INSTITUTE FOR THE DEVELOPMENT OF ENVIRONMENTAL-ECONOMIC ACCOUNTING

Environmental-Economic Accounting: Setting the Scene

Presentation to EIANZ, 14 October 2016

Carl Obst

Webinar content

1. Introducing the presenters: Mark Eigenraam & Carl Obst
2. Short history of environmental-economic accounting
3. Understanding the core measurement challenge
4. A way forward with accounting
5. Accounting for physical flows
6. Land and ecosystem accounts: Concepts
7. Applications

Questions

1. INTRODUCING THE PRESENTERS

1.1 Mark Eigenraam

1.2 Carl Obst

2. SHORT HISTORY OF ENVIRONMENTAL-ECONOMIC ACCOUNTING

2.1 Designing the national economic accounts

Simon Kuznets, 1930s

2.2 The limitations of the SNA

Bobby Kennedy, 1967

2.3 The rise of sustainable development

Brundtland Commission report, 1987

The Rio Summits, 1992 & 2012

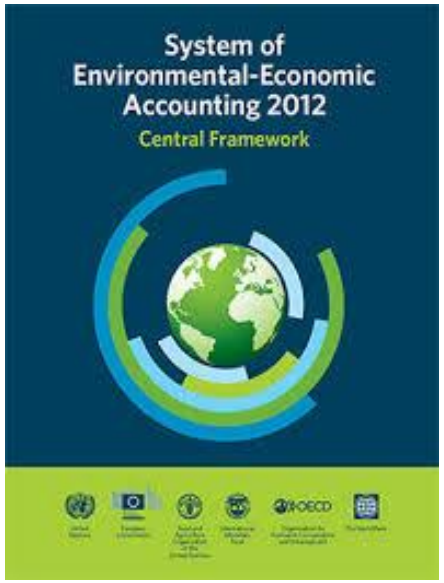
2.4 The UN Sustainable Development Goals

The 17 UN SDGs, 2015

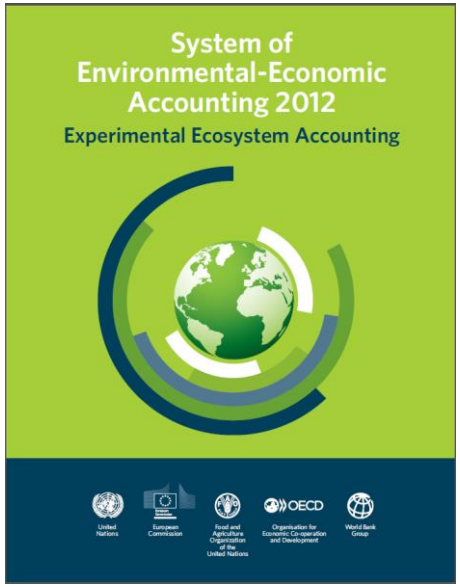
IDEEA

2.5 The SEEA Family

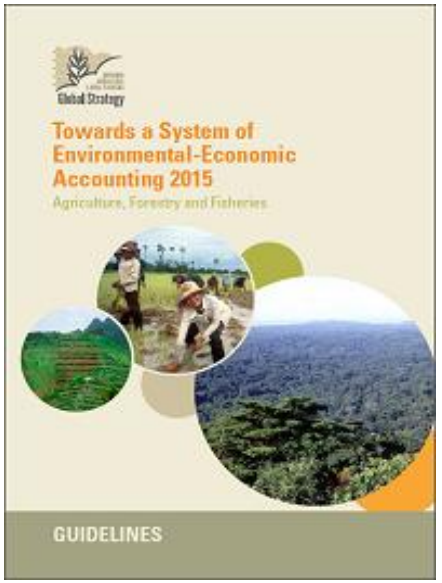
SEEA Central Framework



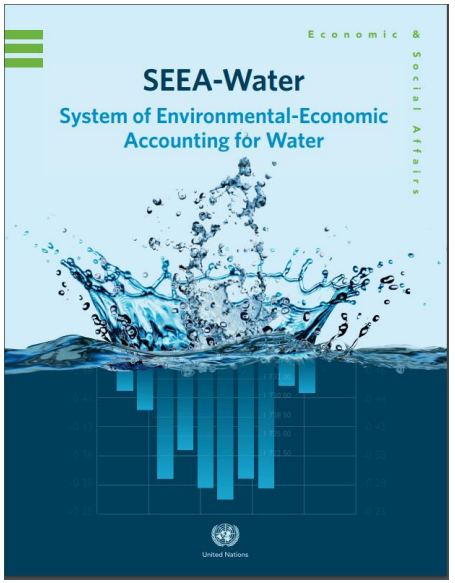
SEEA Ecosystem Accounting



SEEA Agriculture, Forestry & Fisheries



SEEA Water



3. UNDERSTANDING THE CORE MEASUREMENT CHALLENGE

3.1 In all decision making contexts

Core challenge of balancing

a. Rising population, increasing demand for resources, services and expectations of liveability

b. Fixed land areas and declining natural resources

c. Financial reality to ensure returns on investment and cost effectiveness

3.2 Common approaches to balancing

Investigate each perspective - demand, supply, finances – and consider the balance at a final stage

Often undertake integration only in the context of individual projects

Undertake reporting and monitoring on individual perspectives

3.3 Barriers to effective decision making

Many datasets thus increasing costs of data collection and management

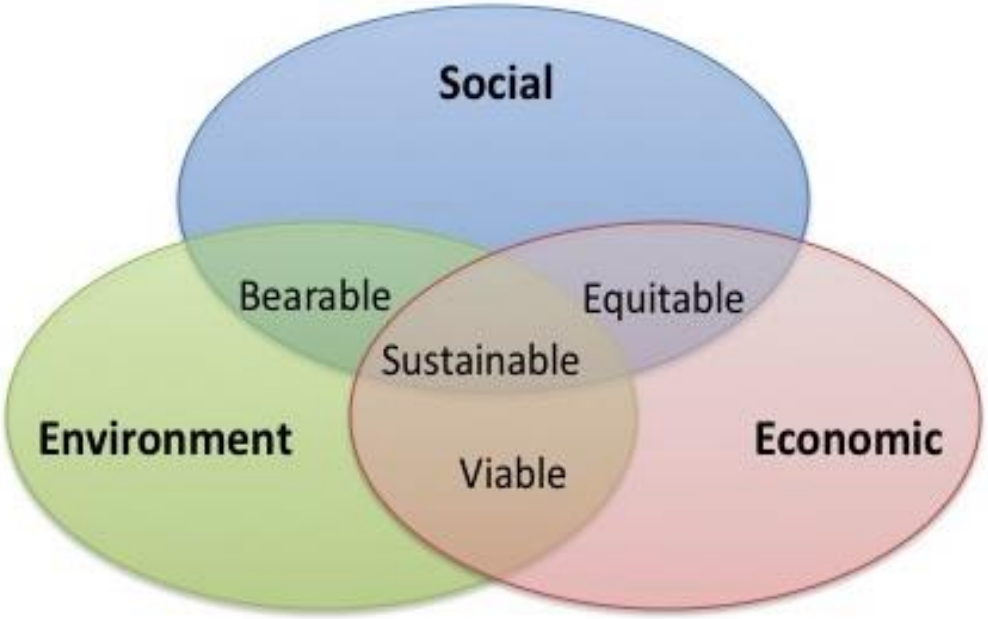
Lack of coherence in information

Ad hoc and one-off investigations

Inability to share information or compare to other regions

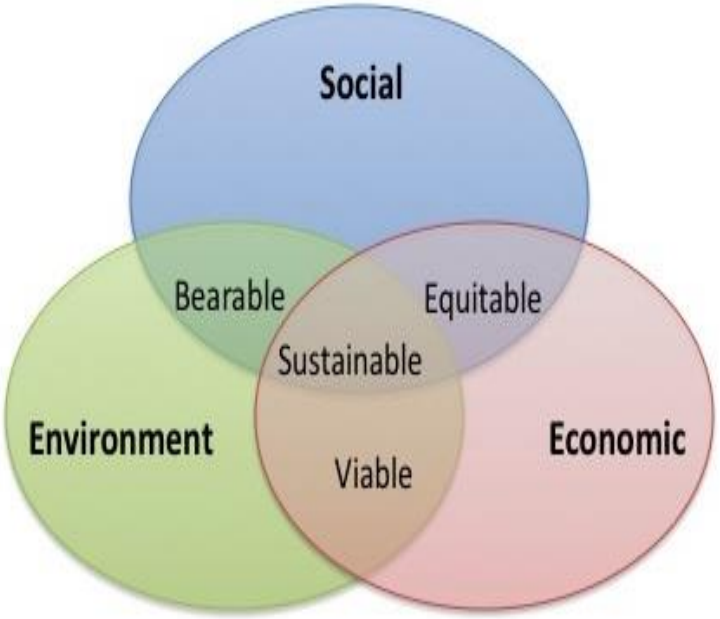
Decreased effectiveness in decision making and/or likelihood of maintaining the status quo

3.4 The underlying challenge: The common view of systems



Economic, environmental and social dimensions are independent & separable

3.5 The creation of silos



Silos of
- Information
- Institutions
- Disciplines
- Language

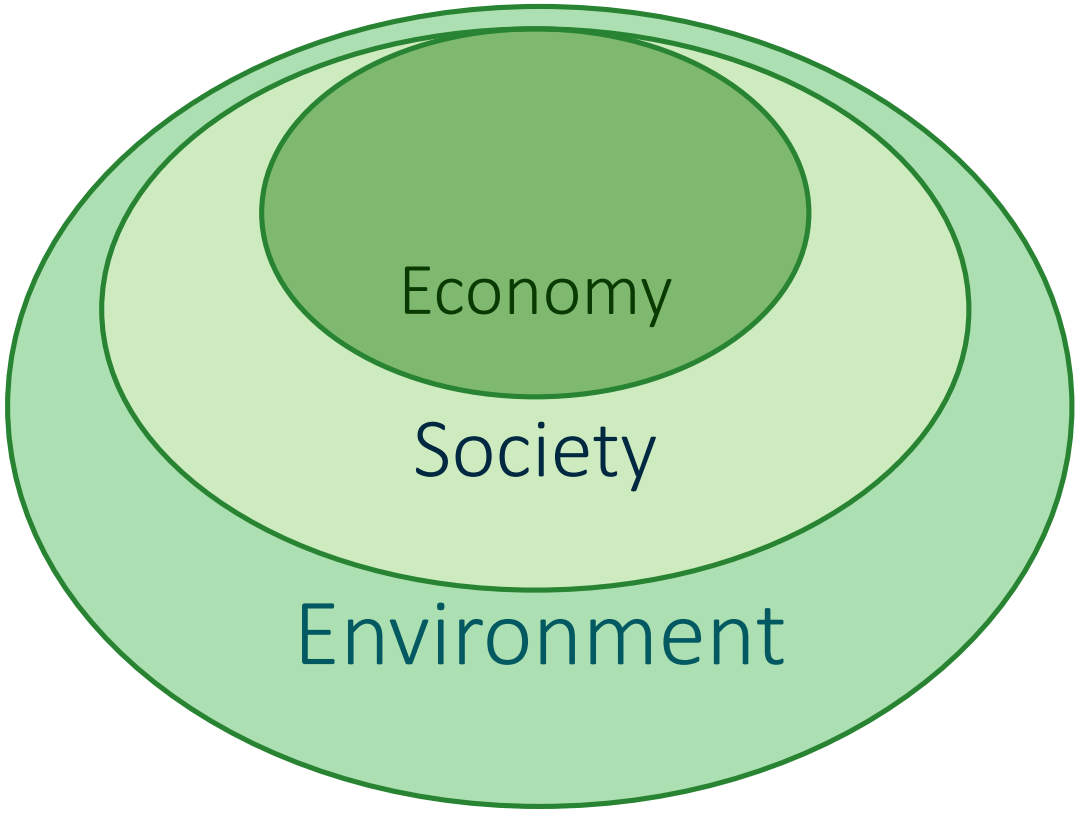
3.6 Barriers to understanding and action

"Silos of excellence" – barrier to change…..

Lack of integrated tools with different dimensions reflected from a common perspective/conceptual basis

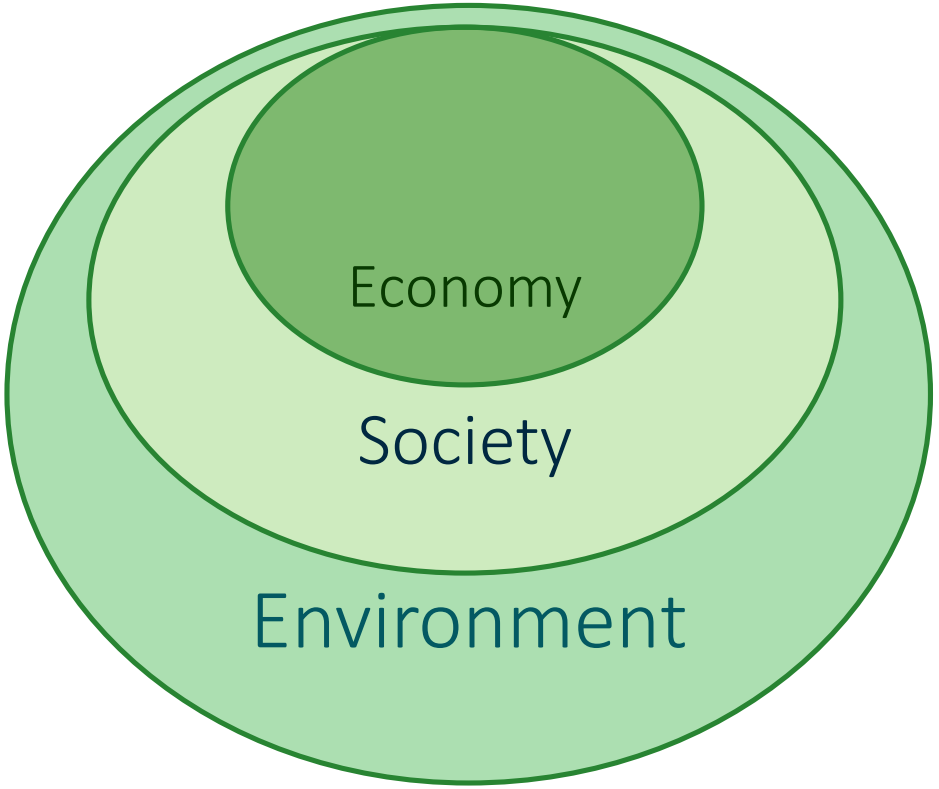
No common language or platform for exchange of information and ideas

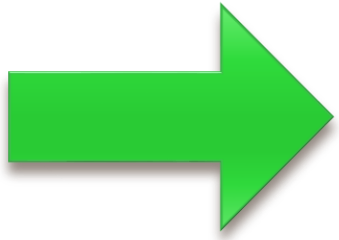
3.7 A “new” perspective of systems



Embedded / emergent systems:
Connections existing at multiple scales -
Local, National, Global

3.8 Where to for silos?





What does this new perspective mean for the current silos?

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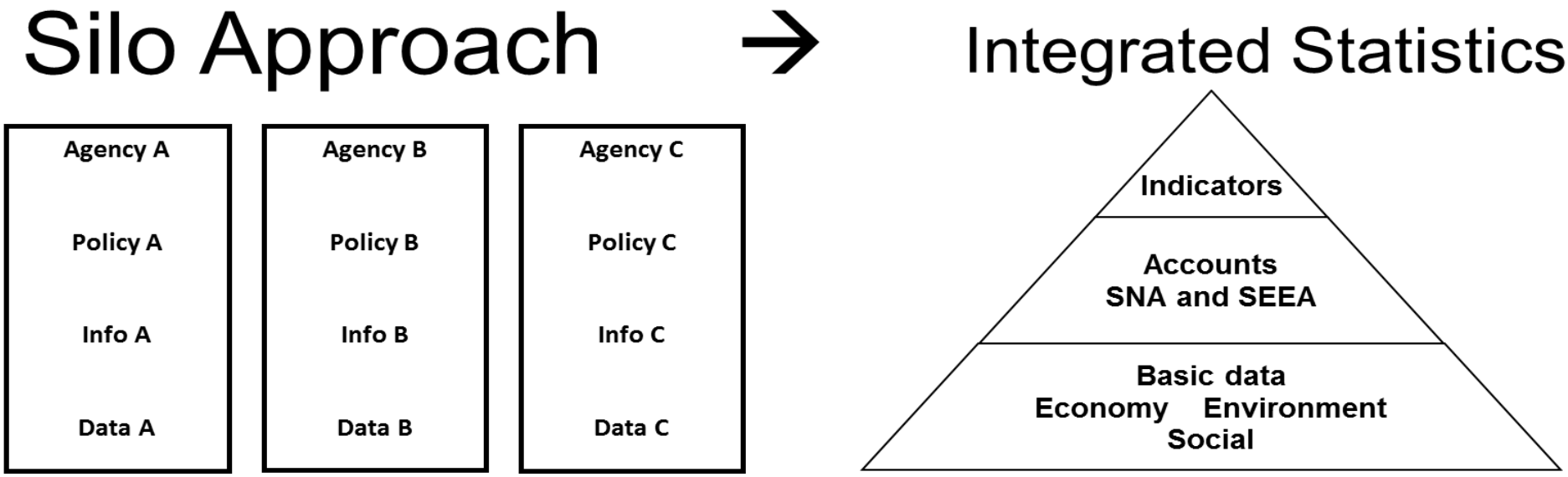
4. A WAY FORWARD WITH ACCOUNTING

4.1 Integrated statistics through accounting



- Basic data sourced from multiple collections and technical agencies
- Accounting frameworks to integrate data using common definitions & language
- Key reporting indicators and aggregates, especially across themes, e.g. sustainability

4.2 Overcoming barriers to integration

SEEA can provide:

- Platform for conversation and information exchange across silos using the richness from each discipline
- Integrated framework using common accounting concepts such as capital and income; stocks and flows to record an extended set of assets, services and benefits
- Standardised language through agreed terms, definitions, measurement boundaries and classifications
- Focus on the use of commonly defined spatial areas to commence integration of different perspectives

4.3 Coverage of the SEEA

Physical flow accounting (Physical Supply & Use Tables)

- Energy, water, emissions, waste

Accounting for environmental activities

Natural resource accounting

- Stocks, natural growth, extraction and depletion

Land accounting

- Changes in land use and land cover

Ecosystem accounting





4.4 Gathering momentum

- SEEA Implementation projects: >70 countries
  - UN Statistics Division; World Bank WAVES; UNEP; EU legislation; Conservation Int.; Global Earth Observation project
- Links to International policy initiatives
  - CBD Aichi targets; UNDP Poverty Environment; TEEB Ag & Food; OECD Green Growth; UN SDGs
- Related corporate activity
  - NCC & Natural Capital Protocol; UNEP-FI & Natural Capital Declaration; GRI; IIRC
- Australian work on SEEA and natural capital
  - ABS; BOM; Victorian Govt; ACT SOE reporting; Wentworth Group; VicSuper; NAB
- Emerging integrated research angles
  - Productivity; Economic modelling; Biodiversity measurement; Soil resources; Sustainable tourism, agri. & forestry; Indigenous land management; Urban planning

CONCEPTS AND APPLICATIONS