



Overview of the System of Environmental-Economic Accounting

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Content

- Policy setting and role of the SEEA
- The SEEA overview
 - SEEA Central Framework
 - SEEA Experimental Ecosystem Accounting
 - SEEA Applications and Extensions



Policy Settings and Role for the SEEA





International policy settings

- International policy settings
 - Post-2015 UN development agenda
 - Sustainable Development Goals
 - Broader measures of progress
 - Natural Capital Accounting
 - Beyond GDP initiatives
 - Biodiversity and ecosystem targets
 - Green economy/green growth
 - Poverty and environment
 - Etc.



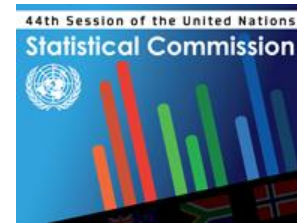
Para.38 of the Rio+20 report



“We recognize the need for **broader measure 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.”



Decisions during UNSC2013



- Insisted that the statistical community needs to be adequately involved in the discussion on new development frameworks, in order to advise early on any formation of targets and indicators
- Supported the formation of a **Friends of the Chair group (FOC)** to build a work programme to develop broader measure of progress
- Asks FOC to facilitate a continuous interface between the political and the statistical sphere

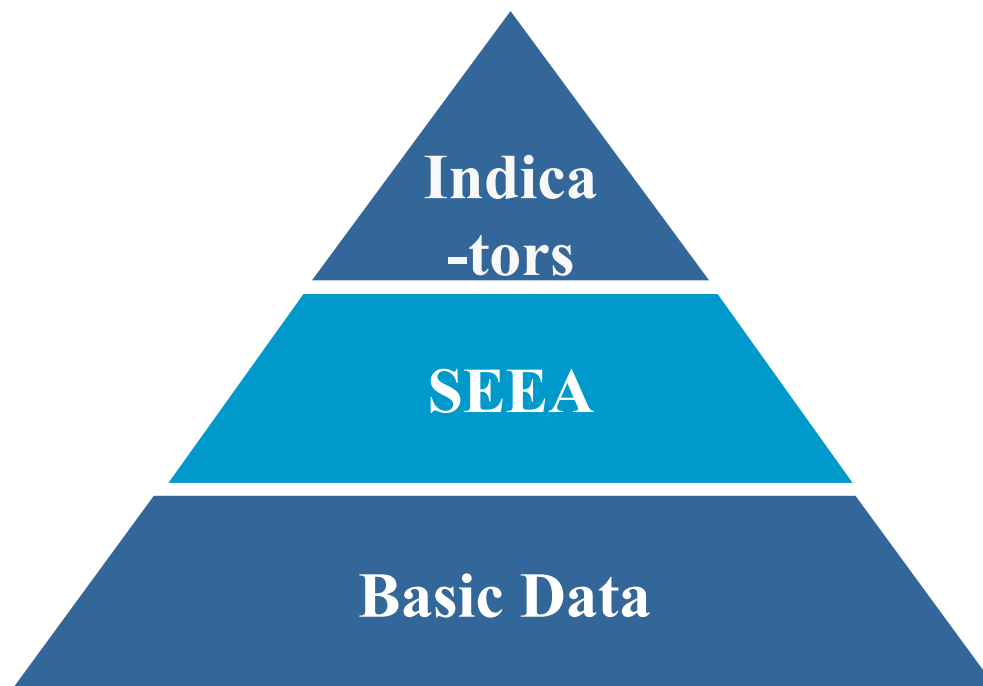


Relevance of the SEEA

- UNSC recognized the SNA and SEEA as important internationally-agreed statistical frameworks for broader measures of progress
- Many commonly cited indicators can be derived from SEEA
- SEEA provides a single coherent measurement framework across the various policy frameworks and targets
- Assessment of environmental sustainability
 - Highly complex and requires further advances with the SEEA to capture complex interactions of economy, environment and society



Role of the SEEA





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





Problem: Information silos

- Data developed to answer one particular question or problem
- Difficult to figure out if all information is included
- Not always easy to see the whole picture, or how it relates to other things





Solution: Integrated information

- Holistic picture
- Consistency of information and identification of data gaps
- Interconnections between economy, environment and society





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 environmental regulations and resource management strategies
- Provides indicators that express the relationships between the environment and the economy



The SEEA: Overview





The SEEA standard

- **Developed by UNSD, NSOs, Eurostat, OECD, IMF, World Bank**

- **1993** Handbook – interim report
- **2003** Updated SEEA handbook – manual of best practices
- **2006** UNSC decided to elevate SEEA to an international standard

- **2012** **SEEA – The Central Framework**
 - Chapter 1 – Introduction
 - Chapter 2 – Accounting structure
 - Chapter 3 – Physical supply and use
 - Chapter 4 – Monetary transactions
 - Chapter 5 – Asset accounts
 - Chapter 6 – Sequence of accounts, aggregates and indicators

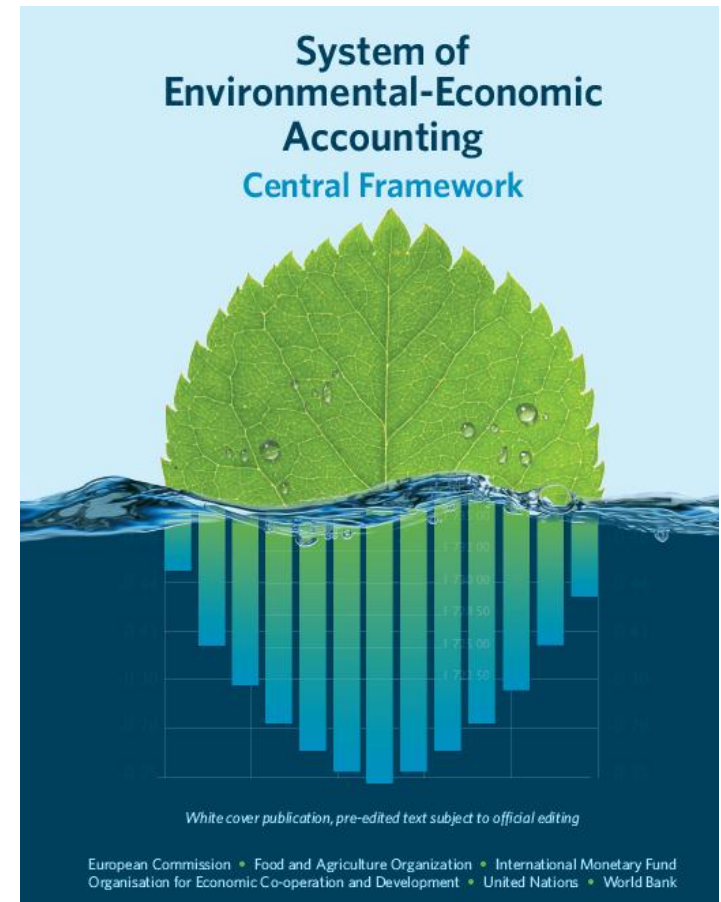
- **2013** **SEEA – Experimental Ecosystem Accounts**
- **2013** **SEEA – Applications and Policy Uses**

- **Subsystems:**
 - SEEA-Water, SEEA-Energy



SEEA Central Framework: Background

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





SEEA as statistical standard

- Countries are “encouraged to implement the standard”
- International organizations have obligations to assist countries in the implementation
- Implementation strategy has been adopted by the Statistical Commission in March 2013
- A data reporting mechanism will be established in time

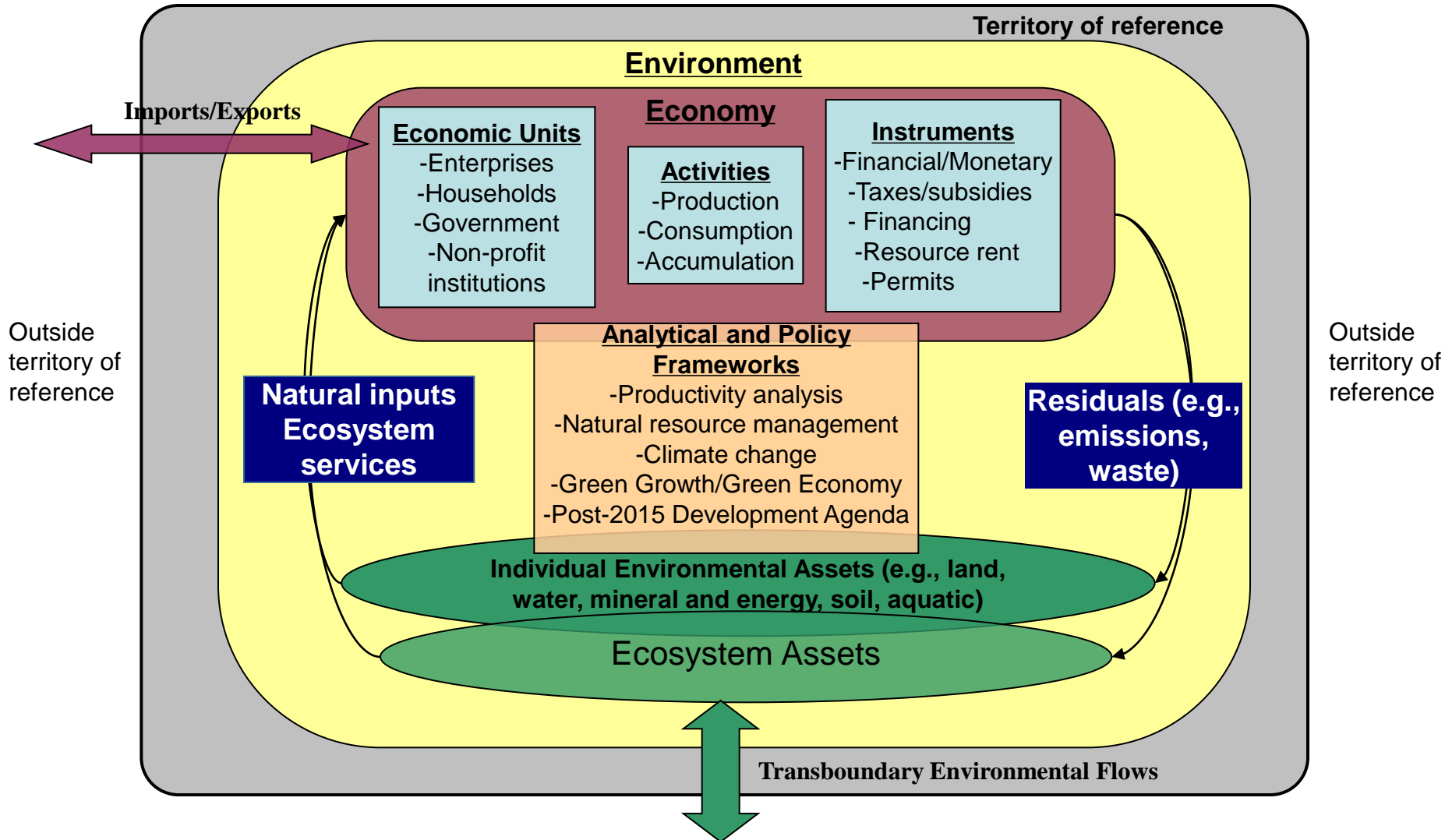


The SEEA central framework incorporates four types of accounts.

- 1. Flow accounts:** supply and use tables for products, natural resources, ecosystem inputs and residuals or wastes from economic activities.
 - physical (e.g. GL of water) and/or monetary values
- 2. Stock accounts** for environmental assets: natural resources, land and ecosystems.
 - physical and/or monetary values
- 3. Activity / purpose accounts** that explicitly identify environmental transactions already existing in the SNA.
 - e.g. Environmental Protection Expenditure (EPE) accounts
- 4. Combined physical and monetary accounts** that bring together physical and monetary information for derivation indicators, including depletion adjusted aggregates



SEEA Conceptual Framework





Benefits of Using SEEA Central Framework

- Organising information within the SEEA Central Framework ensures
 - Consistency (with existing standards eg SNA)
 - Completeness (no gaps, or at least known gaps)
 - Comparability (across time and space)
 - Accountability (industry, governments, households)



SEEA Experimental Ecosystem Accounting

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





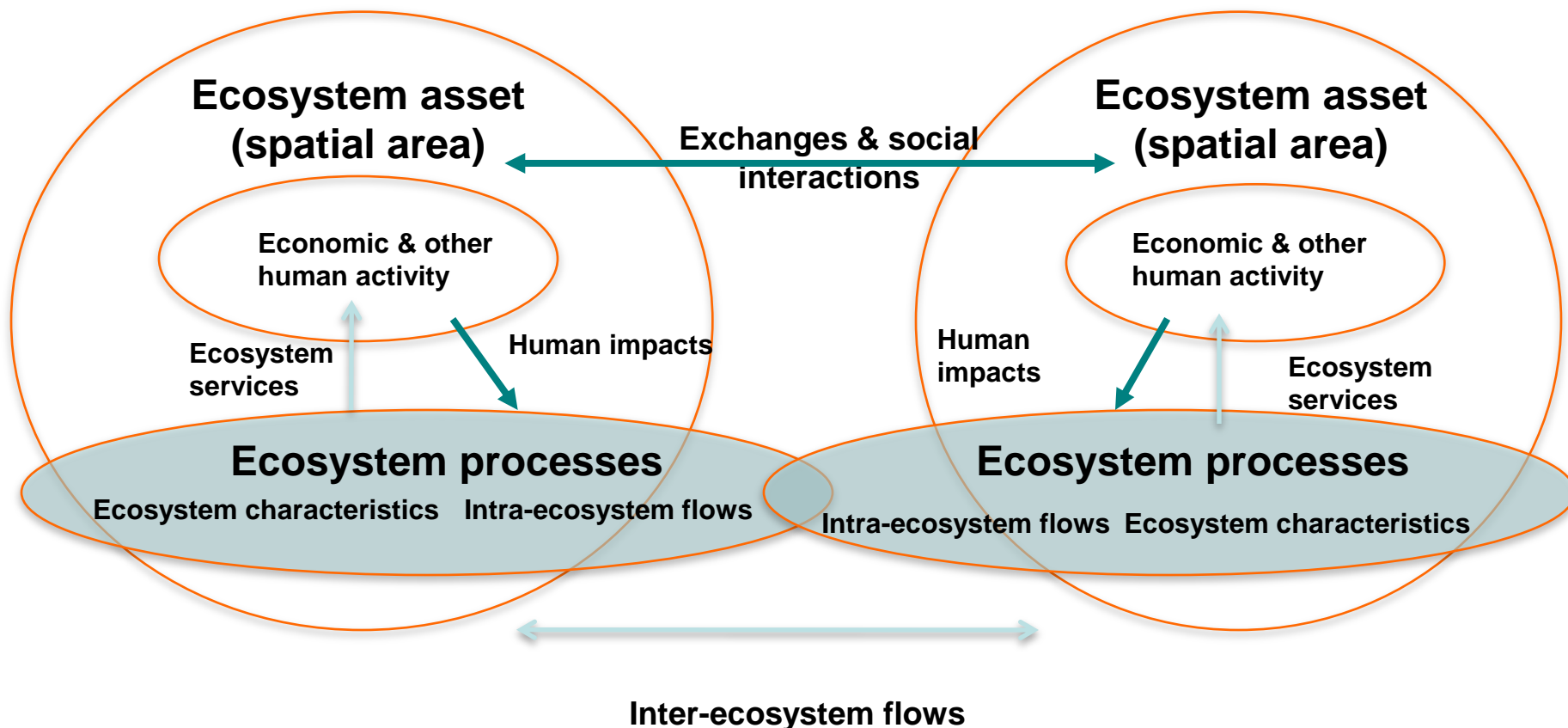
Coverage of SEEA-Experimental Ecosystem Accounts

- Statistical units (spatial areas)
- Flows
 - Ecosystem services (to economy and human activity)
 - Intra-ecosystem (within ecosystem)
 - Inter-ecosystem (between ecosystems)
- Stocks
 - Ecosystem extent and condition
- Monetary accounts and valuation



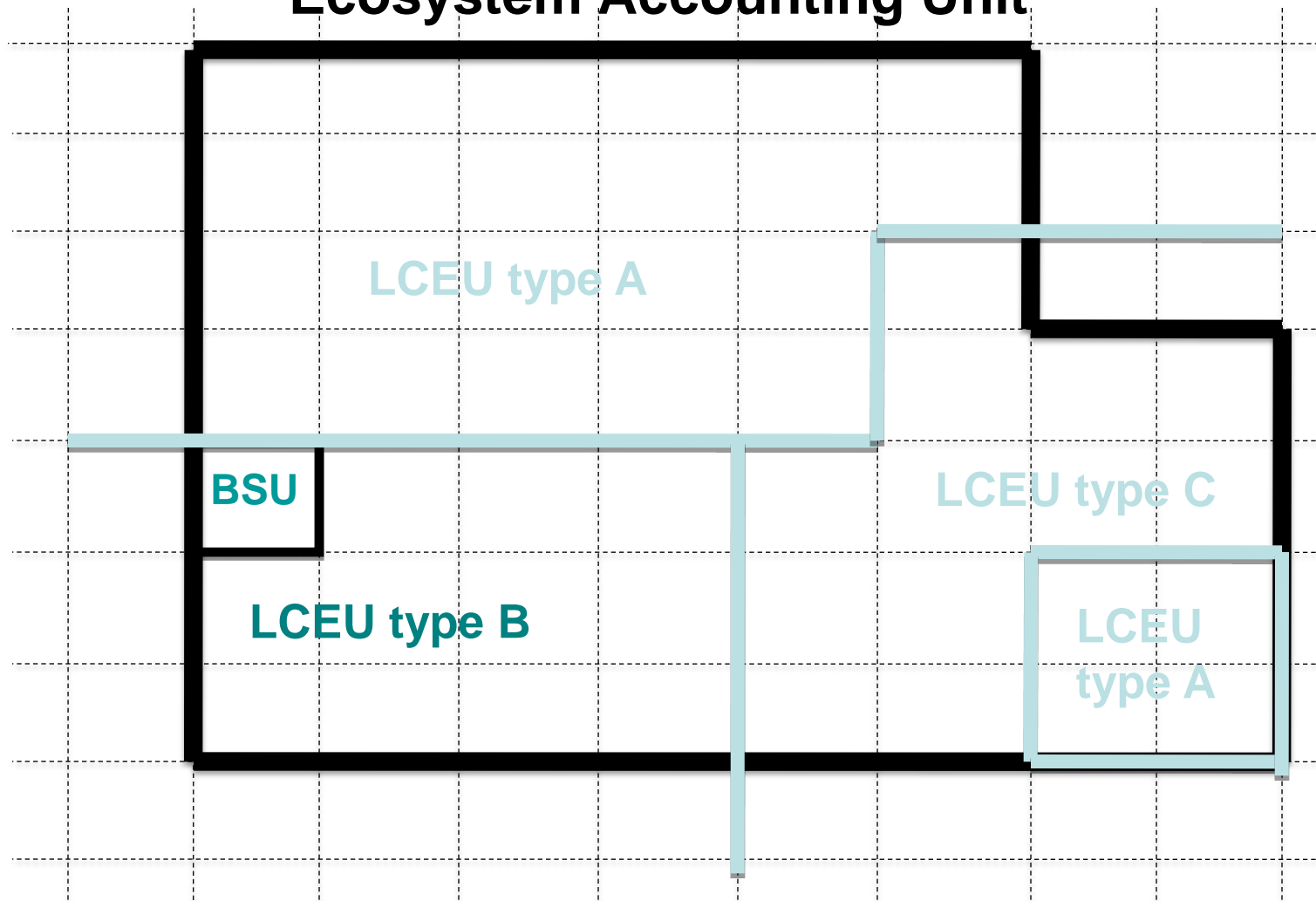


Basic accounting model (cont'd)





Ecosystem Accounting Unit



Spatial Area Representation



Key Considerations

- Multi-disciplinary nature
- Accounting approach benefits
- Physical and monetary accounting
- Complements SEEA Central Framework
- Continued research and testing needed
- Potential to meet policy demands



SEEA Experimental Ecosystem Accounting

- UN Statistical Commission
 - Encouraged countries to test the framework
 - Requested the UNCEEA to prioritize the research agenda
 - Requested the creation of an Expert Group to advance the research agenda



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 and aggregates in environmental analysis, e.g.
 - Resource use and efficiency
 - Production, employment and expenditure relating to environmental activities
 - Environmental taxes and subsidies
 - 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



Next steps

- **SEEA-Central Framework**
 - Implementation
 - Implementation strategy (sub-national approach)
 - Develop common tools (e.g. training materials, compilation guidelines, standardized presentations, diagnostic tools)
 - Develop core tables and accounts from which indicators can be derived
 - Coordinate activities with international partners
 - Research agenda
- **SEEA-Experimental Ecosystem Accounts**
 - Testing and experimentation in countries
 - Establishment of the Expert Group on SEEA Experimental Ecosystem Accounting
 - Advance the research agenda
 - SEEA-Ecosystems??



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

Briefing note on SEEA Water and International Recommendations for Water Statistics (IRWS)

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>