

United Nations Statistics Division

SEEA-Water Accounts and their Contribution to Monitoring the SDGs

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Seminar: SEEA-Water accounts as a Resource for Public Policy and the Monitoring of Sustainable Development Goals

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United Nations Statistics Division

Outline

- Policy Context
- Adoption and Implementation of the SEEA Standard
- The Role of the SEEA for Monitoring the SDGs
 Criteria for SDGs
 - Contribution of SEEA to meeting criteria
 - Technical Notes and Core Tables
- Implementation Support



Policy Context

- The Rio+20 United Nations Conference:
 - Called for the formulation of Sustainable Development Goals
 - Recognized that progress towards these goals would required accompanied targets and indicators
 - Recognized the need for broader measures of progress to complement GDP and better inform policy decisions

Sustainable Development Policy

Increasing recognition that Sustainable Development Policy should:

- 1. Be based on Evidence: Policy should, to the greatest extent possible, be informed by rigorously established evidence
- 2. Take an Integrated Approach: Policy should be based on a better understanding of interactions and tradeoffs between the different realms of sustainability

Implication: Need to develop a system of information which represents all main aspects of Sustainable Development and their inter-connections

The Statistical Response: SEEA

- Response to an identified need to bring the environment into a system of information on par with that used for the economy
- The SEEA Central Framework constitutes an internationally agreed statistical framework used to measure the environment and its interactions with the economy
 - SEEA Experimental Ecosystem Accounting will add the link to well-being
- The SEEA Central Framework was adopted as an international statistical standard by the UN Statistical Commission in 2012



The SNA, the SEEA, and the SEEA-Water are methodologies based on principles rather than conventions.



These systems provide consistent and comparable information which together provide a comprehensive platform for decision making.

The SEEA: Adoption and Uptake

- Countries are "encouraged to implement the standard" and are increasingly doing so
- International organizations have obligations to assist countries in implementation
- The SEEA is being adopted by many international initiatives such as:
 - WAVES (World Bank)
 - BIOFIN
 - CBD Aaichi Target 2
- Legal Mandate in European Union

The SEEA: Use in the Post-2015 Agenda

- The SEEA can contribute to the monitoring of the SDGs by enabling the production of an enhanced set of environmental indicators.
- Will illustrate this by:
 - 1. Presenting a criteria set for SDG indicators
 - 2. Show how using the SEEA can enhance the capacity of indicators to meet these criteria
 - 3. Example: Water

Criteria (1/3): Policy Relevance and Utility

- Accurately describe the phenomena it was designed to measure
- Be supported by supplementary information
- Be sensitive and responsive
- Have the possibility to be disaggregated
- Be timely and based on data which can be produced in a timely fashion

SEEA: Policy Relevance and Utility

- The SEEA organizes environmental statistics such that important aggregates, descriptive statistics and indicators can be easily derived
- The information framework provides supplementary information to headline indicators by elucidating the key drivers and interactions at play – this allows for a richer understanding of indicators
- SEEA accounts allow for disaggregation at different levels (Industry, institutional sector, spatially etc.)

Criteria (2/3): Analytical Soundness

- Be based on best practice methodology (i.e. uses international standards of best practice)
- Be compliant with international standards (in terms of definitions, classifications, etc.)
- Be broadly consistent with systems based information (i.e. be embedded within larger information systems)

SEEA: Analytical Soundness

- Adoption of the SEEA acts as a vehicle for harmonization of environment statistics
 - Helps ensure consistency and coherence of indicators calculated from multiple data items produced under one framework
- Consistency with the SNA allows for integration of environment statistics with economic and other statistics
 - Allows for calculation of important ratios
 - Sustainable development indicators which consider the ratio of environmental factors to economic factors can be calculated in a methodologically coherent manner

Criteria (3/3): Measurability and Practicality

- Constructed from well-established data sources
- Supported by data which is readily available or attainable at a reasonable cost/benefit ratio
- Be easily accessible to the general public (indicators should be freely available, as well as simple, clear and easy to understand)
- Managed by a responsible agency (both at national and international level)

SEEA: Measurability and Practicality

 The SEEA can be a vehicle to achieve an integrated production process for indicators by consolidating data collection and compilation:

AGENCY 1	AGENCY 2	AGENCY 3		AGENCY 1	AGENCY 2	AGENCY 3	
Policy (1)	Policy (2)	Policy (3)	N	Policy (1)	Policy (2)	Policy (3)	Integrated
Decision (1)	Decision (2)	Decision (3)	\	Decision (1)	Decision (2)	Decision (3)	Policy
Indicators (1)	Indicators (2)	Indicators (3)	$ \rangle$	Indicators (1)	Indicators (2)	Indicators (3)	SEEA
Information (1)	Information (2)	Information (3)	5/	Information (1)	Information (2)	Information (3)	Accounts
Data (1)	Data (2)	Data (3)	Y	Data (1)	Data (2)	Data (3)	Universal Data set





Adapted from DESA

SEEA: Measurability and Practicality

- The compilation of accounts requires that countries do a "stocktaking" of existing data collection activities
- In data poor environments the SEEA allows data to be used in multiple ways
- The structure of the SEEA allows for identification of data gaps, and calculation of reliable estimates for missing data items
- The SEEA can facilitate more timely production of indicators as reliable estimates can be calculated using the accounting structure



Water: Matching SDG targets to SEEAbased accounts and indicators (1/2)

SDG	Targets	SEEA accounts	Indicators		
6.3	by 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater, and increasing recycling and safe reuse by x% globally	Water emissions accounts	Generation of gross releases of substances to water by economy activity and household		
6.4	by 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity, and	Water accounts	Water productive indicators (value added by economy activity per cubic metres of water used, disaggregated by ISIC and spatial location)		
	substantially reduce the number of people suffering from water scarcity		Intensity of use of water resources (% of total renewable water resources that is used)		
6.5	by 2030 implement integrated water resources management at all levels, including through transboundary cooperation as appropriate	Water accounts	Water supply and use indicators disaggregated by economic activity, household and spatial location		
			Outflows to other territories - volume of surface water and ground water that flows from within a territory to another territory per year		
		Land	Inland waters used for maintenance and restoration		
		accounts	of environmental functions; other uses of inland waters not elsewhere classified; inland waters not in use		



Water: Matching SDG targets to SEEAbased accounts and indicators (2/2)

SDG	Targets	SEEA accounts	Indicators
6.6	by 2020 protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes	Ecosystem assets accounts	Degradation of designated water related ecosystems (Decline in the expected ecosystem service flows/conditions in designated water- related ecosystems)
6.a	by 2030, expand international cooperation and capacity-building support to developing countries in water and sanitation related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies	Water accounts	Investment in water measures (gross capital formation for water supply and water sanitation)

Technical Notes, Core Tables and Accounts

- Technical Notes provide implementation support for compilers of the accounts
- Core tables and accounts provide concise, highly relevant information
- The information included is key to deriving indicators and aids in developing evidence based public policies
- Two core tables for water are proposed they can facilitate the derivation of a number of indicators relevant to the SDG target 6 on water.



SEEA-Water: Core Table 1

		Industries (by ISIC division)	consu	al final Imption Govern- ment	Taxes less subsidies on products, trade and transport	Total
	Use of water (Millions m3)					
	Total Abstraction		E			
	Use of water received from other economic units		G			
	Supply of water (Millions m3)					
1	Supply of water to other economic units		F			
	Total returns		Н			
	Of which: losses		Ι			
	Water consumption (Millions m3)					
	Supply of water products (Currency units)					
	Natural water		L.1.1		M.1.1.1 - N.1.1.1	
	Sewerage services		L.1.2		M.1.1.2 - N.1.1.2	
	Total supply of products				1	
2	Intermediate consumption and final use (Currency units)					
	Natural water		L.4			
	Sewerage services		L.5			
	Other products					
	Gross value added (Currency units)					
	Employment					
	Gross fixed capital formation (Currency units)					
	For water supply		P.1.1			
3	For sewerage/sanitation		P.1.2			
	Stocks of fixed assets					
	For water supply		0.1.1			
	For sewerage/sanitation		0.1.2			

Target 6.4: Use of Core Tables

- Target 6.4 calls for countries to "by 2030, substantially increase <u>water-use efficiency</u> across all <u>sectors</u>...."
- Table 1 includes information on
 - Total water use by industries and households (alternatively total water abstractions can be used)
 - Industries are by ISIC category, and can include specific measures for Agriculture, Mining and Quarrying, Manufacturing and Construction etc.
 - The level of disaggregation by industries depends on need.
- Combine with Value-Added measures from the SNA as both systems are fully consistent

Global Implementation Strategy

- Incrementally establish national technical capacity for regular reporting on a minimum set of accounts.
- Flexible and Modular approach
- Four phases supported by international activities
 - 1. Establish national institutional arrangements
 - 2. Self assessment using diagnostic tool
 - 3. Data quality assessment
 - 4. Preparation of strategic development plan



Implementation Support for SEEA-Water

- Technical Assistance
- SEEA Implementation Guide
 - Including Diagnostic Tool
- Compilation Guidelines for Water Accounts and Statistics
- Technical Note on Water (forthcoming)
- SEEA training for ECLAC countries
 - Web-based course (expected March-May 2015)
 - 4 day in-person training (Santiago, June 2015)
 - Specific module on water



Summary

- International Standard with increasing adoption
- Important Statistical Framework for Sustainable Development
- SEEA is an important tool for monitoring the SDGs. The Accounting structure improves robustness to a set of general criteria for SDG indicators
- Core Tables and Accounts most critical and relevant information for global reporting
- Range of support materials available for implementation