SEEA and Transforming Global and National Statistical Systems for Monitoring SDG Indicators

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United Nations Statistics Division

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Outline

1. **Integration of Statistical Systems**
   - From silos to a standards-based integrated approach
2. **National Perspectives on Integration of Environmental-Economic Statistics**
   - SEEA: The conceptual framework for integration
   - SEEA: Strengthening institutions and production processes
   - SEEA: The statistical framework for producing high quality SDG indicators
3. **International Perspectives on Integration of Environmental-Economic Statistics**
   - Methodological consistency for an integrated monitoring architecture
   - National ownership of SDG indicators and consolidation of reporting
4. **Roadmap: Towards an SEEA Approach**

Two Papers….

1. **UNCEEA/10/3a: *'SEEA and Transforming Global and National Statistical Systems for Monitoring SDG Indicators'***
   - Considers the need for integration of environmental-economic statistics, and the role of the SEEA as the necessary conceptual framework
   - Discusses benefits accruing to national and global policy-making and the SDG monitoring process following integration of environmental-economic statistics
   - Lays out a transformative roadmap for aligning SDG monitoring mechanisms with the statistical standard of the SEEA

2. **UNCEEA/10/3b: *'The SEEA as the Statistical Framework in meeting Data Quality Criteria for SDG indicators'***
   - Illustrates how integrated statistical frameworks such as the SEEA can facilitate the production of statistics and indicators by national statistical systems which are of enhanced quality against a set of criteria

1. Integration of Statistical Systems

Need for Statistical Integration

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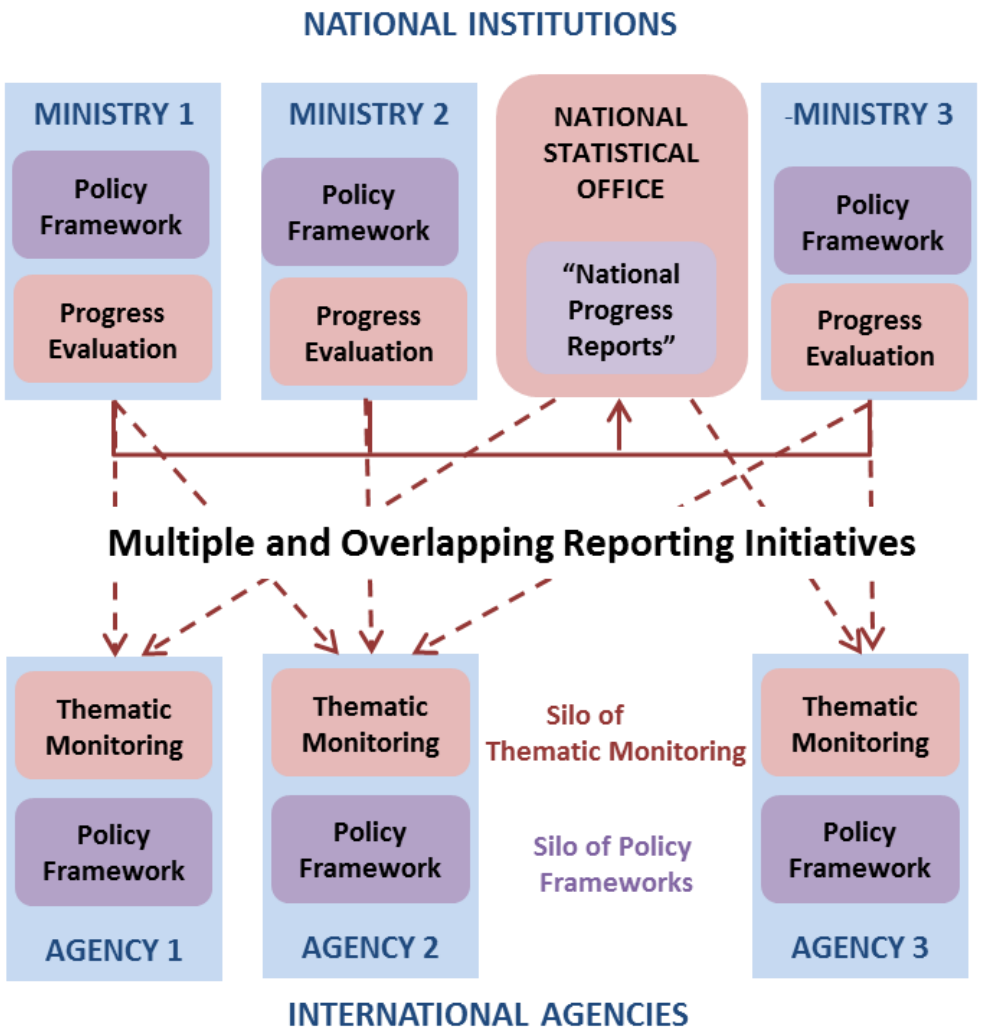


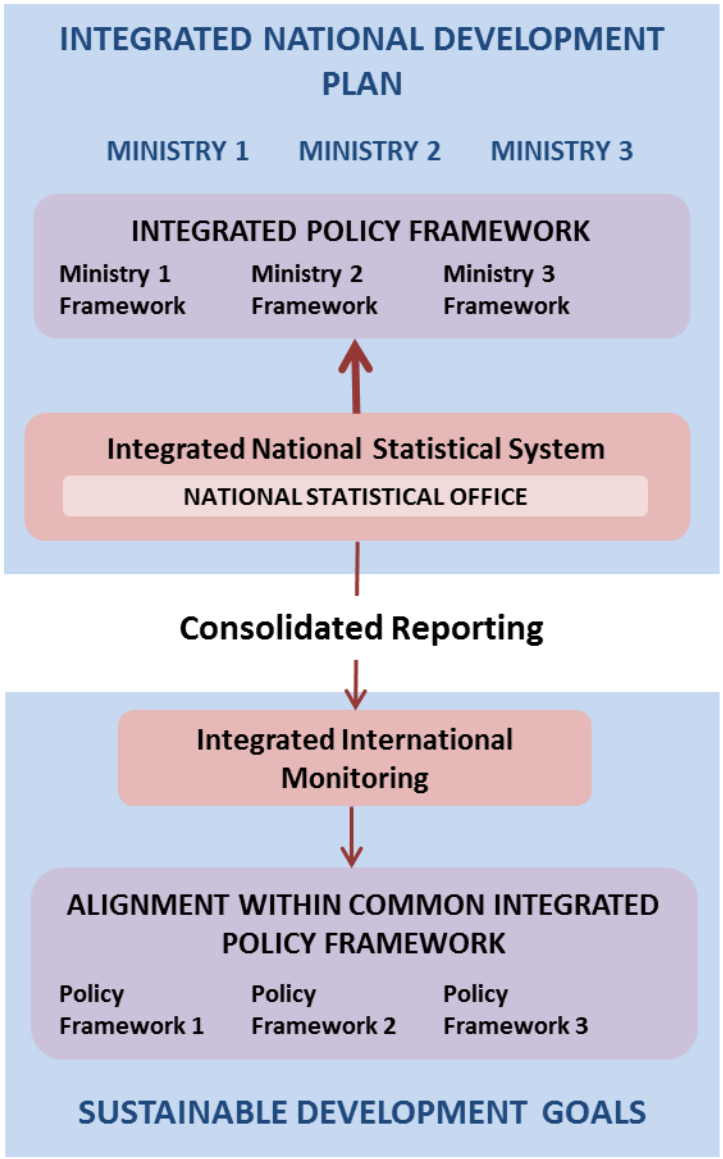
National statistical system operating in silos:

- Stove-piping of institutions, policy frameworks and monitoring at the national level
- Causes lack of integrated information for policy-making

Legacy Framework of International Organizations:

- Stove-piping of institutions, policy frameworks and reporting initiatives at the international level
- Results in multiple and distinct thematic monitoring initiatives

Towards Integration



Policy: The SDGs represent important moves towards an integrated policy agenda

Institutions: Need to develop common integrated policy frameworks at both the national and international level to support policy

Statistics requires integration of:

- National Statistical Systems for an integrated information system to inform sustainable development based on a consistent conceptual framework
- Global Reporting Mechanisms to reduce overlap and streamline international reporting initiatives based on a consistent conceptual framework

Standards-based Integration

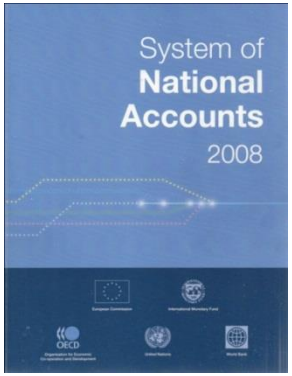
Indicators based on Standards

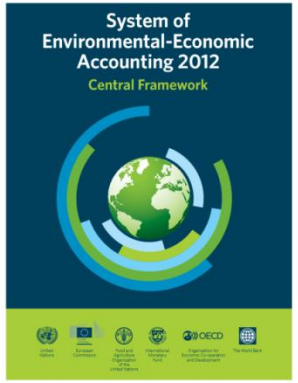
- Higher quality
- International comparability
- Comprehensive basis for (dis)aggregation

Statistical Standards

- Aligned Definitions and Classifications
- Improved capacity to compare and/or combine statistics from different sectors
- Basis for coherent and comprehensive data sets

Frameworks to coherently integrate information:





2. National Perspectives on Integration of Environmental-Economic Statistics

SEEA: Conceptual Framework

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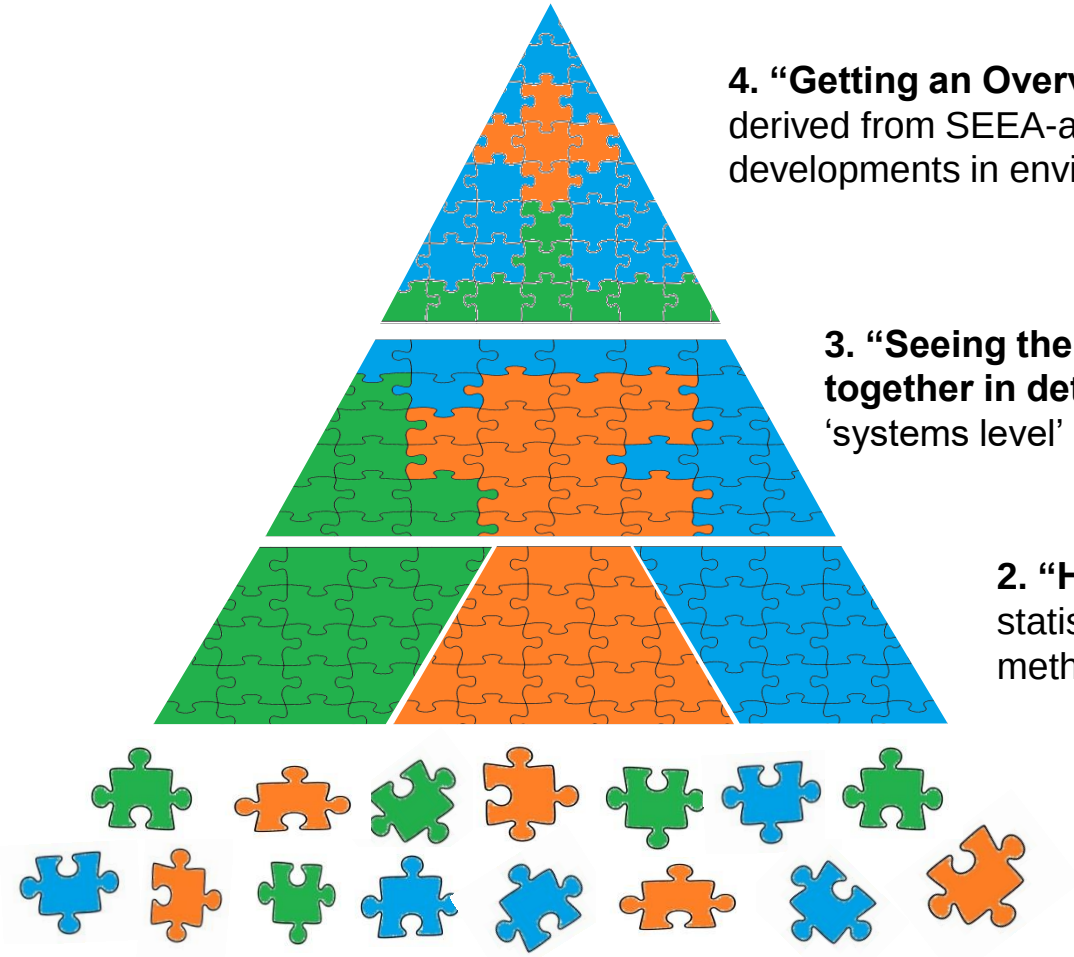
An international standard to measure the environment and it's relationship with the economy:



4. "Getting an Overview of the Picture": Headline indicators derived from SEEA-aligned Information for an indication of developments in environmental issues

3. "Seeing the overall picture and how things fit together in detail": Organizing data into accounts for 'systems level' understanding of the environment

2. "Harmonizing Basic Data": Application of statistical standards to reconcile divergent methodologies

1. Fragmented Environment Data: Data collection dispersed across agencies using different methodologies

SEEA: Statistical Architecture

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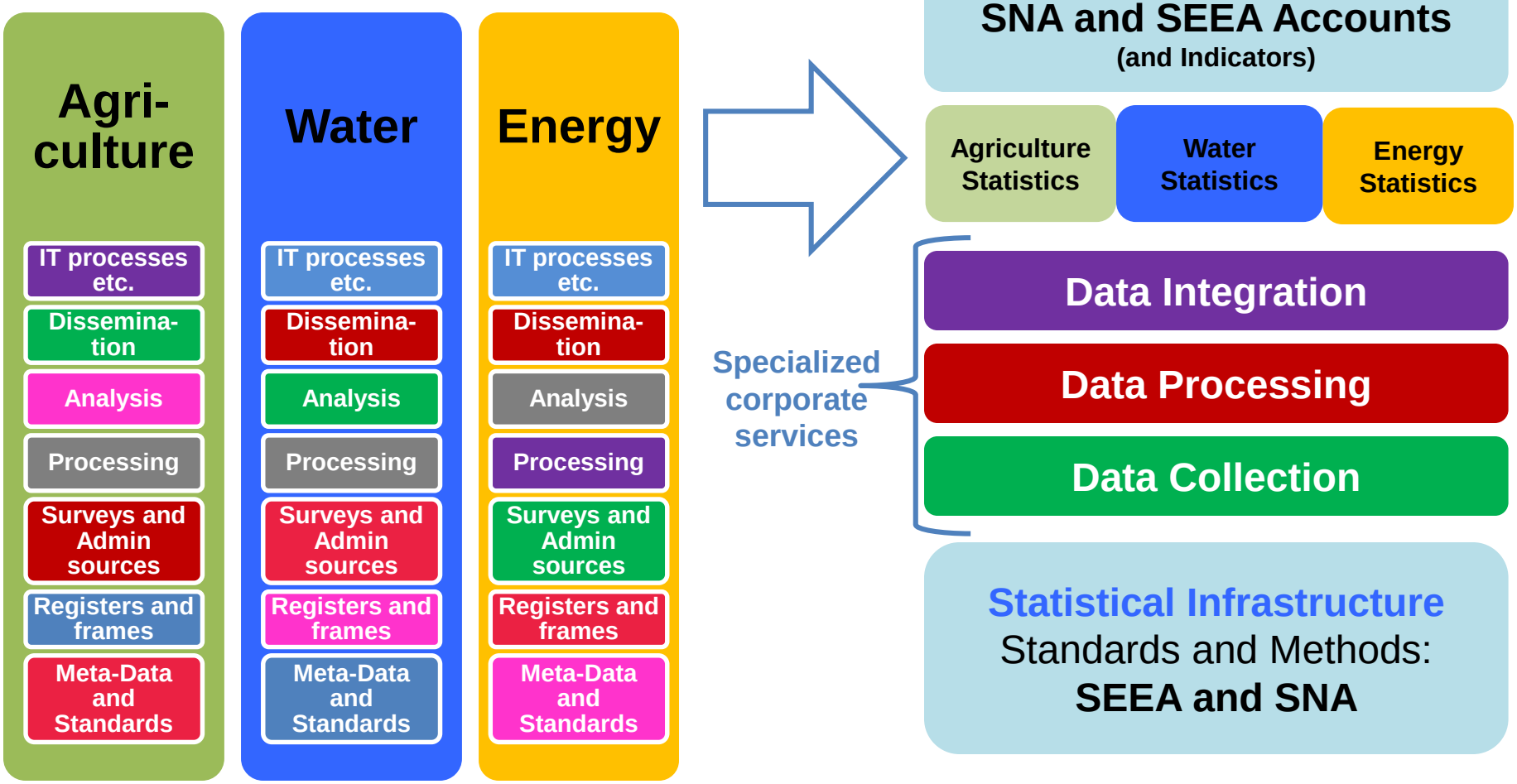

The SEEA and SNA contribute to a systems architecture made up of common institutional and statistical structures to support statistical production processes

SEEA: Producing High Quality Indicators

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Statistical Frameworks and Indicator Frameworks are distinct but complementary:

- **Statistical Frameworks (i.e. SNA and SEEA):** Guide the whole production process through a systems approach to collecting, harmonizing, organizing, vetting and presenting statistical information
  - Standard definitions, classifications and related methods for compiling statistics
  - Lends rigor to the calculation of indicators without suggesting any in particular
  - Value proposition is ensuring indicators are defined and compiled in a methodologically coherent way, through an efficient production process

  → The **FDES** can further support the SEEA by providing a list of environment statistics by thematic areas to support and guide countries in initial data collection activities

- **Indicator Frameworks (e.g. CES Recommendations):** Provide organizing principles to facilitate the choice of indicators for different thematic aspects of sustainable development

SEEA: Producing High Quality Indicators

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Statistical Frameworks such as the SEEA support higher quality indicators. To illustrate this, a set of criteria for indicators was developed against which the SEEA was evaluated:

Policy Relevance and Utility

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

Methodological and Analytical Soundness

6. Be based on best practice methodology
7. Be compliant with international standards
8. Be broadly consistent with systems based information

Measurability and Practicality

9. Be constructed from well-established data sources
10. Be supported by available data or data attainable at a reasonable cost
11. Be easily accessible to the general public
12. Be managed by a responsible agency

SEEA: Policy Relevance

- Using an accounting approach an **information pyramid** is established, based on coherent definitions and concepts

  1. Summary information directly derived from the accounts in the form of **aggregates and indicators** as headline numbers to frame discussions
  2. More detailed information contained in the accounts highlights key drivers of change and provide **descriptive statistics** offering a richer understanding of policy issues
  3. Data contained within the SEEA can be used, in combination with data from the SNA, for **environmental-economic modelling** to assess various scenarios and set policy priorities

- This **supplementary information** is policy relevant in **describing and explaining** the underlying causes of change in headline indicators
- Statistics structured according to the SEEA also present a **basis for disaggregation** on a number of levels e.g industry, product, asset
- The SEEA can facilitate more **timely production** of indicators as reliable estimates can be calculated using the accounting structure

SEEA: Methodological Soundness

- Statistical Frameworks such as the SEEA provide the methodological framework to support the derivation of high quality indicators based best practices and international standards
- This is based on a series of steps in developing systems based information;

1. SEEA acts as a vehicle for **harmonization of basic data**, or manipulation of existing data to fit standard classifications and definitions
2. The accounting structure provides a series of **checks and balances** to ensure the consistency of figures being produced
3. Alignment of statistics with the SEEA ensures consistency with the SNA, enabling **integration of environment statistics** with economic and other statistics

→ Allows for methodologically sound calculation of important ratio indicators which relate environmental information with economic information from the SNA

SEEA: Measurability and Practicality

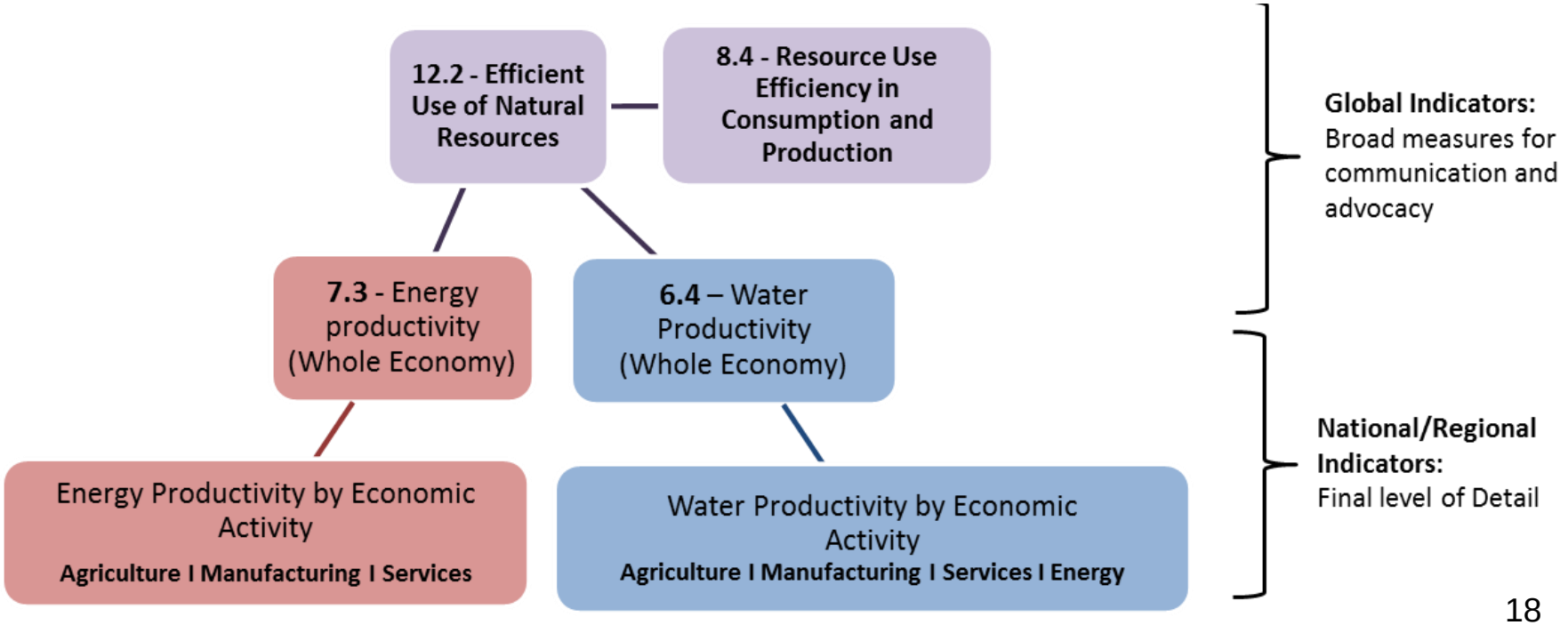
- The SEEA can be a vehicle to achieve an integrated production process for indicators by consolidating data collection and compilation **across agencies** based on well established traditional and non-traditional data sources
- The SEEA allows for the compilation of accounts based on **existing data collection activities** and its assessment of data quality
- The SEEA allows for macro editing and imputation techniques that are more cost effective in calculating **reliable estimates** for missing data items
- SEEA provides an umbrella framework for **collaboration across different responsible data producers** for the production of harmonized statistics and accounts in a centralized and decentralized statistical system

3. International Perspectives on Integration of Environmental-Economic Statistics

Integrated Architecture for SDGs: Methodological Consistency

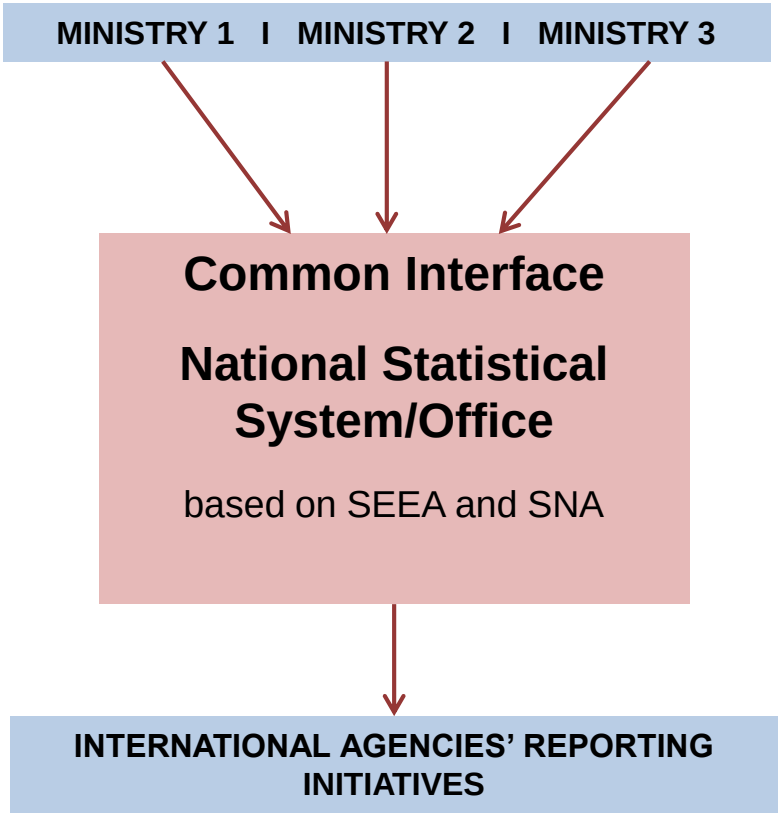
Architecture of integrated global, (sub-)national, and thematic monitoring requires **methodological consistency** across **themes** and **levels of monitoring.**

- The SEEA can be the methodological basis for this:



SEEA: Streamlined Reporting for SDGs

Methodological Consistency resulting from implementation of the SEEA **reduces reporting burden** of national ministries/agencies:



- Single Data System to Inform Indicators
- Data Compiled Once for Many Purposes
- Reduced need for countries to make arduous data adjustments for international reporting

Facilitates **streamlined reporting process for global SDG Indicators**

- Consistent definitions, classifications and spatial units at national and international level allows for **direct transmission of information**

4. Roadmap:

Towards and SEEA Approach

Roadmap: Global Statistical Community

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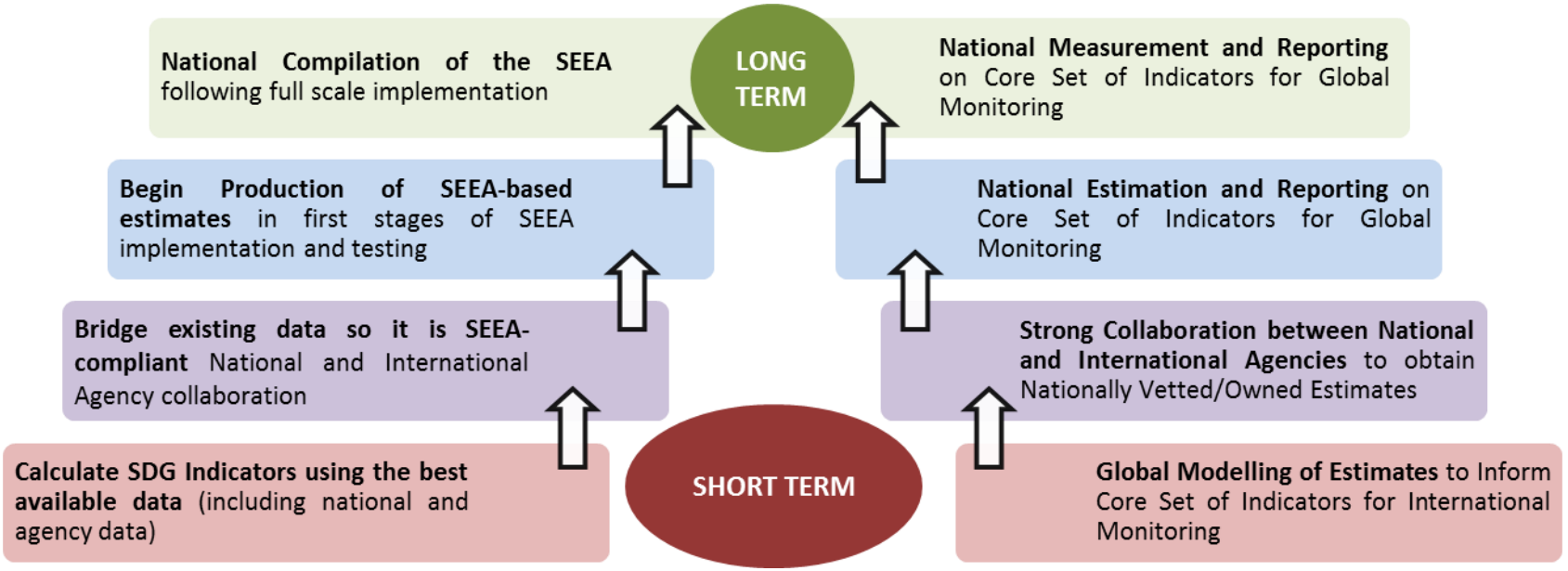
1. Reflecting the SEEA in the SDGs;
    - Indicators are based on proposals by experts in given thematic areas
    - Where relevant, existing monitoring mechanisms should work to align with the Statistical Standard
    - Where new mechanisms are being set up, they should be established in alignment with the Statistical Standard
2. Reflecting the SEEA in the thematic indicator sets;
    - Further adoption of SEEA as underlying statistical framework to support policy frameworks (e.g. SCP, Water, Biofin, Aichi targets, etc.)
    - Common message and approach to in-country work
    - Alignment of established reporting to Statistical Standard over time

Roadmap: National Implementation

Two processes must take place in tandem to support:

1. National ownership of information for integrated decision making and international reporting:
2. Alignment with International Statistical Standards and implementation of the SEEA



Key Points for Discussion

1. Do you agree with the analysis of institutional and statistical transformation needed for the sustainable development agenda and how the SEEA can support this process?

2. Do you agree with the presentation of the SEEA as an important comprehensive statistical framework for the monitoring and reporting of a coherent and consistent set of high quality SDG indicators?

3. Do you agree with the roadmap approach presented for aligning the SDG indicators with the SEEA and achieving national ownership of monitoring and reporting SDG indicators?

4. How can the UNCEEA promote this SEEA-based approach in the SDG monitoring and reporting process?