

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 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: <u>seea@un.org</u>

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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: <u>seea@un.org</u>.

All documents can be also found on the SEEA EEA Revision website at: <u>https://seea.un.org/content/seea-experimental-ecosystem-accounting-revision</u>

In case you have any questions or have issues with accessing the documents, please contact us at <a href="mailto:seea@un.org">seea@un.org</a>



#### **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?

As stated in Ch 8, ecosystem accounting will be based on the following principles:

The flows of ecosystem services are considered as transactions involving supply by ecosystem assets (EA) and use by economic units.

Ecosystem accounting incorporates recording the exchange values of ecosystem assets and associated changes in the value of ecosystem assets over an accounting period. These changes include ecosystem enhancement, ecosystem degradation, ecosystem conversions and revaluations.

For a given EA, the approach adopted for ecosystem accounting is to value ecosystem assets in monetary terms by aggregating the net present value (NPV) of expected future returns (of capital services) for each ecosystem service supplied by that EA.

To measure the expected future returns for an EA there are a number of considerations that need to be addressed. These include the scope of the returns (i.e. the range of ecosystem services to be included); the future patterns of flows in quantitative terms of each ecosystem service taking into consideration expected degradation and patterns of demand; the expected future unit prices for each ecosystem service; the expected institutional arrangements and the expected asset life.

The supply and use of each service and the future flows of each service can be recorded separately and aggregated as required *for one or more ecosystem assets*.

#### 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?



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

## **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?

In summary, the most convenient technique to apply for valuation is one based on a market price of the ecosystem services whether directly observed or using a price from a similar market.

When no market price is available for an ecosystem service, which is the most common situation, Techniques used are divided into those based on:

- (i) the production function concerning the use of the ecosystem service in the production of other goods and services (SNA benefits),
- (ii) costs as inputs (i.e. replacement cost, avoided damage cost...)
- (iii) opportunity costs and simulated exchange value (i.e. foregone benefits),
- (iv) revealed preferences (e.g. The travel cost method, estimates the demand function for recreation by observing the number of trips that take place at different costs of travelling)
- (v) stated preferences (do not utilize information on the behaviour of people in existing markets but rather use information from questionnaires)

Different valuation techniques described in section 9.3 must be applied to individual ecosystem services. Table 9.2



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

Within the chapter, it would be interesting to discuss as well the periodicity of accounting in monetary terms. Regardless of the accounting period, fast changes in market prices may involve that revaluations of monetary accounting can be done more frequently than for example ecosystem condition or services provision (their monitoring and re-assessment will definitely take longer periods).

In addition, it would be also very useful to disaggregate the three main types of ecosystem services of table 9.2 into a more detailed list of ecosystem services.

#### **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?

Summarised in table 10.1

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

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



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

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

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

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

## **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?

We agree with the fact that the compilation of the core ecosystem accounts in biophysical and monetary terms does not require a statement or assumption concerning the ownership of ecosystem assets.

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

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

