


System of
Environmental
Economic
Accounting

Introduction to the SEEA and Climate Change-Related Applications

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SEEA

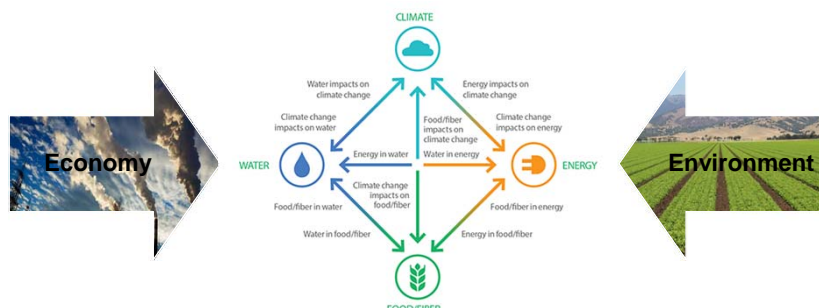
The missing piece of the puzzle

- Every country follows the System of National Accounts and every business relies on a balance sheet
- However, they largely omit the benefits from nature
- We need to integrate the contribution of nature into decision-making.



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Integration for Sustainable Development



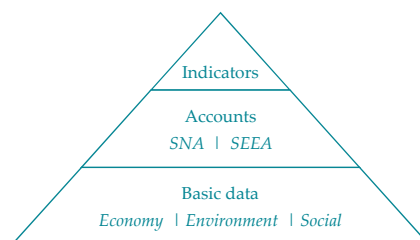
- Environmental policy must consider **interconnected natural systems**
 - E.g. Food, energy, water and climate change **nexus**
- Policies should recognize the links;
 - Between different natural systems → **Integrated** environmental information
 - Between the economy and environment → **Integrated** environmental-economic information



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SEEA: From Silo approach to Integration

Agency A	Agency B	Agency C
Policy A	Policy B	Policy C
Info A	Info B	Info C
Data A	Data B	Data C



Towards integration

- Institutional arrangements/governance
- Integrated decision making



SEEA

The System of Environmental Economic Accounting (SEEA)

- The **SEEA Central Framework** was adopted as an international statistical standard by the UN Statistical Commission in 2012 to measure the environment and its relation with the economy
- The **SEEA Experimental Ecosystem Accounting** complements the Central Framework and represents international efforts toward coherent ecosystem accounting



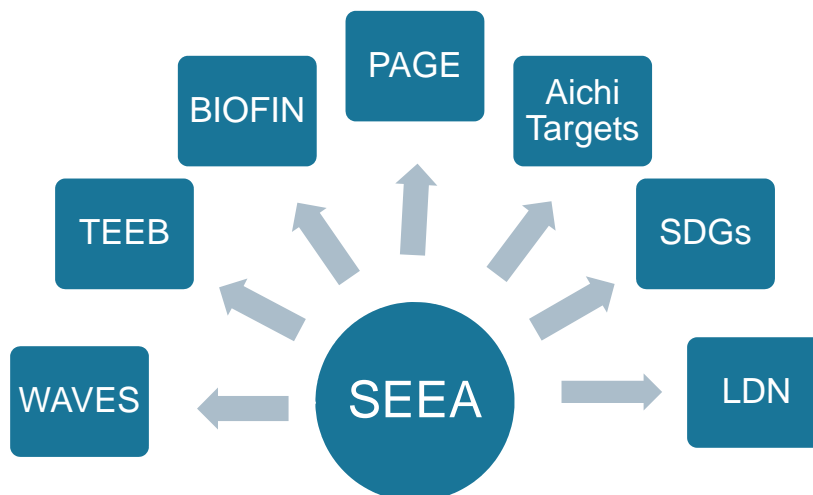
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Systems of INTEGRATED information



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SEEA and other initiatives



Status of SEEA Implementation





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SEEA AND CLIMATE CHANGE-RELATED SDG INDICATORS



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SEEA and the SDG indicators



The **SNA** and **SEEA** are statistical standards that can be used to monitor a number of environmental-economic SDG Indicators **in an integrated way**.



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SEEA and the SDG indicators

- Climate-change relevant SDG indicators the SEEA can inform:
 - > **6.4.1: Change in water use efficiency**
 - > **6.4.2: Level of water stress**
 - > **7.2.1: Renewable energy share**
 - > 7.3.1: Energy intensity
 - > 7.a.1: International flows to developing countries in support of clean energy
 - > 7.b.1: Investments in energy efficiency as a proportion of GDP
 - > 9.4.1: CO₂ emission per unit value added
 - > 12.c.1: Fossil-fuel subsidies per unit of GDP
 - > 15.1.1: Proportion of forest area
 - > **15.3.1: Proportion of degraded land**
 - > 15.4.2: Mountain Green Cover Index

Bold = Overlap with Task Force core indicators



SEEA and the SDG indicators

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= Alignment or progress to align with SEEA

Bold = Overlap with Task Force indicators



SEEA and the SDG indicators

- Alignment of (or current work to align) multiple climate change-related indicators, including Goal 6 and Goal 15 indicators
- Difference of territory vs residence principle for SDG 7 indicators
 - Use of residence principle and SEEA facilitates analysis by economic sector, promotes consistent measurement over time
- Proposal to form subgroup on the SEEA within the Interlinkages Working Group of the IAEG-SDGs to promote further alignment
 - Explore potential for SEEA-based indicators for indicators of all tiers
 - Complimentary residence based SEEA indicators for Goal 7



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GLOBAL DATABASES



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UNCEEA Work Programme

- The UNCEEA is the umbrella body for coordinating efforts in environmental-economic accounting
- A **Work Programme 2017-2020** was developed by the Bureau of the UNCEEA and takes a **5-pronged approach** to global implementation
- For each area of work, different **area leads** are responsible for; a) acting as a champion and providing leadership, b) developing more detailed work plans and strategies, and c) coordinating with other members of the UNCEEA



Development of Global Databases

- UNCEEA tasked by UN Statistical Commission to explore global databases, which will facilitate use of SEEA for SDGs
- Priority databases: **energy**, **air emissions**, material flow, **land** and water
- Energy database (UNSD):
 - > Physical supply and use tables
 - > Energy balances to accounts tool
 - > Next steps: Country testing of tool
- Air emissions database (OECD)
 - > GHGs, air pollutants
 - > Estimated accounts for select countries
 - > Next steps: Estimation of 'bridging items' for territory vs residence principle; inclusion of LULUCF emissions; extended estimation to non-Annex I countries



Development of Global Databases

- Land database (FAO)
 - > Estimated land cover accounts with global coverage and SEEA classification published
 - > Next steps: Collection of official land cover accounts, engagement with UNCCD on indicator 15.3.1.
- SEEA website as potential platform to link the various datasets compiled by different agencies



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PROMOTING USAGE OF SEEA- BASED TASK FORCE INDICATORS



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Promoting Usage of Task Force Indicators

- Residence and territory-based climate change indicators to facilitate different types of analyses and uses
 - > Importance of providing guidance on dissemination and uses of the two methodologies
- Future collaboration and engagement between Task Force and UNCEEA on metadata to facilitate compilation of residence-based indicators
- Key role of global databases for both the SDGs and Task Force indicators



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THANK YOU

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