



DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS
STATISTICS DIVISION
UNITED NATIONS

SEEA Revision

SEEA Experimental
Ecosystem Accounting

Comment form

Comment form for the Consultation Draft

Deadline for responses: 1 January , 2013
Send responses to: seea@un.org

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To submit responses please save this document and send it as an attachment to the following e-mail address: seea@un.org.

The comment form has been designed to facilitate the analysis of comments.

In Part I general comments on the structure and content of the draft document are sought. In Part II any other comments, particularly those of a technical nature should be included.

Relevant documents

Before submitting responses you are encouraged to read

Cover Note to the Consultation Draft

SEEA Experimental Ecosystem Accounting – Consultation Draft

Part I: General comments

In the box below please supply any comments on the structure of the document, the balance of material and the coverage of the draft including any thoughts on missing content.

Comments on the style, tone, and readability of the text are also welcome.

Please reference paragraphs numbers or section numbers as appropriate.

2.19 “(ii) The benefits that accrue to individuals that are not produced by economic units (e.g. clean air and **water**). These benefits are **referred to as non-SNA benefits** reflecting that the receipt of these benefits by individuals is not the result of an economic production process defined within the SNA. A distinguishing characteristic between these two types of benefits is that, in general, **SNA benefits can be bought and sold on markets whereas non-SNA benefits cannot.**”

We consider that this sentence may generate confusion, since it points out that water is a benefit not included in the scope of the SNA because it cannot be sold on markets,

nonetheless, in situations where water becomes scarcer it may occur that it is commercialized on markets; not just from the point of view of the processes required for its purification and bottling, that according to the SNA is what gives a value to water, but from the point of view of a scarce good that is stockpiled or monopolized and generates rent or revenue in the private sector.

2.35 “Because the generation of some ecosystem services involves the extraction and harvest of resources, **and since ecosystems can regenerate...**”

In this paragraph, it should be clarified to which extent an ecosystem can regenerate, taking into account that biodiversity (flora and fauna) as a central part of an ecosystem may suffer irretrievable losses such as the extinction of species.

4.27 “In general terms, **ecosystem degradation** is the **decline** in an ecosystem asset over an accounting period”.

We consider that the extinction of biodiversity (flora and fauna) could be treated not just as degradation of an ecosystem, but also as depletion, since we are talking about irremediable losses. In this sense, in the 2008 SNA (paragraph 12.23), the differences in the quality of assets are treated as differences in volume.

4.35 “A particular feature of ecosystem assets is that **they naturally regenerate**. Regeneration means that they may provide the same ecosystem services over an indefinite length of time.”

The paragraph could be complemented with the consideration that not all actives regenerate at the same rate over time.

4.38 “If, over an accounting period, the increases due to natural regeneration are greater than the reductions due to human activity, then ecosystem degradation should be zero and the excess of regeneration should be shown as an addition to ecosystem assets.”

It may happen that way, however, we consider prudent commenting that when an analysis of the ecosystem by parts is made, it may be the case of a considerable increase in part of an ecosystem, but degradation or depletion in another part of the same ecosystem. Thus the degradation should not be zero even if it appears that way.

4.42 “First, ecosystem assets can regenerate without human involvement. Produced assets must be created (produced) new each time.”

It should be pointed out that there could be assets that cannot be regenerated, and it could happen that they can be regenerated only with human involvement, as can be the case of the reinsertion of endangered species to regulate an ecosystemic cycle.

4.66 “Perhaps the key issue on recording entries in this table is that it is likely to be most useful to **compile** entries in terms of expected flows of ecosystem services per year rather than in terms of absolute quantities.”

We comment that it must be considered for this analysis that the SEEA Central Framework paragraph **2.139** mentions that: “Ideally, the time of the recording of physical flows should align with the time of recording of the flows in monetary terms using an accrual approach. However, in practice, environmental processes may operate on quite different cycles and timeframes compared to the standard calendar and financial years used in monetary accounting. For example, in the case of water resources, the hydrological year does not

correspond to a calendar year. Adjustments to account for different underlying cycles in physical and monetary terms should be made as required”.

4.72 “Typical for regulating services is that the relationship between ecosystem assets and ecosystem services often has a spatial aspect. For instance, the ecosystem service air filtration **only** arises **when there are people living in the area** where air quality is improved.”

It must be considered that due to wind drafts the air produced in one zone can move to another one. In this regard the **SEEA Central Framework** mentions in paragraph **3.33**: “...so-called transboundary flows, for example polluted water flowing downstream into a neighbouring country or air emissions transferred into other countries’ atmospheres.”

4.75 “Cultural services are highly varied in terms of the type of services generated and the link between the services and the ecosystem assets. Recreational services are related to the attractiveness of an area, which is a function of for instance landscape, vegetation, wildlife, visitor facilities, presence of walking trails, etc.”.

It is important to suggest a comprehensive measurement of cultural and recreational services, but also the quantification of the impact generated by the population that is benefitted from this type of ecosystem services.

Regarding chapter 5 on the aspects of economic valuation, we comment that it must be considered a double economic valuation for the services of the ecosystem, differentiating the value of the individual services from the value in a group as a functional unit, since the price of each service is different to its price in a group. In fact, it is considered important to work in the measurement of ecosystem services through a systemic approach, for which in addition we should work in the modeling of complex systems for its study. We must think in integrated models that allow to answer to integrated public policy demands, seeing that an answer to the problems of shortage of water is linked to the problems of erosion and forestry production, and vice versa.

5.17 “A particular issue arises in the case of ecosystem assets since it may not be appropriate to apply valuation approaches developed in the context of produced assets (such as buildings and machines) to ecosystems that are complex assets, can regenerate over time and provide multiple services. A related question is whether the valuation of ecosystem degradation should be based on analysing foregone income due to the reductions in the current and future flows of ecosystem services, or if valuation of ecosystem degradation should be based on the costs of restoring the ecosystem to a previous state...”

It is commented that the economic valuation of the ecosystem services could be based on the expected future income or in the costs of replacement; we consider that for the second alternative it is important to contemplate that when damages to the ecosystem are generated by economic activity and are subsequently restored, there is a progressive deterioration in their quality, for which it must be considered to add an additional value.

Regarding chapter 6, we comment that the aspects of economic valuation are a complex subject to tackle, since it requires a lot of technical-theoretical work and time for a better analysis. In fact, the economic valuation in the SEEA is one of the most complex subjects but also we consider that is one of the less addressed.

One of the most difficult aspects is the consideration of the value of environmental services that are commonly not paid, and are not considered to be received by the market, for example, carbon capture, rain collection, natural purification of water, pollination, among

others, for which we consider that the way in which it is proposed may result complicated for the ones not specialized on the matter.

Part II: Other comments

In the box below please supply any additional comments including those of a more technical nature.

Please reference your responses with the relevant paragraph number or section number.

2.3.4 Ecosystem accounting units

Inside this classification it could be missing certain type of flora and fauna of marked relevance for ecosystem accounting. For example, plankton on sea ecosystems that according to its quantity may or may not affect an ecosystem in an important way by producing oxygen, or affecting the food chain where other species practice overgrazing of seaweed, such as the case of whales.

Besides, we consider that the works undertaken in the development of ecosystem accounting could be divided, for practical purposes, into two parts and that would not be motive of separation or duplication of efforts in terrestrial ecosystems and sea ecosystems, since the coastal zone is an area in which goods and services of both ecosystems are mixed.

4.72 “An exception in this case is carbon sequestration, since the impact of one unit of carbon sequestered on the global climate is the same regardless wherever the sequestration takes place?”

We consider that the question mark is outside context, seeing that the sentence does not have a question structure.

5.19 The word “Figure 5.1” is two times straight; perhaps an intermediate point is missing.