Advancing the System of Environmental-Economic Accounting (SEEA) Experimental Ecosystem Accounting

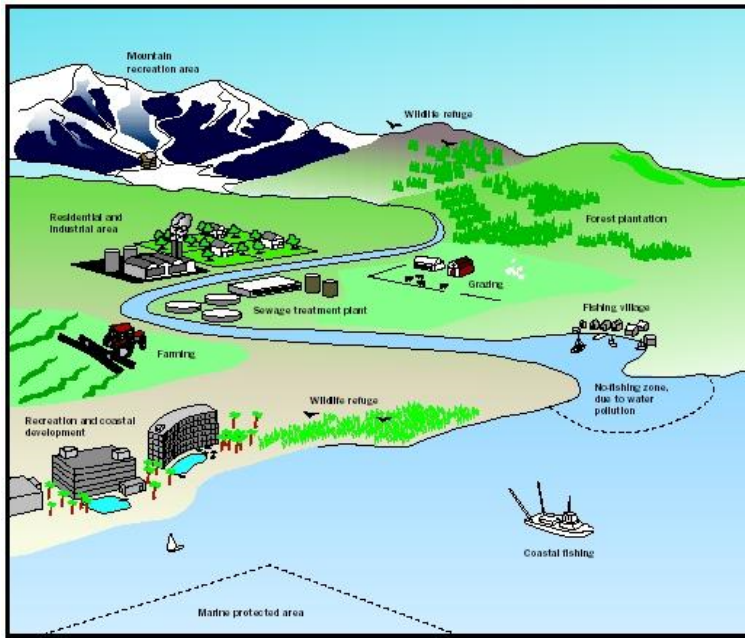
Mark Eigenraam
United Nations Statistics Division

ACES Conference, Washington, 2014

The EEA brings in two new dimensions:

1. Spatial characteristics expressed in spatial units
2. Integrated or holistic view of multiple characteristics for each unit

Minimum dataset scheme
Unifying themes



- Land
- Water
- Carbon
- Biodiversity
- Nutrients
- Pollution
- Human activities
- Ecosystem services

Image source: http://www.waterencyclopedia.com/La-Mi/Land-Use-Planning.html

The EEA is focused on living (renewable) natural resources

SEEA-Experimental Ecosystem Accounting - Background

- Complements SEEA Central Framework with a focus on ecosystems
- Integrated system of information on **ecosystem** stocks and flows
- Not a statistical standard but synthesizes current knowledge related to ecosystem services, ecosystem condition and related concepts
- "Experimental" because significant methodological challenges remain and further testing of concepts needed

Advancing the System of Environmental-Economic Accounting (SEEA) Experimental Ecosystem Accounting

- Sponsored by the Norwegian Government
- Partnership between
  - United Nations Statistical Division (UNSD)
  - Secretariat of the Convention on Biological Diversity
  - UNEP TEEB Office
- Seven pilot countries
  - Chile, South Africa, Vietnam, Indonesia, Bhutan, Mexico, Mauritius

Guidance documents

- Provide practical guidance to countries on how to embark on SEEA-EEA through a step-by-step process
- It is intended to
  - help country experts and practitioners understand the available options for models and links to policy demand
  - explain, in particular, how to compile the data, including from non-conventional data sources (e.g. remote sensing)
  - help determine which tools may be applied in various circumstances
  - include case studies from the country pilots

Guidance topics

- **Ecosystem services** – classification and links to measures of condition
- **Land cover accounting**, **Biodiversity accounting**
- **Biophysical modelling** and analysis of ecosystem service flows and assets
- **Review existing global and national spatial datasets**, including remote sensing imagery to support EEA
- Demonstration of **linkage between ecosystems asset accounts and ecosystem service accounts**
- **Valuation update**
- **Spatial units**, scaling and aggregation methods and approaches
- **Land and ecosystem condition & capacity**
- **Water & Carbon – stock and flow accounts** – with a focus on EEA ecosystem services

Training material

- A blended learning combining online training and a follow up phase is currently planned

- A standard set of presentations for common use will be developed as part of this exercise.

- Both the guidance material and the training material will be made available to countries for testing and use

Outreach and communication

- To ensure that a clear and effective message is developed to obtain the buy-in of various stakeholders
- Communication strategy for the SEEA-EEA as part of the broader communication programme of the SEEA, to
  - determine how to profile ongoing work in countries online;
  - maintain community of practice informed of progress on implementation of project
  - profile in relevant fora and workshops
  - develop information material
  - share experiences and good practices, and lessons learned with broader country groups, through regional or sub-regional workshops.

Forum of experts in ecosystem accounting

- A forum where experts will meet on a yearly basis to discuss progress of testing of the SEEA-EEA and the research agenda
- Lead to a large, multi-stakeholder, international conference bringing together various stakeholders and communities proposed to be held in 2016 for
  - showcasing advances in research and testing of the SEEA-EEA
  - pointing to the potential for more definite methods and guidelines to be developed;
  - providing recommendation for the revision of the SEEA Experimental Ecosystem Accounting

Global Strategy for advancing SEEA-EEA

- Assist countries in the testing of the SEEA-EEA and establishing incrementally the technical capacity for compiling a set of ecosystem accounts
- Build on the early experience of testing the SEEA-Experimental Ecosystem Accounting in countries to
  - identify linkages and contributions to relevant initiatives, platforms and processes;
  - identify relevant data sources managed by national and international agencies and others;
  - identify tools that can develop baselines for 2016;
  - identify list of desired outputs, associated outcomes and timelines at the global and national level beyond 2015.

Delhi Meeting: 14 October 2014

- Countries presented and discussed EEA

a) **Policies links to ecosystem accounting** – what are the main policy priorities in your country and how can the accounts help to address them

b) **Institutional arrangements** – what are the main agencies involved in the use and compilation of the accounts, is there the buy in from various institutions, what are the plans and possible challenges in establishing an inter-institution coordination mechanism?

c) **Data availability** – what are the challenges with respect to data in particular linked to the development of land accounts, water, carbon and biodiversity accounts?

Delhi Meeting Observations

- Data
  - in most instances there is data
  - may not be at the national level but certainly at the regional level
  - challenge is bringing it together into an experimental account
- Institutional Arrangements
  - variable but generally not a show stopper
  - generally an awareness, even if low
- Policy Links
  - generally easy to identify policy drivers
  - in some instances, government Acts or Mandates do exist

Delhi Meeting Observations

- Human capital*
  - skills, training, ongoing support
- One shot approach*
  - most countries have had work done, but it is one shot work with little or no ongoing capacity building
  - clear need for longer term relationships
- Buy-in
  - there is very strong demand, key difference is the starting point……..
- Managing expectations
  - Future support

Next Steps

- Building on technical experience and learnings in a coordinated manner
  - Classifications
  - Biophysical modelling
  - GIS challenges
  - Core accounts and tables
  - Scaling up from local examples
  - Linking to the statistics and policy community

Moving from testing theory to practice…….into a regular production process and program