DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS
STATISTICS DIVISION
UNITED NATIONS

System of
Environmental
Economic
Accounting

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

First Global Consultation on:

Chapter 8: Principles of valuation for Ecosystem Accounting

Chapter 9: Accounting for ecosystem services in monetary terms

Chapter 10: Accounting for ecosystem assets in monetary terms

Chapter 11: Integrated and extended accounting for ecosystem services and assets

Comments Form

Deadline for responses: 6 July 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 twelve 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 8

Question 1: Do you have comments on the principles proposed to underpin monetary valuation for the revised SEEA EEA, including the use of exchange values and net present value approaches?

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

Question 2. Do you have any suggestions for topics to include in Annex 8.1?

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

Question 3. Do you have any other comments on Chapter 8?

8.27 …… "It is nonetheless recognised that since there are multiple services from a single ecosystem asset, determining the expected future flows for each service must involve consideration of the common supply context. Thus, factors influencing the future supply of one ecosystem service will be linked to the future supply of other ecosystem services. This framing is analogous to recognising that a hotel may provide separable outputs of both accommodation and meal services, each supplied using a common pool of produced assets and labour." → Does this imply the trade-off between different services from a single ecosystem asset should be consider when determining the expected future flows for each service? The potential trade-off between should be involved in the consideration when measuring the expected flows of each services separately

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Questions related to Chapter 9

Question 4. Do you have comments on the range of valuation methods proposed for use in estimating exchange values of ecosystem services?

Figure 9.1. gives a very good overview of available techniques. The techniques are also well explained at general level. It could be very useful to have short practical, numerical example of each technique. It would make things easier to those compilers of ecosystem accounts that are not experts on valuation or national accounting.

At this point I would like to thank and congratulate the editors of these chapters and other chapters of the SEEA EEA. Structures of the chapters and the texts are very clear. it is a pleasure to read the chapters and follow the 'story' of ecosystem accounting, although the expertise of this reader is rather limited in both environmental and economic aspects.

Question 5. Do you have any other comments on Chapter 9?

I would like to see even more guidance/discussion on how to conduct revealed/stated preference valuation studies that allow the simulation of exchange value, and what other data needs there often are to use existing valuation studies to simulate the exchange value. Even if the marginal WTP/utility can be defined based on these studies, the object/unit of valuation may be such that it is not possible to define exchange or other values that are compatible with SNA and ecosystem accounting approach.

Currently the discussion is more about what valuation methods are compatible with the ecosystem accounting approach rather than how these valuation methods should be applied to provide values that are in line with ecosystem accounting.

Also, guidance/discussion on how to use revealed/stated preference method studies/results that focus on the change in the environment to define SNA compatible values for ecosystem services and assets would be useful. This would allow the assessment of international policy frameworks such as EU MSFD, WFD, biodiversity strategy… in terms and units that are compatible with ecosystem accounting.

Especially chapter 9, which introduces the ES supply and use account in monetary terms, and the different valuing techniques of ES, would greatly benefit from practical examples like the annexes in chapters 10 and 11

Questions related to Chapter 10

Question 6. Do you have comments on the definitions of entries for the ecosystem monetary asset account including ecosystem enhancement, ecosystem degradation and ecosystem conversions?

C1: In CF, one of the entries is growth while in SEEA Ch10 it is suggested to be enhancement. What is the basis for different definitions? In 10.9. it is said that "*Ecosystem enhancement is the improvement in the value of an ecosystem asset over an accounting period that is a result of an increase in the condition of the ecosystem asset.*" What if the value of asset is improved e.g. due to the increased growth due to the changes in age-class structure? Is this included in enhancement, in some other entry or omitted?

C2: The definitions of the entries are clear, but it might be challenges in practices. The estimation of the expected flows is very likely based on some models. Sometimes it may be hard to distinguish the value change of the expected flows is from which reasons (ecosystem conditions or demands). For example, if the estimation of the expected flows is based on a model which have continue interaction between social-environmental interactions over the period of estimating the expected flows (Continue with Q8). It might be also good to provide a guideline for the cases if the attribution of net present value change is hard to identified.

Question 7. Do you have comments on the recommendations concerning the selection of discount rates for use in NPV calculations in ecosystem accounting?

Based on the selection criteria for the discount rate in chapter 10, different ecosystem services from the same ecosystem can use different discount rate in calculating the value of ecosystem assets. Will this create problem/biased when do the comparison across ecosystems?

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Question 8. Do you have comments on Annex 10.1 describing the derivation and decomposition of NPV?

The decomposition of NPV to price effect and quantity effects is understandable. And Table 10.5 further provide the suggestion to identify the quantity effects to ecosystem enhancement, ecosystem degradation and ecosystem conversions based on the change of condition and demand. But the question remains in practice if these differences can really be identified. Depending on the approach to estimate the expected follows, the change of the condition (quality of the ecosystem) can also effects in demand and price, especially the expected flows are estimated for several years in the future.

Annexes with practical application examples (annex 10.1 and 11.1) are very useful. For a reader without any economics background, it is enormously helpful to grasp the monetary ecosystem accounting concept through practical examples which are as simple as possible. It would help many readers to develop these annexes further with more tutorial-like examples.

Question 9. Do you have any other comments on Chapter 10?

C1: Ecosystem assets such as fish stocks/marine food webs often provide multiple services of different types. Spatial boundaries/units (extent) concerning these assets can often be an issue for monetary ecosystem accounting for several reasons such as: the species and services are mobile, and valuation studies related to for example recreational fishing are not easily transferrable between different locations. Also, how to account for the changes in the condition of habitats for mobile species that provide multiple services. In general, I would like to see more discussion/guidance on the spatial issues in context of valuation, not just related to the biophysical ecosystem extent or benefit transfer.

C2: In 10.51 it is said that "*The additional challenge in estimating future flows of ecosystem services in an asset valuation context is to allow for interactions and connections between ecosystem services*". The interaction is indeed really important to take into account for obtaining the consistent outcome. It might be beneficial to elaborate this further than in current version. For example, are the numerical ecological (-economic) models necessary to utilize to take into account the interaction?

C3: Thank you for including the application in Annex 10.1, these examples are very helpful!

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Questions related to Chapter 11

Question 10. Do you have comments on the proposed structure of the extended balance sheet that integrates the monetary values of ecosystem and economic assets?

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

Question 11. Do you have comments on the approaches to assigning the ownership of ecosystem assets that underpins the structure of the extended sequence of institutional sector accounts?

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

Question 12. Do you have any other comments on Chapter 11?

Annex 11.1: Example of an extended supply and use account
Thank you providing the examples, they are highly valuable! However, more detailed guidance would still be needed. For example, there is no guidance how the partition of value added of forestry industry (in SNA) should be done between the industry and the ecosystem asset. Below there are some specific questions related to that.

In the SNA, Forestry and logging (02) is divided into Silviculture (021), Logging (022), Gathering of wild growing non-wood products (023), Support services to forestry (024) and **Net growth of forests** (025). Net growth of forest is not part of the official classification of NACE Rev 2, but it is reported at least in Finland. This net growth of forest is however part of the Silviculture and logging (02), not value added. If this Net growth of forest i(025) is reported in other countries as well, what is the relationship between that and 'Ecosystem service: Growth of forests' in the example in Annex 11.1?

In the example of Annex 11.1, the VA is partitioned. I assume that 'ES: Growth of forests' is one/some of the capital components in value added? Which one(s)?

Why the name of the ES is Growth of forests? What if the ecosystem service is carbon sequestration that is also related to the growth of forests but it is not part of SNA?

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