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A systems approach to SDG indicators

statistics for informed decision making

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 the preferred approach 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
- International initiatives
  - OECD's Green Growth Strategy, WAVES, VANTAGE, UNEP-led Green Economy programme, CBD, TEEB

Policy Demand: SEEA as Measurement Framework for SDGs

- The need for an accounting approach:
  - Environmental statistics often focussed on a specific problem
  - Integrated accounts can help to identify missing pieces; to make connections between social, economic and environmental; and to build the bigger picture

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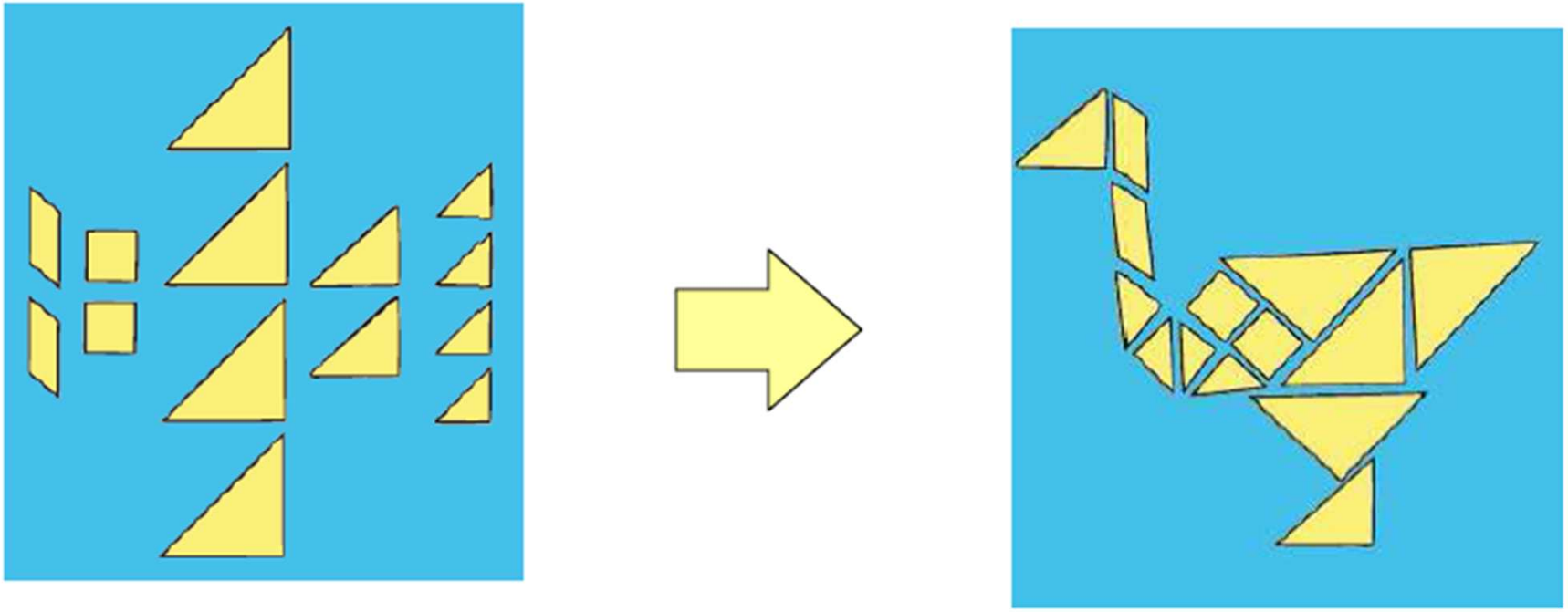
Figure 1.1.2 From sectoral to integrated information



Sectoral Data

Integrated information

Policy Demand: SEEA as Measurement Framework for SDGs

- Two levels of integration relevant:
  - Among indicators themselves to ensure proper linkages and appropriate reflection of social, economic and environmental aspects of sustainable development
  - Use of integrated framework (e.g. SEEA) to derive indicators

SEEA: Builds on the SNA

The SNA:

- Is a statistical model of the economy
- Provides a framework within which to organise economic data
- Enables relationships to be understood statistically
  - e.g. between production, income and expenditure and accumulation
- Supports economic forecasting and future-oriented decision making
- Imposes order on underlying data
  - Through agreed definitions and classifications: industry, sector and commodity
- Explains the roles of different economic actors:
  - e.g. households, businesses, government, the rest of the world

SEEA: Builds on the SNA

Indicators derived from the National Accounts are more useful because they:

- Can be understood in the context of the economy as a whole
- Can be analysed by component (GDP, CoE, GOS, Investment, Consumption, Net Exports, and Industry GVA)
- Support derived performance measures such as MFP by industry

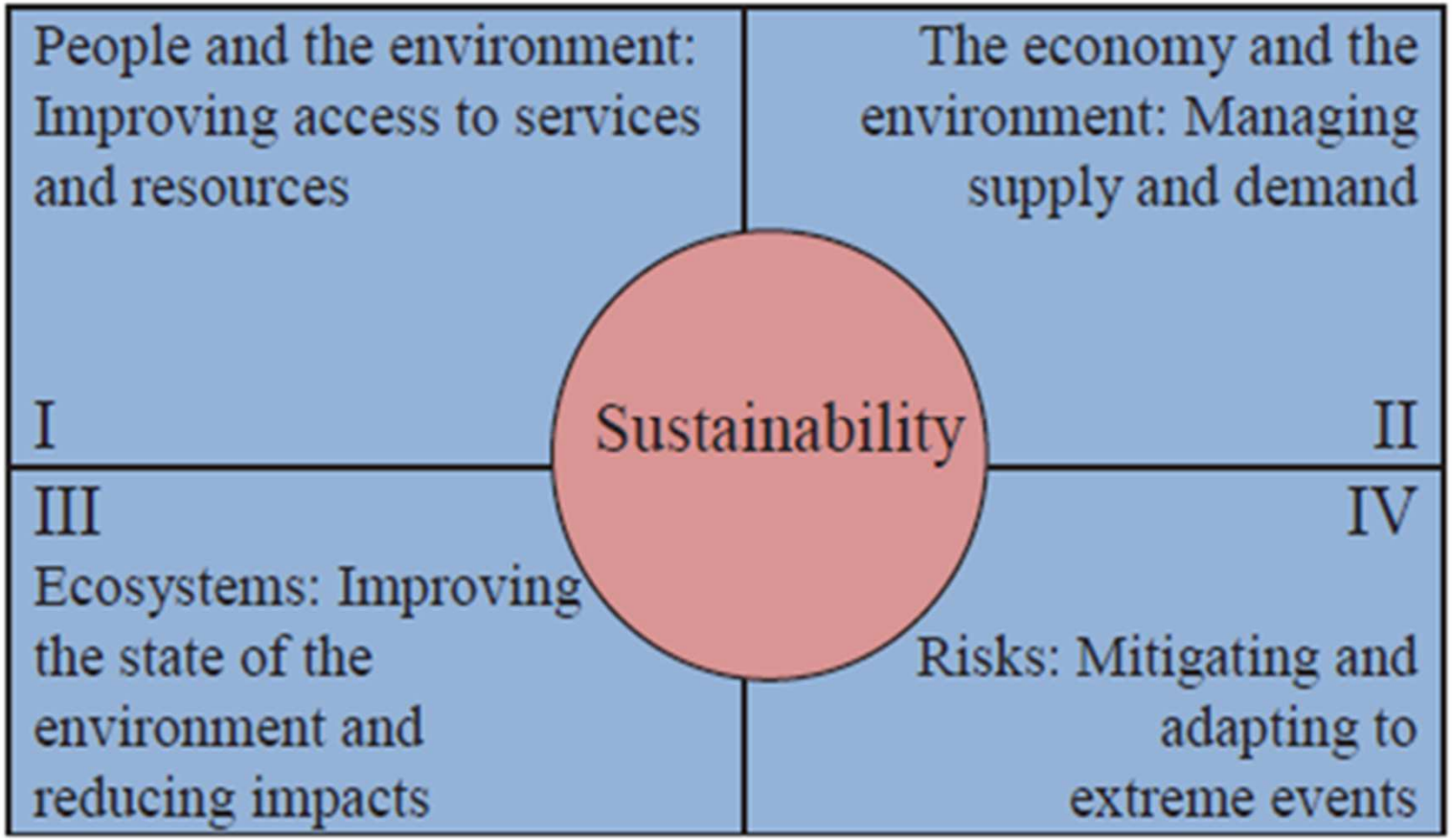
The SEEA

- A framework that supports a systematic understanding of the relationship between people (as economic actors) and the environment
- Extends and elaborates the SNA to focus on natural resources
- Integrates physical stocks and flows with value data
- Allows the cost and benefits of environmental expenditures, investments and taxes to be measured and their performance evaluated
- Exploits the power of supply and use tables and input-output tables to help understanding of consumption, use efficiency and scarcity
- Supports inclusion of Ecosystems and the measurement of Ecosystem Services by relaxing strict SNA asset and transaction assumptions

Experience in deriving economic indicators from the SNA suggests that where practical and conceptually relevant the SEEA provides a valuable framework for deriving SD indicators.

Linking SEEA to Policy Initiatives

Possible framework to view linkages between SEEA and policy:



In practice: linking HLP Report; OWG goals and SEEA data

- The example on the following slides is from Appendix 1 of meeting paper ESA/STAT/AC.268
- The example looks specifically at Energy-related targets and demonstrates the clear linkages between underlying data from the SEEA framework; proposed goals and targets from the Open Working Group (OWG) and 2013 High-Level Panel Report on the Post-2015 Development Agenda.

The Role of SEEA in a Systems Approach to Indicator Development in Post 2015 Development Agenda.

Annex 1: An example – Energy related targets, goals and indicators:

HLP Report	OWG zero draft-June 2014	SEEA
7a. Double the share of renewable energy in the global energy mix	7.2 double the share of renewable energy in the global energy mix by 2030 7.3 double the global rate of improvement in energy efficiency by 2030 7.4 by 2030 increase by x% globally the share of clean energy technologies, including sustainable biomass and advanced cookstoves	Physical flow accounts contain information on energy flows by energy product Physical flow accounts can be easily linked to SNA data since the classifications used are the same Linked to OWG zero draft 7.2. Environmental activity accounts provide information on energy technologies which can be augmented with supplementary data
7b. Ensure universal access to modern energy services	7.1 by 2030 ensure universal access to sustainable modern energy services	Supplementary data on access to energy

The Role of SEEA in a Systems Approach to Indicator Development in Post 2015 Development Agenda.

Annex 1: An example – Energy related targets, goals and indicators *continued*:

HLP Report	OWG zero draft-June 2014	SEEA
7c. Double the global rate of improvement in energy efficiency in buildings, industry, agriculture and transport		Data on value added by ISIC and data on energy use as presented in the SEEA physical flow accounts; note that buildings is not a standalone category of ISIC; it would be helpful from a measurement perspective if targets and goals were formulated in a way that allows for linking of categories to statistical classifications (e.g. the term buildings as
		used here does not correspond to a clearly defined group within ISIC)

The Role of SEEA in a Systems Approach to Indicator Development in Post 2015 Development Agenda.

Annex 1: An example – Energy related targets, goals and indicators *continued*:

HLP Report	OWG zero draft-June 2014	SEEA
7d. Phase out inefficient fossil fuel subsidies that encourage wasteful consumption	7.5 by 2030 phase out inefficient fossil fuel subsidies that encourage wasteful consumption, with solutions that aim to secure affordable energy for the poorest	Data on taxes and subsidies linked with physical flow data from can be used to trace the relationship between subsidies and use of different energy products
	7.6 by 2030 expand and upgrade as appropriate infrastructure for supply, transmission and distribution of modern and renewable energy services in rural and urban areas, including with a view to doubling primary energy supply per capita for LDCs	Supplementary SNA data on investments in energy infrastructure; physical flow data to determine supply of primary energy per capita

Possible Guiding Principles to inform compilation of SDGs

- **Principle 1** - *Indicators should be derived from a consistent and comprehensive statistical framework and be based to the greatest extent possible on international standards, recommendations and best practices*.
- **Principle 2** - *Environmental economic accounts should be the priority source to provide a range of important aggregates and indicators.*
- **Principle 3** - *Basic statistics that are relevant for the compilation of the accounts should be collected in a manner that allows for their integration into environmental economic accounts.*

Possible Guiding Principles to inform compilation of SDGs, *continued…*

- **Principle 4** - *Indicators should allow, where relevant, for disaggregation by economic activity and spatial disaggregation.*
- **Principle 5** - *Indicators need to be attainable, feasible and timely; they should be policy relevant, easy to communicate and interpret by users.*

Points for UNCEEA to consider:

- Do you consider that *Guiding Principles 1 to 5* are useful in informing the compilation of SDGs?
- How can we best communicate our views on *Guiding Principles* to the Open Working Group?