

Overview of the SEEA and its subsystem; Relevance and utility of SEEA in meeting policy demands

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Policy settings

- Post-2015 UN development agenda/SDGs
- Barbados Action Plan and Mauritius strategy of implementation
- Green Growth/Green Economy
- Broader measures of progress/Povend CDD
- Natural Capital Accounting/ WA
- Aichi targets (e.g. Target 2)
- Poverty and environment
- TEEB





Para.38 of the Rio+20 report



"We recognize the need for broader measures of progress to complement GDP in order to better inform policy decisions, and in this regard, we request the UN Statistical Commission in consultation with relevant UN System entities and other relevant organizations to launch a programme of work in this area building on existing initiatives."



Challenges ahead for our operations

- Fundamental rethink and transformational change in mainstreaming sustainable development
 - How we set the statistical agenda, how we keep the agenda under review and how we promote the statistical agenda and the authority of official statistics
 - How we engage within and between the national, regional and international statistical system with a bottom-up approach based on national priorities
 - How we integrate policy and statistics in our operations
 - How we integrate economic, social and environmental dimensions in our operations





Implications for statistical community

- A need to bring statistical decisions into the political process of defining development goals, targets and indicators
- An early and adequate engagement of the statistical community is vital
- A leadership role for the national statistical offices in the national statistical system and engage with the national stakeholders
- A need to strengthen the capacity of national statistical systems to compile and report development indicators through balanced and resourced national statistical systems based on national priorities



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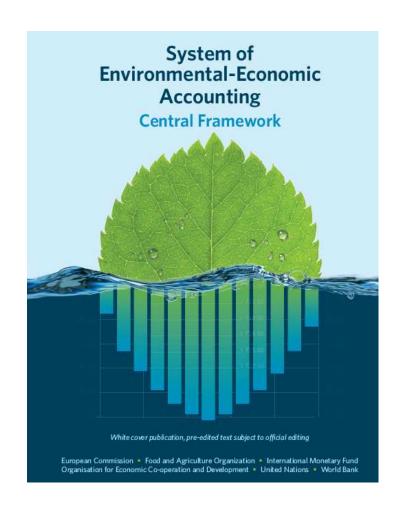
Statisticians, politicians and policymakers, business sector, scientific/academic community and general public must join hands!





Recent advances - SEEA

- Internationally agreed statistical framework to measure environment and its interactions with economy
- Adopted as international statistical standard by UN Statistical Commission in 2012
- Developed through intergovernmental process
- Published by UN, EU, FAO, IMF, OECD, WB



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The Suite of SEEAs

1993 2003 2006	Handbook – interim publication Updated SEEA handbook – manual of best practices UNSC decided to elevate SEEA to an international standard
2012 2013 2013	SEEA – The Central Framework (international standard) SEEA – Experimental Ecosystem Accounting SEEA – Applications and Extensions

Subsystems:

- SEEA Water (adopted in 2007)
- SEEA Energy
- SEEA Agriculture



SEEA: A Statistical Standard

- Countries are "encouraged to implement the standard"
- International organizations have obligations to assist countries in implementation
- Implementation strategy adopted by Statistical Commission in March 2013
- Data reporting mechanism will be established



Information is vital ...and it needs to be integrated

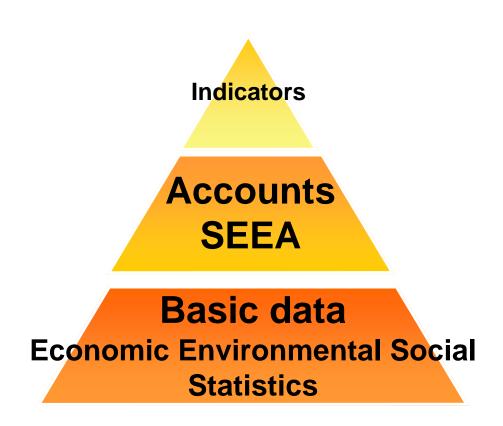
- The economy impacts on the environment and the environment impacts on the economy
- To understand these linkages we need to integrate environmental and economic information
- This is the explicit purpose of the SEEA





Integrated statistics

- Linking policy needs and statistics
- Understanding the institutional arrangements
- Integrated statistical production process/chain and services
- Consistency between basic data, accounts and tables and indicators





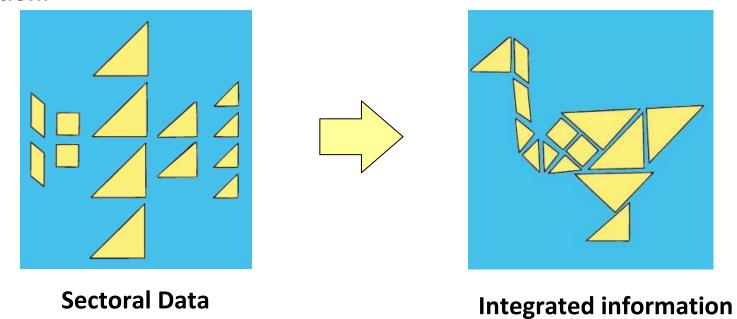
Linking environmental and socio-economic data is essential for policymakers

- Enables analysis of the impact of economic policies on the environment and vice versa
- Provides a quantitative basis for policy design
- Identifies the socio-economic drivers, pressures, impacts and responses affecting the environment
- Supports greater precision for environmental regulations and resource management strategies
- Provides indicators that express the relationships between the environment and the economy
- Support relevant perspectives on the dimensions of economic development, environmental sustainability and social equity



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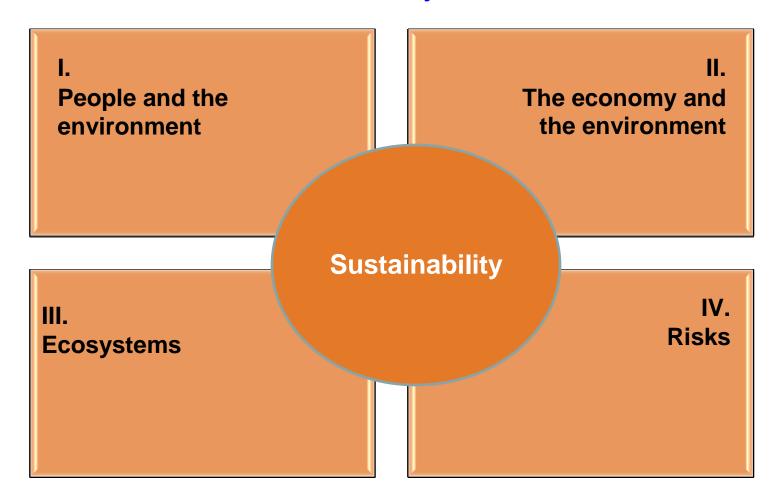
The System of Environmental-Economic Accounting (SEEA) provides the framework for transforming sectoral data into integrated policy-relevant information.



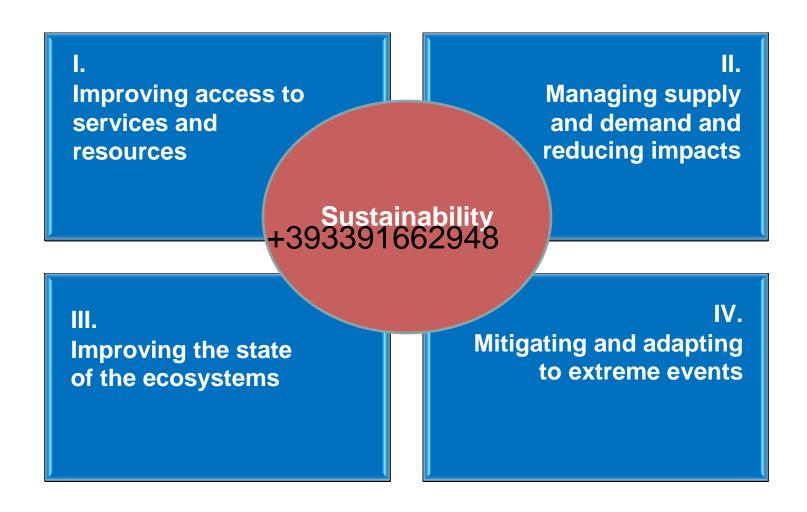
Integrated information provides a comprehensive picture to support policy making.



The SEEA Policy Quadrants



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Quadrant I: Improving access

I. Improving access to services and resources

Key information in this quadrant (household sector related):

- Costs associated with the provision of services to households (e.g. access to water, sanitation, waste collection, electricity, etc.)
- Investments in network infrastructure
- Employment and compensation in household production units (e.g. subsistence fisheries
- Household consumption and disposable income
- Poverty and inequality



Quadrant II: The economy and the environment

II. Managing supply and demand

Key information in this quadrant:

- Efficiency of production
 - Decoupling
- Efficiency of consumption
 - Footprint indicators
- Costs of production and payments by users (e.g. fees, taxes, rents, permits, etc.)
- Employment and compensation
- Financing (who pays for investments and current costs)
- Depletion
- Solid waste and emissions
- Environmental protection and resource management expenditures
- Natural resource assets (e.g. fish stocks, etc.)



Quadrant III: Ecosystems

III. Improving the state of the ecosystems

Key information in this quadrant:

- Ecosystem extent
- Ecosystem conditions
 - Water cycle
 - Carbon cycle
 - Nutrient cycle
 - Primary productivity
- Degradation
- Biodiversity
- Regulatory services provided by ecosystems



Quadrant IV: Extreme Events

IV. Mitigating and adapting to extreme events

Key information in this quadrant:

- Natural disasters
- Investments for mitigation
- Investments for adaptation

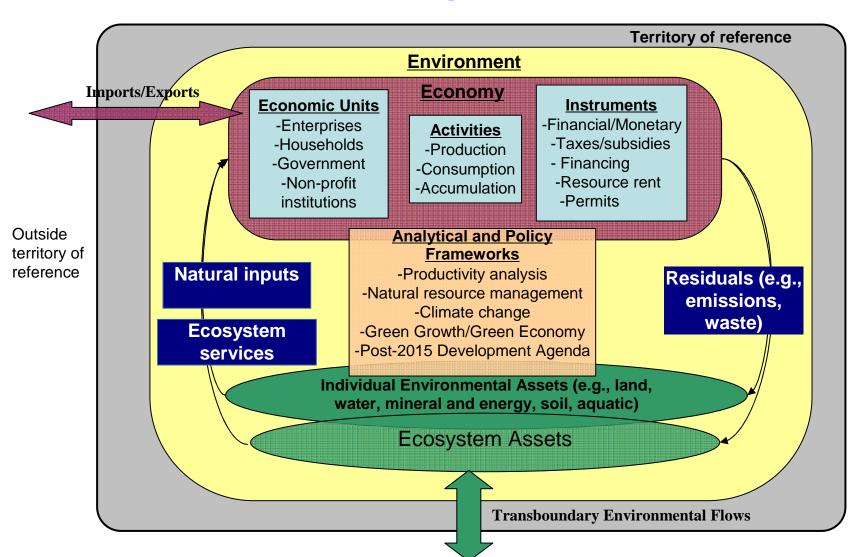


The SEEA Central Framework Accounts

- 1. Flow accounts: supply and use tables for products, natural inputs and residuals (e.g. waste, wastewater) generated by economic activities.
 - physical (e.g. m² of water) and/or monetary values (e.g. permits to access water, cost of wastewater treatment, etc.)
- 2. Stock accounts for environmental assets: natural resources and land
 - physical (e.g. fish stocks and changes in stocks) and/or monetary values (e.g. value of natural capital, depletion)
- 3. Activity / purpose accounts that explicitly identify environmental transactions already existing in the SNA.
 - e.g. Environmental Protection Expenditure (EPE) accounts, environmental taxes and subsidies
- 4. Combined physical and monetary accounts that bring together physical and monetary information for derivation indicators, including depletion adjusted aggregates

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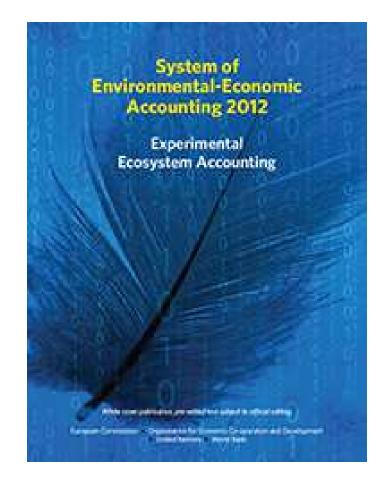
SEEA Conceptual Framework



Outside territory of reference

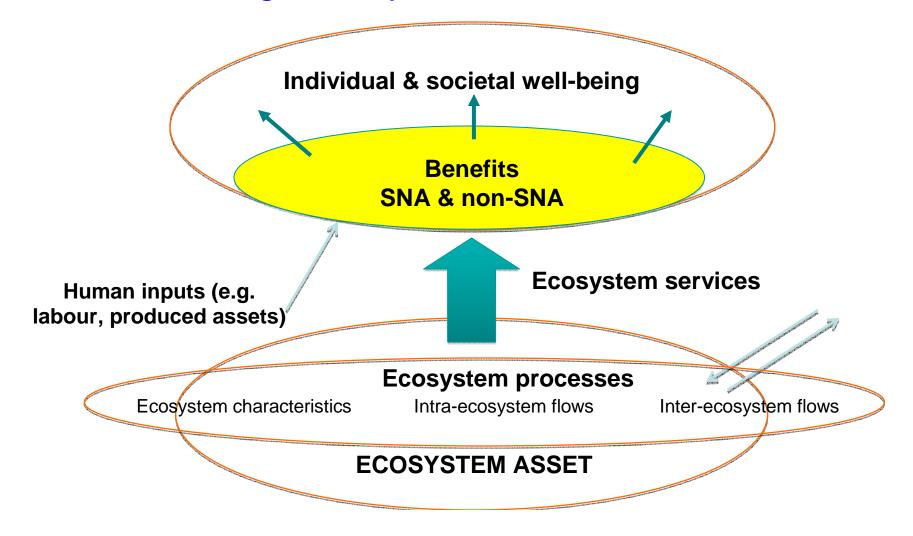
SEEA Experimental Ecosystem Accounting

- Complements SEEA Central Framework
- Integrated statistical framework for accounting for ecosystem assets and associated ecosystem services
- Important first step in development of statistical framework for ecosystem accounting



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Linking ecosystem assets and well-being through ecosystem services





Key aspects of the framework

Statistical units

Classification of ecosystem services

- Provisioning (water, materials, energy and other provisioning services)
- Regulating services (remediation and regulation of biophysical environment, flow regulation, etc.)
- Cultural services (physical or experiential use of ecosystems)

Ecosystem assets

- Ecosystem extent
- Ecosystem condition (measured through a range of indicators of characteristics)
- Expected ecosystem service flows

Degradation and enhancement



SEEA Experimental Ecosystem Accounting

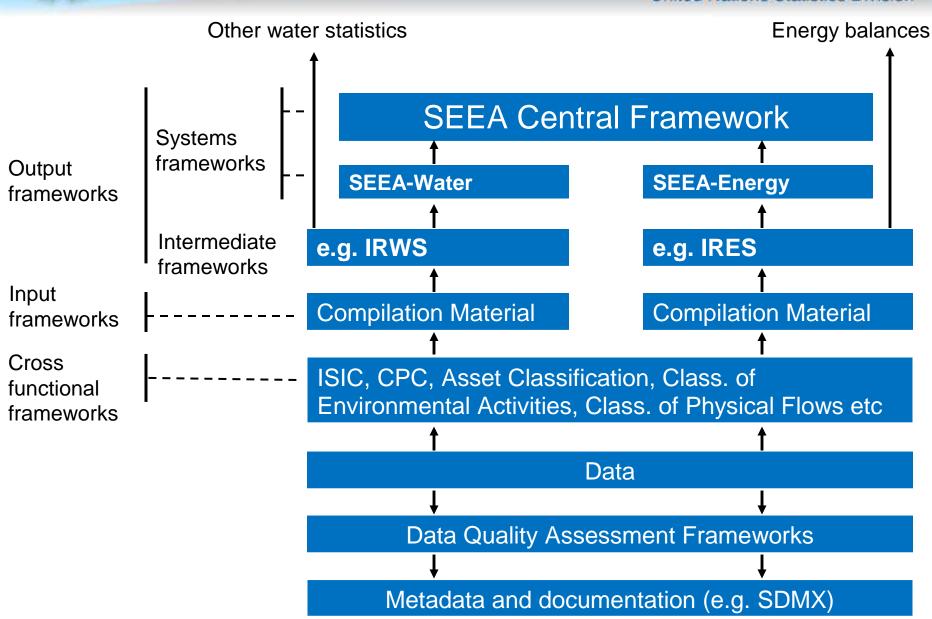
- UN Statistical Commission
 - Encouraged countries to test framework
 - Endorsed the research agenda
 - Requested creation of mechanism to advance research agenda – multidisciplinary
 - 5 possible research streams:
 - Ecosystem conditions and services
 - Geospatial
 - Valuation
 - Policy applications
 - Communication



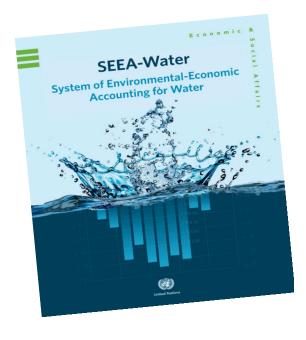
SEEA Applications and Extensions

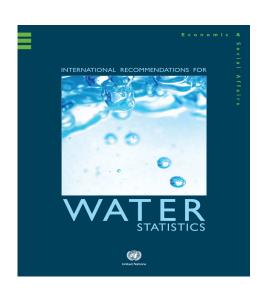
- Companion document to the SEEA Central Framework to support the implementation
- Highlights potential application of SEEA data to answer policy and research questions
- Can be extended to integrate with data with other domains (such as household sector)
- Provides a bridge between compilers and analysts

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After the SEEA-Water was adopted in 2007, the International Recommendations for Water Statistics (IRWS) were designed to assist countries in the implementation.





The documents have been translated into French, Spanish and Russian. Other translations will be available soon.



SEEA-Energy

- SEEA-Energy organizes physical and monetary information on energy
- It builds on the SEEA Central Framework and 2008 SNA
- Emphasis on the relationship between energy, the economy and the environment

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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

Briefing note on SEEA Water and International Recommendations for Water Statistics (IRWS) http://unstats.un.org/unsd/envaccounting/WWAP UNSD WaterMF.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

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