

SEEA Experimental Ecosystem Accounts: A Proposed Outline and Road Map

**Sixth Meeting of the UN Committee of Experts
on Environmental-Economic Accounting
New York, 15-17 June 2011**

Background

- Request from UNCEEAA at its 5th meeting for UNSD, World Bank and EEA to report back with a broad outline and road map for ecosystem accounts
- 2 expert group meetings organized in the past year by the partnership
 - outcomes reflected clear progress towards consensus on the general principles
- Work on many of the technical issues still relatively new; therefore, the group has been encouraged to call it *experimental* ecosystem accounts at this stage

Policy Demand

- There is a growing demand for better understanding and clear measures on what ecosystems provide and the impacts economic activities are having on delivery of these services
- Wide range of emerging measurement/monitoring initiatives require an ecosystems perspective of sustainability and information on the links between ecosystems and human well-being
- Millennium Ecosystem Assessment (MA) has led a surge in attention and support for a conceptual framework for ecosystem assessment in terms of ecosystem services, or the benefits people obtain from ecosystems
- MA, subsequently TEEB, and many other related initiatives respond to the growing demands from international conventions (e.g. CBD, UNFCCC, etc.)
- Closely related to these developments are new demands for applying current GIS technologies for integrating information in geographic space and making information flexible to analysis at multiple levels of spatial scale

Some key elements of the framework

- Ecosystems perspective
 - Assessing efficiency or sustainability from the economic perspective does not fully account for the functions and services of ecosystems or the costs to ecological productivity caused by degradation
- Statistical units
 - Ecosystems as functional units represented as spatial areas – which can be linked to economic units and aggregated into different reporting units through geographic referencing
- Classification of ecosystem services and assets
 - Agreement will be sought for finalizing a classification of services and assets (or attributes) conceptualized from the ecosystem perspective
- Issue of scale
 - Accounts of ecosystem services and assets need to be flexible to multiple levels of spatial scale
- Where relevant, will build on existing work and try to make maximize use of existing data

Physical asset accounts and measures of health

- What are the aspects of ecosystems that determine the quantity and quality of services provided?
- The idea of the physical asset accounts is to compile information regularly for assessing changes in a dashboard of ecosystem health signals or symptoms
- Current signals/aspects being explored and tested are:
 - Carbon cycle (net primary production less removals through economic activity)
 - Landscape (land use and land cover attributes)
 - Water (indicators of quantity and quality, as relevant to region)
 - Biodiversity (proxy index using existing data)
 - Prevalence of disease and unhealthy conditions (related to impacts of stress caused by pressures from economy)
 - Dependence on artificial inputs

Physical flow accounts

- Strategy will be to begin by selecting a small number of services of high relevance to the particular context and measure flows in annual accounts
- Some services (e.g. provisioning services) are already accounted for in SEEA Central Framework – therefore focus is on the non-market services
- Framework allows for flexibility to the variations in scale relevant to each type of ecosystem service

Monetary valuation

- A core principle is that valuations should be consistent with SNA, i.e. approximate prices and not represent a holistic or social identity of value
- There are significant challenges in achieving this for many ecosystem services
- Therefore, as with the physical flow accounts, strategy will be to at first focus on small number of services of high policy relevance and for which consistent valuations are most feasible
- This means that no comprehensive valuation of ecosystem capital is foreseen at this stage of development of experimental ecosystem accounts. However, the possibility of collecting data from existing statistics and administrative reports on the benefits of the services and costs necessary to restore ecosystem capital from degradation will be explored – this is an additional potential area of linkage to SEEA Central Framework

Details of the proposal

- SEEA Part II will be a conceptual framework for experimental ecosystem accounting
- Aim to present to UN Statistical Commission for endorsement in 2013
- Will contain high-level descriptions on the structure and core issues
- Approx. 30-50 pages maximum
- Further elaborations may follow in a separate manual on land and ecosystem accounts

Road map

- To ensure a broad consultation process consisting of members from the statistical, economic and scientific communities, the proposal is to constitute a technical sub-committee under the UNCEEA
- The focus of work of the technical sub-committee will be around an agreed list of key technical issues (to be established by the UNSD/World Bank/EEA partnership)
- Ultimately, through a process of drafting papers and extensive discussions, the inputs from the technical sub-committee will culminate in a set of recommendations to be used as the primary input for drafting the conceptual framework in 2012
- The draft conceptual framework will then undergo worldwide consultation in the 4th quarter of 2012

Thank you for your attention!

Question for discussion:

Does the UNCEEA endorse the continued collaboration of UNSD, EEA and World Bank to provide substantive inputs for the drafting of SEEA Part II on Experimental Ecosystem Accounts based on the proposed annotated outline and roadmap?