SEEA Experimental Ecosystem Accounting – Testing and research agenda

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Background

- Development of SEEA Experimental Ecosystem Accounting as a synthesis of developments across disciplines

- Short development timeframe that did not aim to resolve all conceptual and methodological issues

- Material presented to UNSC in February 2013
  - Draft SEEA Experimental Ecosystem Accounting
  - Draft Research agenda highlighting the need for continued testing and research

- Current requirement to determine
  - Priority areas
  - Appropriate mechanisms, resources and links to related projects

Key aspects of the research agenda

- Must be multi-disciplinary
  - Not aiming at discipline specific measurement improvement (although these are important)
- Must aim to cover multiple ecosystem types
- Must incorporate both conceptual work and testing of definitions and methods
- Must integrate effectively with existing projects and new initiatives
- Should link with research agenda for the SEEA Central Framework and be associated with implementation of the SEEA Central Framework

Priority #1: Spatial units

- Delineating appropriate spatial units and associated classification is central to effective progress

- Units model generally accepted but is a blend of many perspectives and needs to be tested

- Extensions to consider marine areas and the atmosphere are needed

- Important to consider optimal links to geo-referencing of socio-economic data

- Links to defining classifications for land use and land cover are important

Priority area #2: Methods for measuring ecosystem services and assets

- Concepts and definitions described in SEEA Experimental Ecosystem Accounting
- Less obvious exactly how to populate the information
- Key considerations
  - How to determine the most important services and characteristics (don't focus on only the measureable)
  - Linking physical flows of ES to beneficiaries
  - Advancing development of classifications
  - Determining reference/benchmark conditions
  - Incorporating measures of biodiversity
  - Variation in methods across ecosystem type

Priority area #3 : Presentation and structure

- Concepts and methods need to be developed in the context of disseminating information

- Accounting structures are only indicative in the SEEA Experimental Ecosystem Accounting text

- Key considerations
  - Matching information requirements to concepts and methods
  - Approaches to linking ecosystem data to socio-economic data
  - Development of different dissemination techniques especially maps
  - Articulation of potential indicators

Priority #4: Linking to socio-economic data

- SEEA's objective is to bring environmental and economic information together

- Challenge to ensure that the spatial scales used to compile ecosystem related data are not aligned with those used for socio-economic data

- Many developments on geo-referencing socio-economic data underway

- Objective here is to examine ways to harness these developments and associated techniques around big data for use in accounting situations

- Close links needed to delineation of spatial units

Priority area #5: Valuation of ecosystem services

- This topic has much momentum in many places
- Text of SEEA Experimental Ecosystem Accounting highlights some important considerations from an accounting perspective
- Important to engage with economists to reach common understanding of potential methods and relevant assumptions
- Important links also to developments at the corporate level in integrating values of ecosystem services in business accounting frameworks

Medium to longer term priorities

- **Accounting concepts**
  - Degradation – valuation and allocation
  - Integration of ecosystem values into standard accounts and balance sheets (links to wealth a/c)
  - Treatment of expenditures on ecosystems (incl PES)

- **Connections between ecosystem services and ecosystem condition**
  - Often seen as competing approaches
  - SEEA EEA sees clear links but they are complex and non-linear

- **Aggregation and ecosystem-wide indicators**
  - Most challenging aspect: needs to build and combine all other research and testing work

Management and governance proposals

- Recognise multi-agency requirements and harnessing existing knowledge

- Under the auspices of the UNCEEA

- Key aspects of the proposals

  - Small steering committee

    - Co-ordination and reporting

  - Forum of experts

    - Building connections and networks

  - Targetted Technical Expert Groups (TEG)

    - Providing technical guidance

  - Identification of research and testing opportunities

  - Allocation of resources

  - Future international conference

Possible TEGs

- **#1: Geospatial data, land classifications and units** (closely linked with the expert group on geo-spatial information established by the UN Statistical Commission)

- **#2: Physical measures of ecosystem services and ecosystem condition**

- **#3: Valuation techniques and approaches to aggregation** (closely linked with WAVES-PTEC and TEEB)

- **#4: Presentation and policy linkages** (closely linked with WAVES-PTEC and TEEB)

- **#5: Integrated accounting issues** (links with London Group on Environmental Accounting and National Accounts fora)

Possible timing of proposals

- Sept 2013: Establish steering committee and forum of experts
- Nov 2013: Establish TEGs and initial research questions
- Nov 2013: Meeting of forum of experts
- May 2014: Interim reports of progress
- Oct 2014: TEGs reports on key findings and recommendations
- Oct 2015: International conference

Questions for UNCEEA

- Comments on priorities
  - Short to medium term
  - Medium to longer term

- Comments on governance proposals
  - Steering committee
  - Establishment of TEG
  - Use of forum of experts and international conference for discussion and consultation