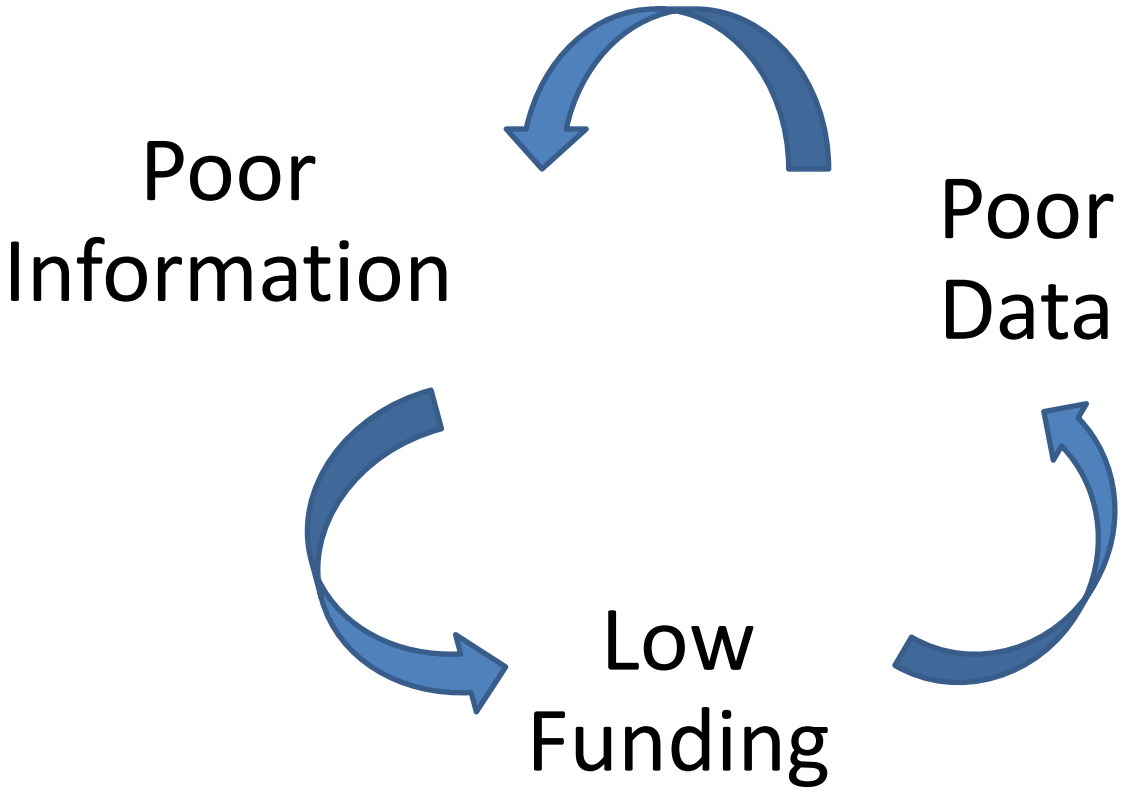
Water Policies Monitoring Framework (SEEA-Water and IRWS)

UN Statistics Division

29 February 2012

Water management is in a vicious cycle: there is insufficient data, which is translated into poor information. In turn this results in low funding for data production, having as consequence even poorer data.



This vicious cycle needs to be transformed into a virtuous cycle in which data is transformed into valuable information generating an incentive for producing better data, which in turns results in more and better data. How do we achieve this?

Some time ago the data for the design and evaluation of economic policies was also very poor. The situation changed when countries agreed to create an international system of information.

- **In 1947 the United Nations Statistical Commission was created, promoting new institutional arrangements.**
- **In 1953 the Member States decided to adopt the System of National Accounts. This system provided the framework to connect data with policy needs.**

Today there is a global information system that is in a virtuous cycle, in which policy demands drive the production of data. The data is comprehensive, consistent, and comparable throughout the world.

Twenty years ago, in Rio, Member States agreed that a similar system should be created to provide the basis for decisions about the environment. Continuous efforts have been made to develop environmental accounts.

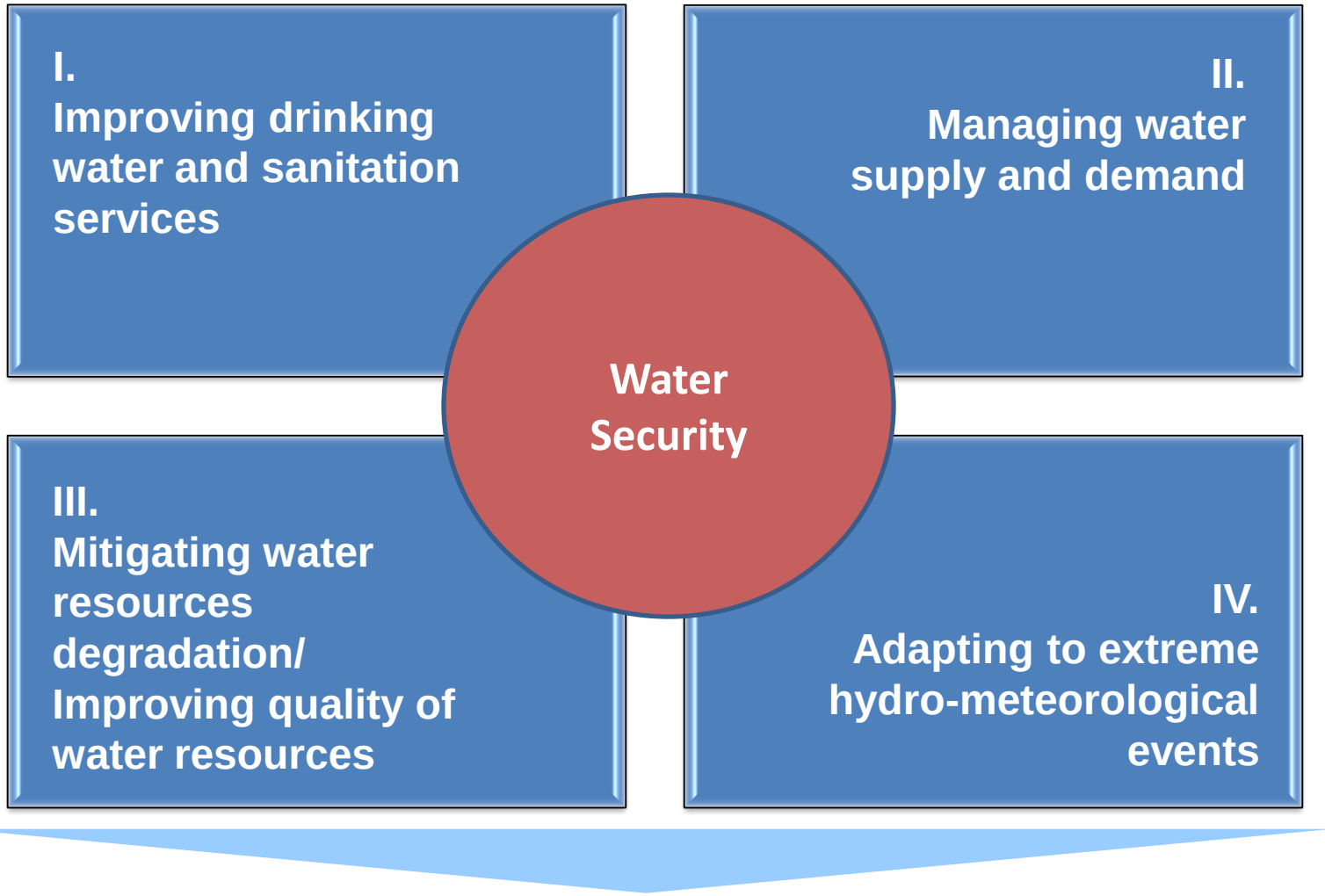
In 1993 a handbook on Environmental Economic Accounts was adopted by the Member States. It was reviewed in 2003. In 2012 it was adopted after a long process of revision and negotiation.

In 2007 the System of Environmental-Economic Accounting for Water (SEEA-Water) was adopted.

In 2010 the International Recommendations for Water Statistics were adopted to assist countries in the implementation of SEEA-Water.

Water accounts is the first in a set of subsystems for environmental accounting. Other subsystems, such as energy are being developed.

In general, water policy objectives can be grouped in the following four groups. Water security contributes to the attainment of higher level objectives.



SEEA-Water and IRWS respond to the need of measuring progress towards the attainment of the objectives in the four groups.

The four quadrants in plain English:

I.
Nature provides water, but not the pipes

II.
Water is enough, if it is well managed

Water Security

III.
Water cleanses, but cannot absorb all our wastes

IV.
Too much, too little, better be prepared

Sustainable development requires good water and sanitation services for all, sharing water to maximize benefits, making sure we don't exceed water's carrying capacity, and getting ready for wet and dry years. The four quadrants are interconnected.

Quadrant I: Water and Sanitation

I.
Improving drinking water and sanitation services

Key information in this quadrant:

- Number of people with access to improved water and sanitation (MDG, from JMP)
- Tariffs, taxes and transfers
- All costs associated to the provision of the services
- Investments in infrastructure and value of infrastructure
- Volume of water abstracted, distributed and lost (unaccounted for water)

Key indicators for this quadrant can be derived from the standardized information collected according to SEEA-Water and IRWS concepts and definitions. The indicators can therefore be consistent and comparable over time and space.

Quadrant II: Water Supply and Demand

II.
Managing water supply and demand

Key information in this quadrant:

- Renewable inland water resources
- Water abstracted/consumed/returned by economic activities (including households).
- Water productivity by economic activity
- Trade off when allocating water
- Investments in hydraulic infrastructure and value of existing infrastructure

Key indicators for this quadrant can be derived from the standardized information collected according to SEEA-Water and IRWS concepts and definitions. The indicators can therefore be consistent and comparable over time and space.

Quadrant III: Water Quality and Water Health

III.
Mitigating water resources degradation/ Improving quality of water resources

Key information in this quadrant:

- Waterborne pollutants emitted by economic activity
- Pollutants removed as a result of treatment
- Water quality assessments in watercourses
- Regulatory services provided by ecosystems in terms of assimilation of waterborne pollution (water purification and disease control)
- Measures of the health of the water ecosystems

Key indicators for this quadrant can be derived from the standardized information collected according to SEEA-Water and IRWS concepts and definitions. The indicators can therefore be consistent and comparable across time and space

Quadrant IV: Extreme Hydro-Meteorological Events

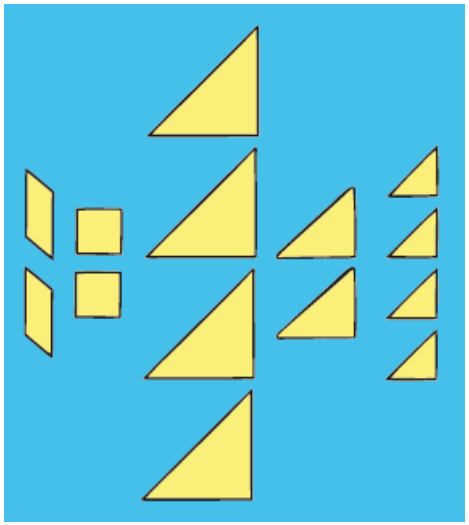
IV.
Adapting to extreme hydro-meteorological events

Key information in this quadrant:

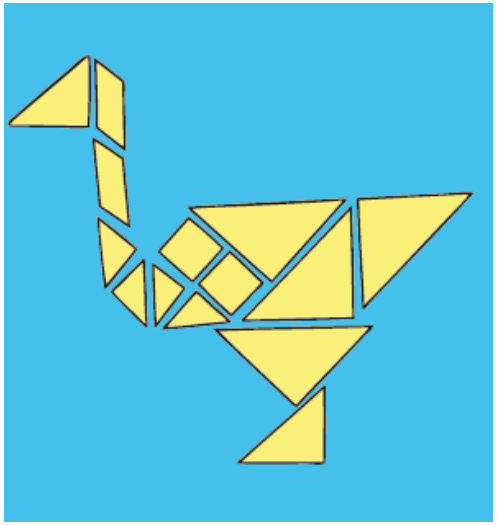
- **Water stocks and variations through time (surface and groundwater).**
- **Investments for the storage and control of water**
- **Disturbance prevention**
- **Regulatory services provided by the ecosystems in terms of water flows**

Key indicators for this quadrant can be derived from the standardized information collected according to SEEA-Water and IRWS concepts and definitions. The indicators can therefore be consistent and comparable across time and space

The System of Environmental-Economic Accounting (SEEA) provides the framework for transforming sectoral data into integrated policy-relevant information.



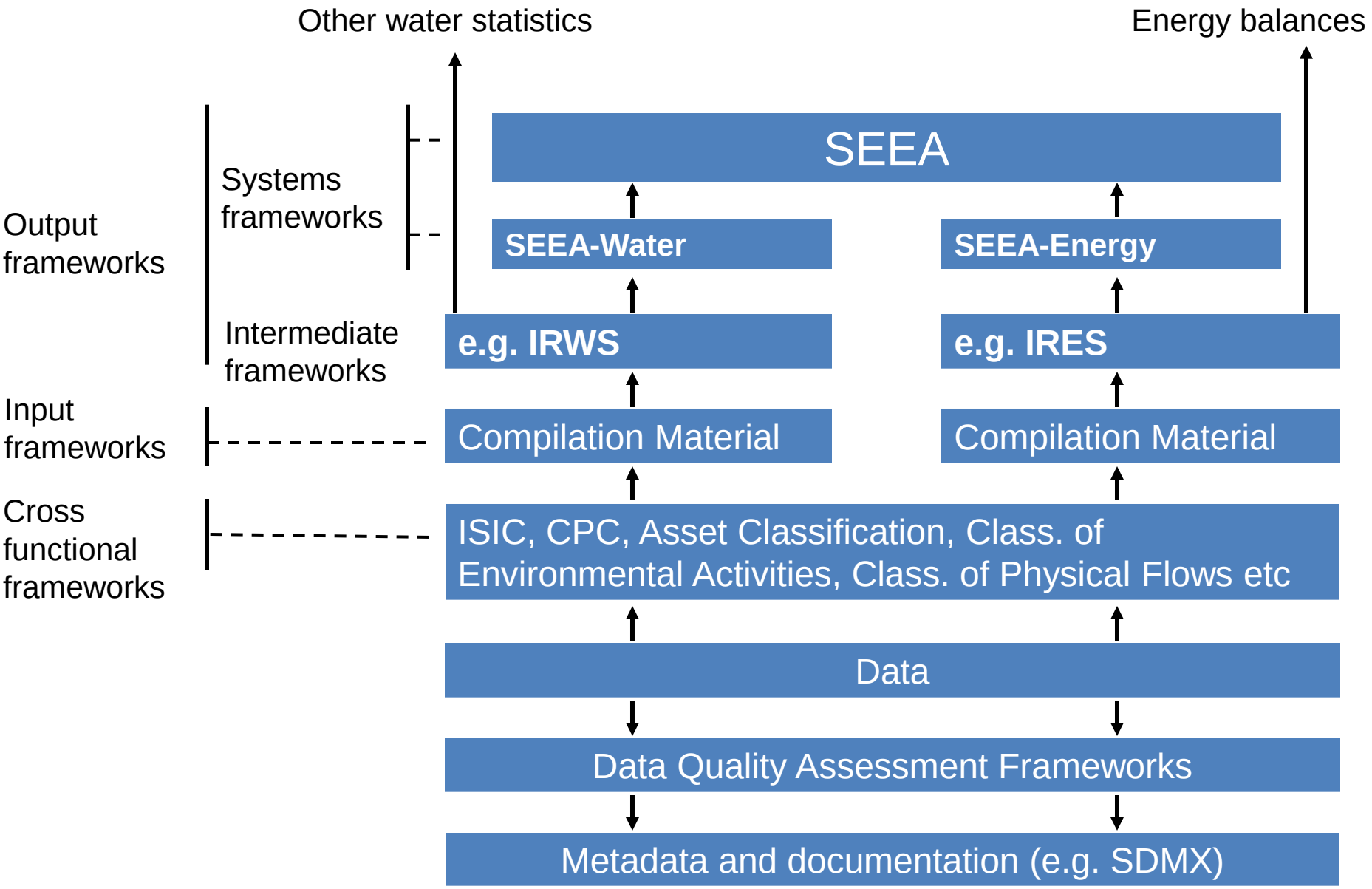
Sectoral Data



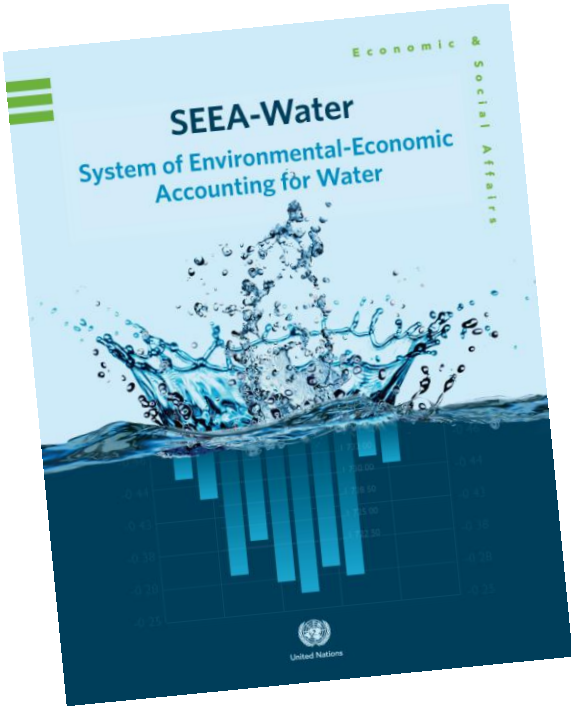
Integrated information

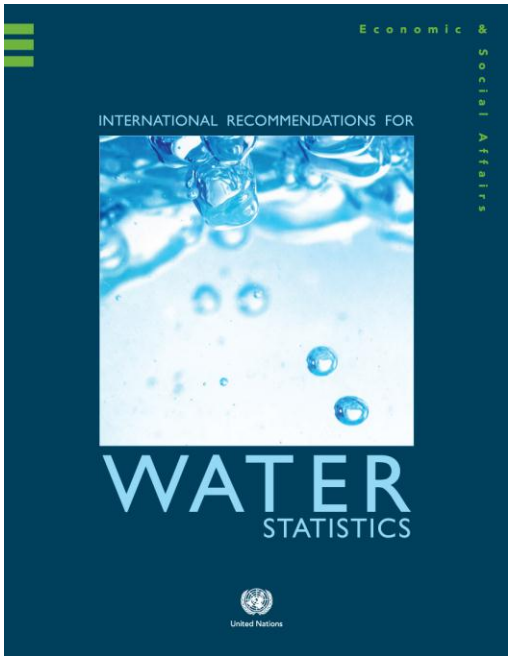
Integrated information provides a comprehensive picture to support policy making.

The System of Environmental-Economic Accounts (SEEA) is part of a family of statistical frameworks.



The SEEA-Water, adopted in 2007, covers the physical and economic stocks and flows associated with water. It also covers emissions of pollutants and water quality.





The International Recommendations for Water Statistics (IRWS), adopted in 2010, was designed to assist countries in the implementation of SEEA-Water.

The SEEA-Water and the IRWS provide the framework for developing indicators that are comprehensive, consistent, and comparable through time and space.

More than fifty countries around the world are doing or planning to do water accounts.

Countries, such as Australia and the Netherlands have institutionalized water accounts. Others, such as, China, Colombia, Jordan, Mexico, and South Africa are doing significant progress.

The System of Environmental-Economic Accounting (SEEA) provides the basis for a robust monitoring system for policies which affect the environment.

The System:

- **Provides comprehensive, consistent and comparable policy relevant information about the environment and natural resources.**
- **Provides a way of linking environment information with economic information.**
- **Emphasizes nationally owned information and is built upon the existing capacity of countries.**

More engagement and ownership by the "water community" is required to move forward in the implementation of SEEA-Water and IRWS.

Thank you!

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