



DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS  
STATISTICS DIVISION  
UNITED NATIONS

**SEEA Applications and  
Extensions**

**Comment form**

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## Comment form for the Consultation Draft

**Deadline for responses: 31 January, 2013**

**Send responses to: [seea@un.org](mailto:seea@un.org)**

Your name:	Environmental-Economic Accounts
Your country/organization:	United Nations Statistics Division
Contact (e.g. email address):	<a href="mailto:seea@un.org">seea@un.org</a>

To submit responses please save this document and send it as an attachment to the following e-mail address: [seea@un.org](mailto: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 Applications and Extensions – 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.**

UNSD welcomes and supports the development of the SEEA Applications and Extensions. We consider SEEA Application and Extension an important part of the SEEA suite. The consultation draft provides a bridge between compilers and analysts and can be considered as an important document in promoting and supporting the implementation of the SEEA Central Framework.
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### **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.**

## **Ch.2**

### **General comments on the chapter**

The chapter is relatively long and a restructuring of the chapter may help readers in going through the chapter and getting a better overview. Some suggested ways of restructuring include: 1) Create an introductory table that briefly groups the indicators types, their examples and where they are discussed, and place it before section 2.3-2.6 (which described each type of indicators in details); and 2) shorten the chapter (move some of material into an annex) so that indicators that will likely be used more often can jump out a bit more.

The focus of this section is on indicators but descriptions on totals and aggregates (introduced parap6.94 of SEEA Central Framework) are missing in the introductory part of the chapter (section 2.1 and 2.2), Since such totals and aggregates (e.g. depletion adjusted net value added) are embedded in the Central Framework and are parts of the SEEA dataset, adding an explicit section or paragraph on totals and aggregates in section 2.1 and 2.2 will provide a more complete picture to the chapter.

There is no reference of aggregates in the information pyramid (Fig. 2.1).

Section 6.4.5 of the SEEA Central Framework on environmental ratio indicators covers three types of indicators: 1) productivity and intensity indicators; 2) decoupling; and, 3) indicators and polluter pays indicators. The first two are mentioned in the chapter but the term “polluter-pay indicators” are not, although “polluter-pay principles” are mentioned. It would be helpful if the text and terminology in the section of indicators in the SEEA Central Framework and the SEEA Application and Extensions can be aligned for consistency purpose.

### **2.3 Analysis of sustainable resource use and environmental efficiency**

Para. 2.22: Natural resource degradation: “degradation”, according to the SEEA Central Framework and SEEA Experimental Ecosystem Accounting, is linked to ecosystem condition and ecosystem services. As such, definition/explanation here is needed if the term “degradation” is now associated with (a particular) natural resource. The use of the term “depletion” may be more appropriate.

Para. 2.30: The use of volume measure of economy activity, accounted for inflation, is appropriate if the comparison is to be made across time within a single country. For international comparison between countries, the use of time series volume measure may not be appropriate and perhaps this needs to be stated.

### **3.6.3 Analysis of environmental assets in terms of wealth and incomes**

Para. 2.174: any changes needed based on changes to Chapter 5 of ecosystem report and statements about assumptions of sustainability implied by valuation?

## **Ch.3**

### **3.2 Environmentally-extended Input-Output Table (EE-IOT)**

No definition of EE-IOT is provided. Para. 3.2 states that there are various types of EE-IOT, such as single region/multiregional IOT or IOT in hybrid units. However, EE-IOT can only be the case when a “standard/core” IOT augments with environmental data. A more precise definition of EE-IOT is recommended to be placed either in para. 3.2 or at the introduction of section 3.2. Then the term need to be applied consistently for the rest of the chapter (e.g. para.3.23 use environmental input-output model instead of EE-IOT)

The classification of categories in the EE-IOT can be further elaborated (either in the text, footnote or annex). Reference can be made to: ISIC and CPC, for the classification of industry and product, respectively; COICOP, COFOG, COPNI for the final demand of consumption, government and non-profit institution, respectively, and; Ch.3 of the SEEA Central Framework for classification/list of flows of natural inputs and residuals.

The vector “r” in table 3.1 is not clearly defined in para. 3.9. It can be interpreted as environmental pressure, as defined later in equation 3.1.

The term “environmental pressure”, while widely used in the whole document, is not defined in the text. Adding a few lines to define environmental pressure helps clarifying the concept.

Table 3.1, 3.2 and 3.3: There are no notations correspond to the final demand, final consumption expenditures, gross capital formation and exports in these tables and in para. 3.7. These notations are introduced later in equation 3.1. It would be helpful if these notations are brought forward in these tables.

Para.3.8: Recommend to place the abbreviation SIOT (symmetric/square IOT) in the footnote or remove it. Therefore is not much value for introducing it since this abbreviation is not used again in the document. There are too many abbreviation associated with IOT that may create confusion.

#### **3.2.3 Hybrid input-output table**

Table 3.2 can be extended with environmental data since the focus of the section is the EE-IOT. Para. 3.12 can explain whether it is appropriate to apply the physical flows of natural inputs and residuals (i.e. physical measures of environmental pressure) in the hybrid table.

### **3.3 Analytical Technique**

Para. 3.23: minor formatting issue but the L (subscript d) looks more like an I (subscript d) which could cause confusion

Para.3.27 points out the limitation of IOT (assume constant technical coefficients and constant returns to scale). The limitation of constant technical coefficients is discussed (in para. 3.63), but not constant returns to scale. A brief description can be added to elaborate the limitation of the latter. Reference can also be made to para.3.63.

#### **3.3.2 Multiplier analysis**

Formula 3.2: Even though the formula is self explanatory, a brief description of the equation will be helpful for non-technical reader to understand.

### **3.3.3 Attribution of environmental pressures to final demand**

Figure 3.1: typo - consumption - how does text in 3.42 match up with figure - not entirely clear

### **3.3.4 Decomposition analysis**

Equation 3.6 and 3.7 specify an approach without a residual term, which imply that the decomposition is not an exact but only an approximation. This also implies exogenous (e.g. catastrophic events) and mixed effects are not analysed and they are distributed among different components in the formula. Perhaps this can be stated in the footnote.

Para. 3.60: symbol for CO2 emissions does not seem correct/match symbol used

### **3.3.5 Computable general equilibrium (CGE) modelling**

The descriptions of the model are in economic terms without much reference to SEEA or environmental pressure. While it is clearly stated in the text that CGE models use EE-IOT (where data on flows of natural inputs and residuals can be sourced from SEEA accounts) as core database, the linkages between these SEEA flows and the specification of equations in the model are unclear. For example, will SEEA residual flows be treated as endogenous variables in the model? It would be helpful if attempts can be made to place such CGE model in the context of environmental-economic analysis, and explain the element of the model (e.g. parameters, exogenous factors and endogenous variables) in terms of these SEEA flows.

Para 3.61: "by" used instead of "be"

Para 3.65: delete "functioning"

## **3.4 Geo-spatial analysis**

GIS information might be better earlier in the chapter - this is an area where there is a lot of work being done or planned relating to environmental goods and services

Figure 3.4: question about how well text in 3.78 matches up with figure - the text seems more interesting than what ends up being seen in the figure

## **Ch.4**

### **4.2 Household access to natural resources**

(Comments in this part are provided from our UNSD colleagues in the MDG section)

Para. 4.14 and 4.15: The extension can also be done not only by income quintiles, but also by a breakdown of urban and rural households, or by special population groups (such as ethnicity), to study inequality and its impact on development.

Table 4.1: For the environmental link between MDGs and the environment

- Goal 1:
  - A. improve natural resources management will improve rural households whose incomes depend largely on natural resources
  - B. improved access to clean water and basic sanitation help reduce malnutrition
  
- Goal 2:

Educational attainment is lower where lack of water, sanitation, and hygiene is a major cause of malnutrition.