

Introduction to Environmental-Economic Accounting

Rob Smith, Principal
Midsummer Analytics
rob@midsummer.ca

**Training on application of UNFC
for sustainable resources
management**

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midsummer.ca



Overview

- Why environmental accounting?
- What is the System of Environmental-Economic Accounting?

Why Environmental Accounting?



Good information is essential to good decision making



- Information must be integrated to be useful!
 - Integrated means **structured**, **complete** and **coherent**
- When it comes to environmental information, though...

...there are
often problems





... and is often not up to the measurement challenge

- Sustainable development
- Green economy
- Climate change
- Biodiversity
- Resource productivity
- Pollution
- Consolidated reporting for multi-lateral environmental agreements

That's why we need to
see the
“Complete Picture”

A solution: Integrated environmental-economic accounting

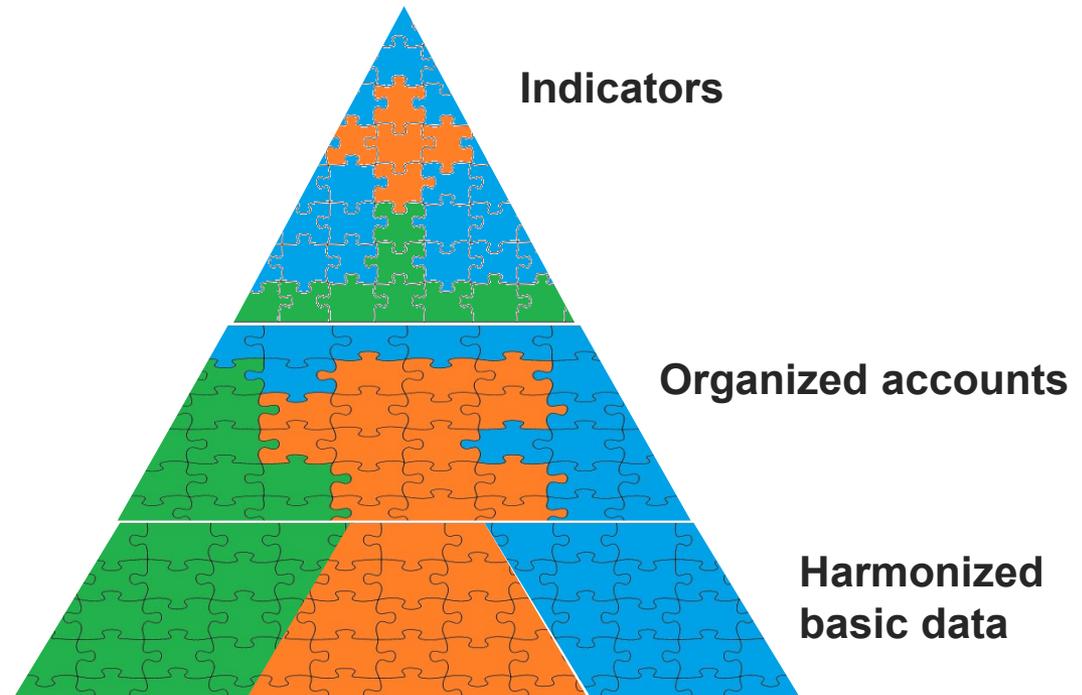


- Environmental-economic accounting allows the complete picture to be seen
- Accounting provides information that is coherent and helps identify data that are missing
- Allows users to better understand the interactions between the environment and the economy



Benefits of integrated accounting

- Integrated accounting assures:
 - Coherence of environmental data with economic data
 - Exhaustiveness
 - Geographic
 - Sectoral
 - Comparability
 - Over time
 - Across issues



The System of Environmental- Economic Accounting (SEEA)



What is the SEEA?



- The *System of Environmental-Economic Accounting 2012* (SEEA) was adopted by the United Nations to promote integrated environmental-economic accounting
- Developed through an inter-governmental process
- Published by the UN, EU, FAO, IMF, OECD, WB

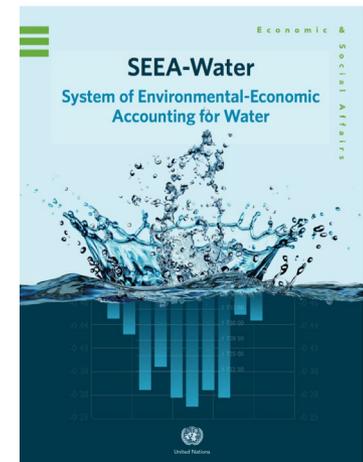
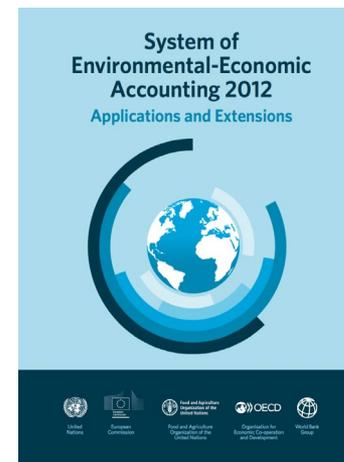
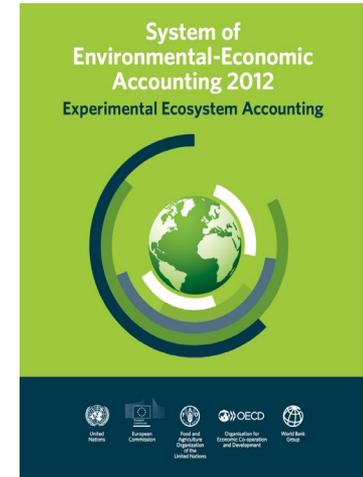
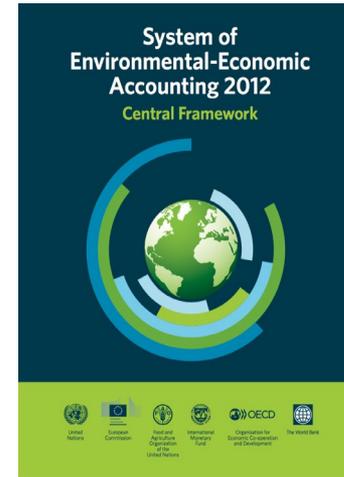
The SEEA: History

- 1993: First SEEA interim handbook
- 2003: Revised SEEA handbook (set out structure for SEEA-CF)
- 2006: UN decided to elevate SEEA to an international standard
- 2012: SEEA – The Central Framework adopted as international standard
- 2013: SEEA – Experimental Ecosystem Accounting published as “best practices”
- 2013: SEEA – Applications and Policy Uses
- 2019: SEEA ecosystem accounting revision and standardization

The SEEA handbook suite



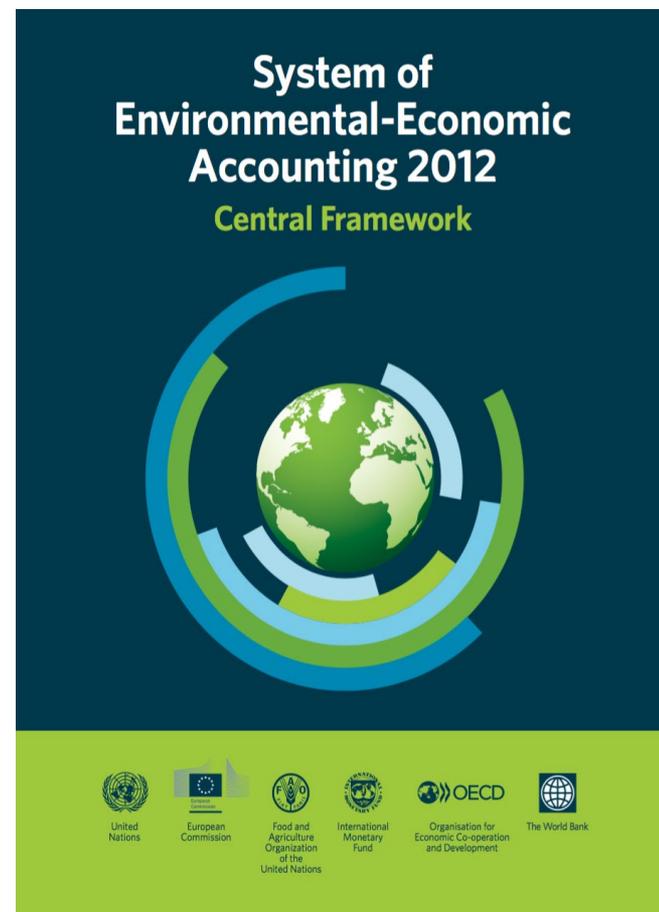
- **SEEA Central Framework (SEEA-CF)**
The **international statistical standard** for measuring the environment and its relation to the economy
- **SEEA Experimental Ecosystem Accounts (SEEA-EEA)**
Best practises (not a standard) for tracking changes in ecosystems and linking those changes to economic and other human activity
- **SEEA Policy Applications**
How to use the SEEA Central Framework accounts for decision making, policy formulation and research
- **SEEA Water, SEEA Energy, etc.**
Specialized handbooks of best practices (not standards) on specific topics



SEEA-CF as statistical standard



- Countries are “encouraged to implement the standard”
- International organizations have obligations to assist countries in the implementation
- Implementation strategy was adopted by the Statistical Commission in March 2013



The SEEA-CF comprises three main accounts

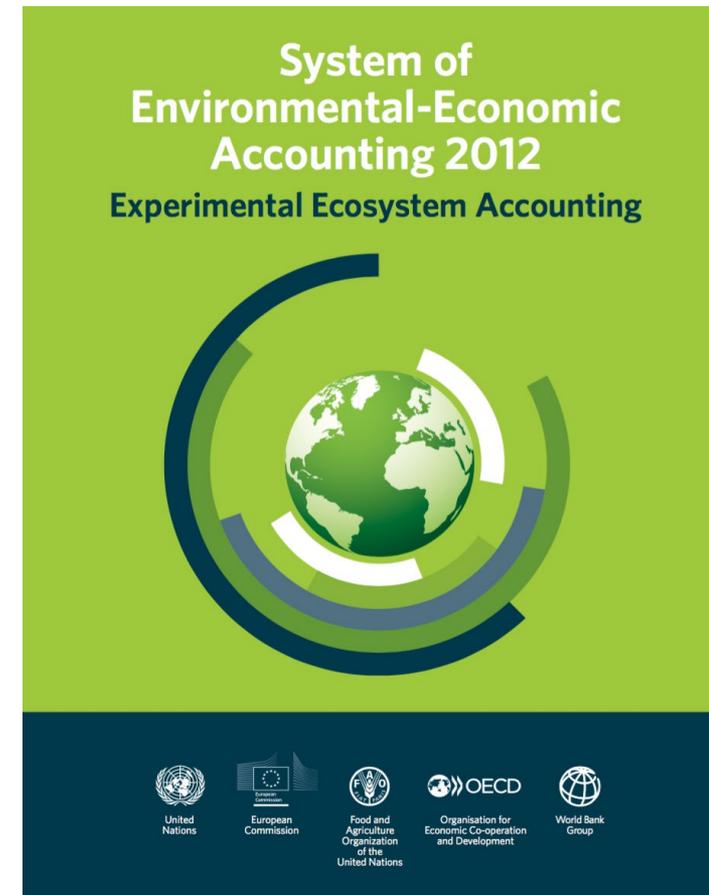


- **Flow accounts:** supply and use tables for products, natural resources, ecosystem inputs and residuals or wastes from economic activities.
 - Physical and/or monetary values
- **Stock accounts** for environmental assets: natural resources, land and ecosystems.
 - physical and/or monetary values
 - Use the UNFC to classify assets
- **Activity / purpose accounts** that explicitly identify environmental transactions already existing in the SNA.
 - e.g., Environmental Protection Expenditure (EPE) accounts

SEEA Experimental Ecosystem Accounting



- Complements the SEEA-CF
- Integrated statistical framework for accounting for ecosystem assets and associated services
- Important first step in development of statistical framework for ecosystem accounting
- UN encourages countries to test the framework
- Currently being revised and elevated to an international standard



SEEA Applications and Extensions



- Companion document to SEEA Central Framework
- Highlights potential of data from SEEA accounts to be
 - Applied to policy and research questions
 - Extended to integrate with data in other domains
- Provides bridge between compilers and analysts



Applications

- Indicators for environmental analysis
 - Resource use and efficiency
 - Production, employment and expenditure relating to environmental activities
 - Environmental taxes and subsidies
 - Natural resource depletion
- Environmentally extended input-output tables

Extensions

- Extension of SEEA to household sector
 - Household access to natural resources
 - Linking household activity and environmental pressures
 - Linking SEEA to tourism
- Geospatial analysis

Some reference material



- Briefing notes:
 - Briefing note on SEEA Central Framework:
<http://unstats.un.org/unsd/envaccounting/Brochure.pdf>
 - Briefing note on SEEA Experimental Ecosystem Accounting:
http://unstats.un.org/unsd/envaccounting/workshops/int_seminar/note.pdf
- Methodological publications:
 - SEEA Central Framework: http://unstats.un.org/unsd/envaccounting/White_cover.pdf
 - SEEA Experimental Ecosystem Accounting:
<http://unstats.un.org/unsd/statcom/doc13/BG-SEEA-Ecosystem.pdf>
 - SEEA Applications and Extensions:
<http://unstats.un.org/unsd/statcom/doc13/BG-SEEA-AE.pdf>
- Library – searchable library of publications (e.g. country case studies, methodological publications, etc.)
 - <http://unstats.un.org/unsd/envaccounting/ceea/archive/>
- Research agenda accompanying SEEA-Experimental Ecosystem Accounting
 - <http://unstats.un.org/unsd/statcom/doc13/BG-SEEA-ResearchAgenda.pdf>

Thank you

Rob Smith, Principal
Midsummer Analytics
Ottawa, Canada

rob@midsummer.ca

Skype: smitrob1965

+1-613-716-5230

