosystem services supply and use tables described in section 7.2?

7.2 “All flows of ecosystem services in the reference list can be measured in physical or quantitative terms.” This is not very likely true. Perhaps some of them or some parts of them can be quantified, but “all” is not something that a statistical system can ever aspire too do. It would be valuable to back this statement up with references to show how things have been quantified and if it is likely that the methods are reproducible over time.

7.3 “support analysis of trade-offs between different ecosystem services as part of spatial planning and land management and provide information to delineate areas for specific land use.”

This sounds so specific that it would need to have local data rather than something that can be picked from a national accounting system! Or from a macro model or a general map.

7.14 It would be good to have this chapter as an application rather than as part of the standard itself, and to make sure to reference the studies mentioned. For a stats office, it

seems unlikely that this is a common practice, as we are not aware of many NSOs that are doing these types of assessments.

Also, having worked doing local assessments, there is no way the scale that we are providing could be used for local planning. For general understanding and an overview of the situation, but not for actual projects

7.34 “The use of services by non-residents are recorded as exports”. Why? What is this apparently very specific question that you are attempting to answer here?

Question 6. Do you have any other comments on Chapter 7?

We would like to ask you to be cautious in adding so many chapters and specific tables in the report. Some of the topics appear to be more conceptual or research and models, where data or reference levels need to be assumed, than the type of data that could be provided or required by the statistical users and non-specialised policy makers on a regular basis. To reason on how data can be provided to feed into such analyses is valuable, but to put it into a statistical standard is confusing.