



DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS
STATISTICS DIVISION
UNITED NATIONS

SEEA Revision
Issue 1
Cover Note

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Issue #1: Harmonization of MFA with SEEA concepts

Outcome paper for global consultation

Outcome Paper Issue #1: Harmonization of MFA with SEEA concepts

Issue description

1a. Recording of cultivated biological resources The growth of cultivated biological resources constitutes a process of production in the 1993 and 2008 SNA as well as the SEEA-2003. As such the SEEA-2003 records it within the economy and considers flows from the environment to the economy to consist of the ecosystem inputs necessary for the growth of the resources for example carbon dioxide, nutrients and soil water. On the other hand, the economy-wide MFA (EW-MFA) approach considers cultivation of biological resources as a process that takes place in the environment and not within the economy. The flow from the environment to the economy is the harvest of the biological resources. How should the SEEA and EW-MFA approaches be reconciled?

1b. Treatment of consumer durables In the SNA consumer durables are defined as goods used for purposes of consumption repeatedly or continuously over a period of a year or more. They are not regarded as assets because the services they provide are not within the production boundary. The 2008 SNA suggests that because of the analytical interest of the information on stock of durables, to record them as memorandum item in the balance sheet. This recommendation also is of interest for environmental accounting considering that there is a time lag between the consumption and the residual flows generated when using up the consumer durables. Should the SEEA recommend the treatment of consumer durables as produced assets?

1c. Recording of landfills In the SEEA-2003, the operation of controlled landfills is considered a productive activity. Landfills themselves are treated as a sort of physical capital formation. Therefore flows of waste to controlled landfills are considered flows within the economy while emissions from landfills to air, soil and water are considered flows from the economy to the environment. In EW-MFA approach, instead landfills are considered within the environment and flows of waste to controlled landfills are considered as flows from the economy to the environment. How should the SEEA and EW-MFA approach be reconciled?

Background

In many countries the recording and study of physical flows of materials and resources has been a focus of environmental accounting. Some of this work is focused on individual substances while other work has considered broader ranges of materials, up to and including economy wide measures of physical flows. This work is generally grouped into a body of work known as Material Flow Analysis (MFA) and includes Economy Wide – MFA (EW-MFA). This work has been developed over a long period of time and consequently has developed a range of recording conventions. While related to the System of Environmental

and Economic Accounts (SEEA), MFA and EW-MFA in particular are not completely aligned with the SEEA. As part of the revision of the SEEA the alignment between the SEEA and MFA boundaries was identified as an issue.

There were a number of areas of particular interest in considering the relationship between SEEA and EW-MFA as outlined above. For these three issues outcomes and recommendations are contained in the outcome paper.

It should be recognised that accounting for flows of materials is a subset of overall accounting for physical flows. Accounting sub-systems are also developed in the SEEA for water and energy. This paper deals exclusively with some boundary issues as they concern material flow accounting. The links to other forms of physical flow accounting are considered in detail in SEEA Revision Issue #2: Classification of physical flows.

Summary of outcomes

The investigation of this issue led to the following three recommendations. The issues regarding the delineation of the boundary between the economy and the environment is by far the most significant matter and arises again in the broader context of the classification of physical flows. The outcomes from decisions regarding that classification will need to be considered in finalising the decision in relation to EW-MFA.

Recommendation 1.1: That in the revised SEEA where the cultivation process is dominated by a natural process the flows from the environment to the economy consist of the used biomass growth that is drawn into the economy; and where the cultivation process predominantly occurs under artificial conditions and there is little direct interaction with the environment, the flows from the environment to the economy consist of ecosystem inputs.

Recommendation 1.2: That in the revised SEEA the stock of consumer durables should be estimated as a memorandum item.

Recommendation 1.3: That in the revised SEEA controlled landfills should be considered as part of the economy and emissions from controlled landfills should be recorded as flows from the economy to the environment.

Questions

1. Do you agree that in the revised SEEA where the cultivation process is dominated by a natural process the flows from the environment to the economy consist of the used biomass growth that is drawn into the economy; and where the cultivation process predominantly occurs under artificial conditions and there is little direct interaction with the environment, the flows from the environment to the economy consist of ecosystem inputs?
2. Do you agree that, in the revised SEEA, the stock of consumer durables should be estimated as a memorandum item?
3. Do you agree that in the revised SEEA controlled landfills should be considered as part of the economy and emissions from controlled landfills should be recorded as flows from the economy to the environment?
4. Any other comments?

To submit responses to these questions please complete the accompanying comment form available on the website. You are encouraged to submit a short response to the questions (yes/no/no comment) even if you have no further comments to submit.

Deadline for responses: 17 January 2011