Using the SEEA for the derivation of indicators in the context of the Post-2015 Development Agenda

United Nations Statistics Division

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Background

1. UNSD was asked to draft a paper under the auspices of the UNCEEA to suggest appropriate indicators for the SDG targets, detailing how the SEEA can be a valuable tool to the SDG monitoring process.
2. This presentation sets out the key points UNSD aims to make in the above mentioned paper, and our approach so far.

Outline

1. Policy demand and the SDG process
2. Incorporating the SEEA into SDG monitoring
3. A criteria set for Indicators
4. SEEA indicators: meeting baseline criteria
5. Matching SDG targets and indicators with SEEA-based indicators

Policy Demand: Background

- "The Future We Want" from Rio+20 calls for the development of Sustainable Development Goals (SDGs)
  - Recognises the need to build upon existing initiatives in developing broader measures of progress
  - One such initiative is the SEEA
- This session discusses how the SEEA is relevant to meeting data demands of the SDG process

Policy Demand: International Context

- Agenda 21
- Rio+20 outcome document
- High-Level Panel Report on the Post-2015 Development Agenda
- Open Working Group
- European legislation
- Aichi targets
- International initiatives

- OECD's Green Growth Strategy, WAVES, VANTAGE, UNEP-led Green Economy programme, CBD, TEEB

Incorporating the SEEA into the SDG monitoring process

- Develop a set of criteria to which sustainable development indicators should adhere
  - Based on a mapping of criteria and qualities of indicators set out in the literature
- Demonstrate that environmental indicators derived from the SEEA are more useful, and robust to meeting the above criteria
- Map SDG targets and indicators to highlight which indicators can be derived from / supported by the SEEA

Set of Criteria for Indicators (1)

Policy Relevance and Utility for the User

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

Set of Criteria for Indicators (2)

Analytical Soundness

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

Set of Criteria for Indicators (3)

Measurability and Practicality

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

SEEA-based Indicators: Policy Relevance and Utility

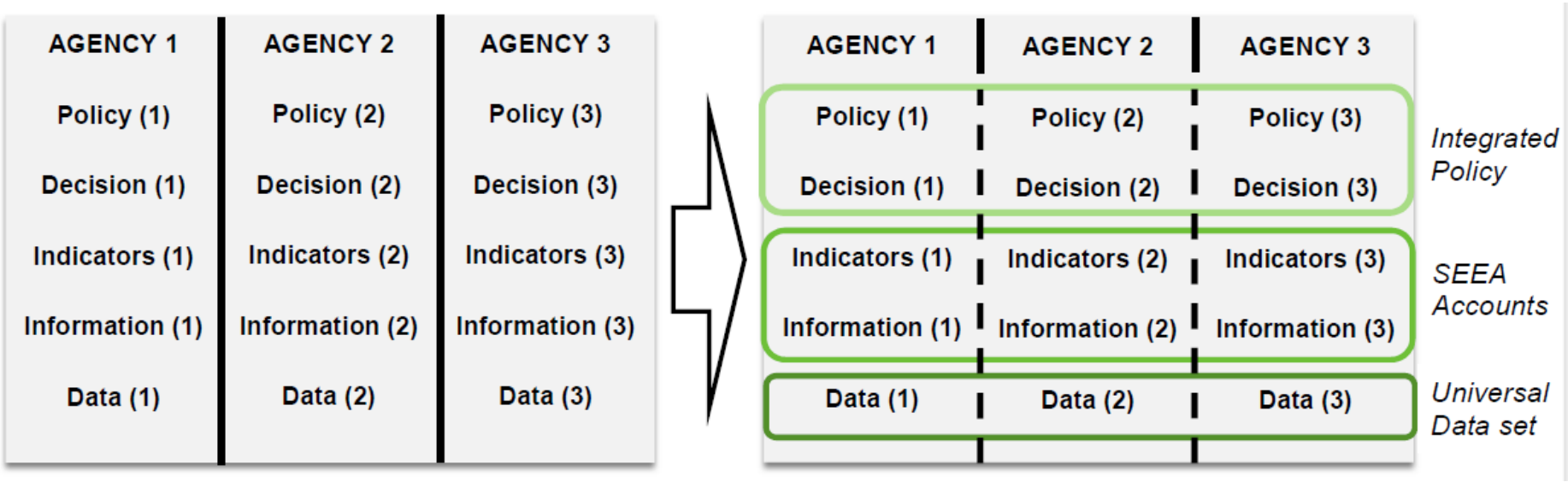
- The SEEA organizes environmental statistics such that important aggregates, descriptive statistics and indicators can be easily derived
- The information framework provides supplementary information to headline indicators by elucidating the key drivers and interactions at play – this allows for a richer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

SEEA-based Indicators: 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

SEEA-based Indicators: Measurability and Practicality

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



SEEA-based Indicators: 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

Matching SDG targets to SEEA-based accounts and indicators – water (1)

SDGs	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 substantially reduce the number of people suffering from water scarcity	**Water accounts**	Water productive indicators (value added by economy activity per cubic metres of water used, disaggregated by ISIC and spatial location)
			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 accounts	Inland waters used for maintenance and restoration of environmental functions; other uses of inland waters not elsewhere classified; inland waters not in use

Matching SDG targets to SEEA-based accounts and indicators – water (2)

SDGs	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)

Matching SDG targets to SEEA-based accounts and indicators – ecosystems (1)

SDGs	Targets	SEEA accounts	Indicators
15.1	by 2020 ensure conservation , restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements	**Land accounts**	Proportion of land area covered by forests, wetlands, mountains and drylands
		Ecosystem assets accounts	Degradation of designated terrestrial and inland freshwater ecosystems (Decline in the expected ecosystem service flows/conditions in designated terrestrial and inland freshwater ecosystems)
15.2	by 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests, and increase afforestation and reforestation by x% globally	**Ecosystem assets accounts**	Proportion of land area covered by forests
15.3	by 2020, combat desertification, and restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land-degradation neutral world	**Land accounts**	Land used for maintenance and restoration of environmental functions
		Ecosystem assets accounts	Degradation of designated land area (Decline in the expected ecosystem service flows/conditions in designated land area)

Matching SDG targets to SEEA-based accounts and indicators – ecosystems (2)

SDGs	Targets	SEEA accounts	Indicators
15.4	by 2030 ensure the conservation of mountain ecosystems, including their biodiversity, to enhance their capacity to provide benefits which are essential for sustainable development	**Ecosystem assets accounts**	Degradation of designated mountain ecosystems (Decline in the expected ecosystem service flows/conditions in designated mountain ecosystems)
15.5	take urgent and significant action to reduce degradation of natural habitat, halt the loss of biodiversity, and by 2020 protect and prevent the extinction of threatened species	**Biodiversity accounts**	Species abundance indices disaggregated by ecosystem types
		Biodiversity accounts	Threatened species disaggregated by IUNC Red List categories
		Ecosystem assets accounts	Degradation of designated natural habitat area (Decline in the expected ecosystem service flows/conditions in designated natural habitat area)
15.6	ensure fair and equitable sharing of the benefits arising from the utilization of genetic resources, and promote appropriate access to genetic resources	**Ecosystem services accounts**	Provisioning services (genetic resources) provided by designated type of ecosystems

Matching SDG targets to SEEA-based accounts and indicators – ecosystems (3)

SDGs	Targets	SEEA accounts	Indicators
15.8	by 2020 introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems, and control or eradicate the priority species	**Ecosystem services accounts**	Regulatory services (pest and disease control including invasive alien species) provided by designated land and water ecosystems
15.9	by 2020, integrate ecosystems and biodiversity values into national and local planning, development processes and poverty reduction strategies, and accounts	**Ecosystem accounts**	Country implements and reports on SEEA Experimental Ecosystem Accounting
15.a	mobilize and significantly increase from all sources financial resources to conserve and sustainably use biodiversity and ecosystems	**Environmental protection expenditure accounts**	Level of national expenditure on environmental protection, disaggregated by environmental activity domain (biodiversity and ecosystems) and by institutional sector
			Level of national expenditure on finance resource management and preservation, disaggregated by environmental activity domain (biodiversity and ecosystems) and by institutional sector
15.b	mobilize significantly resources from all sources and at all levels to finance sustainable forest management, and provide adequate incentives to developing countries to advance sustainable forest management, including for conservation and reforestation	**Environmental Protection expenditure accounts**	Level of national expenditure on environmental protection, disaggregated by environmental activity domain (sustainable forest management) and by institutional sector

Discussion points

- Do you agree with the approach taken?
- Is the list of criteria compatible with your notion of what SDG indicators should comprise?

THANK YOU