

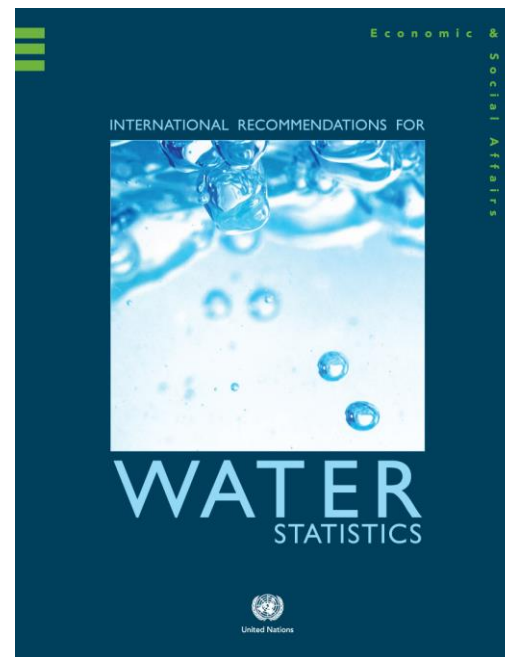
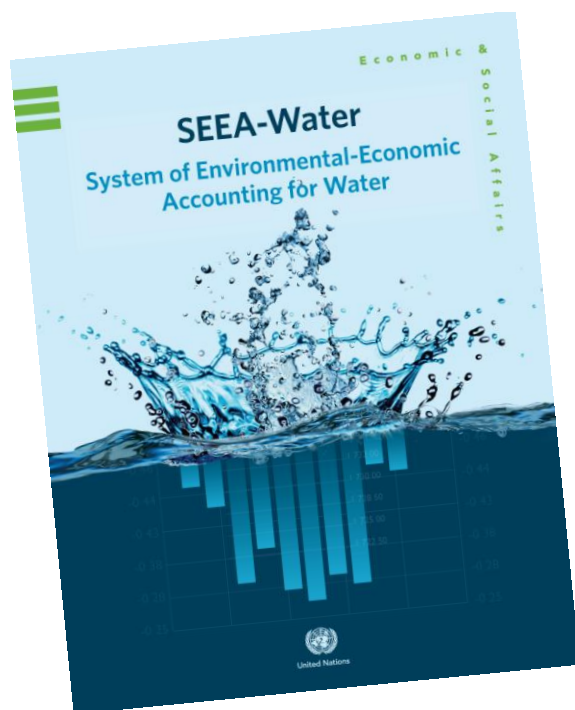
Implementation of SEEA-Water

Regional Seminar on the System of Environmental-Economic
Accounts in the Caribbean
6-7 February, Castries, Saint Lucia



**Policy relevant
information on water**

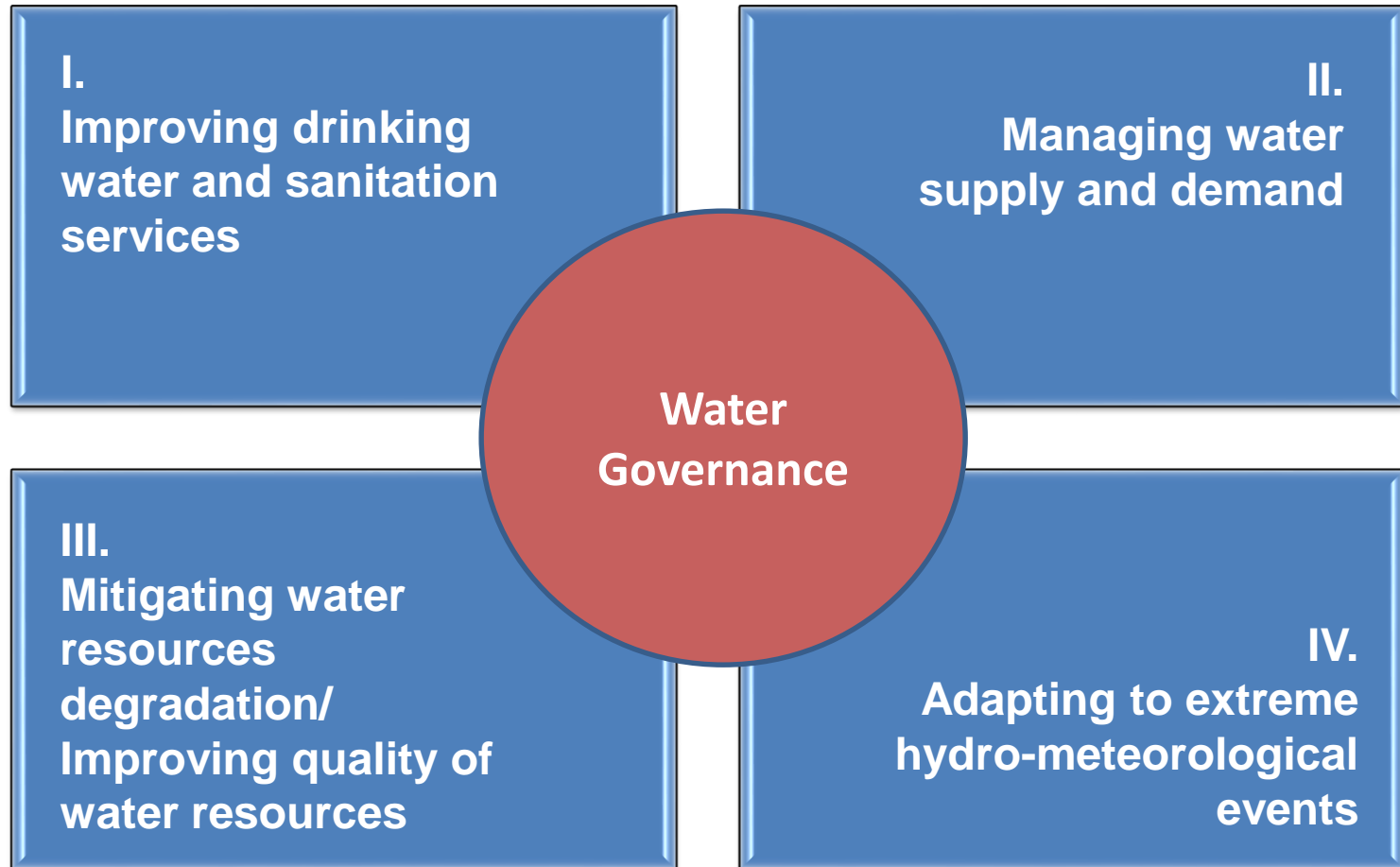
The SEEA-Water is a subsystem of the SEEA that covers the physical and economic stocks and flows associated with water. It also covers, to some extent, emissions of pollutants and water quality.



The International Recommendations for Water Statistics (IRWS) was designed to assist countries in the implementation of SEEA-Water. Guidelines are being developed to provide additional support.

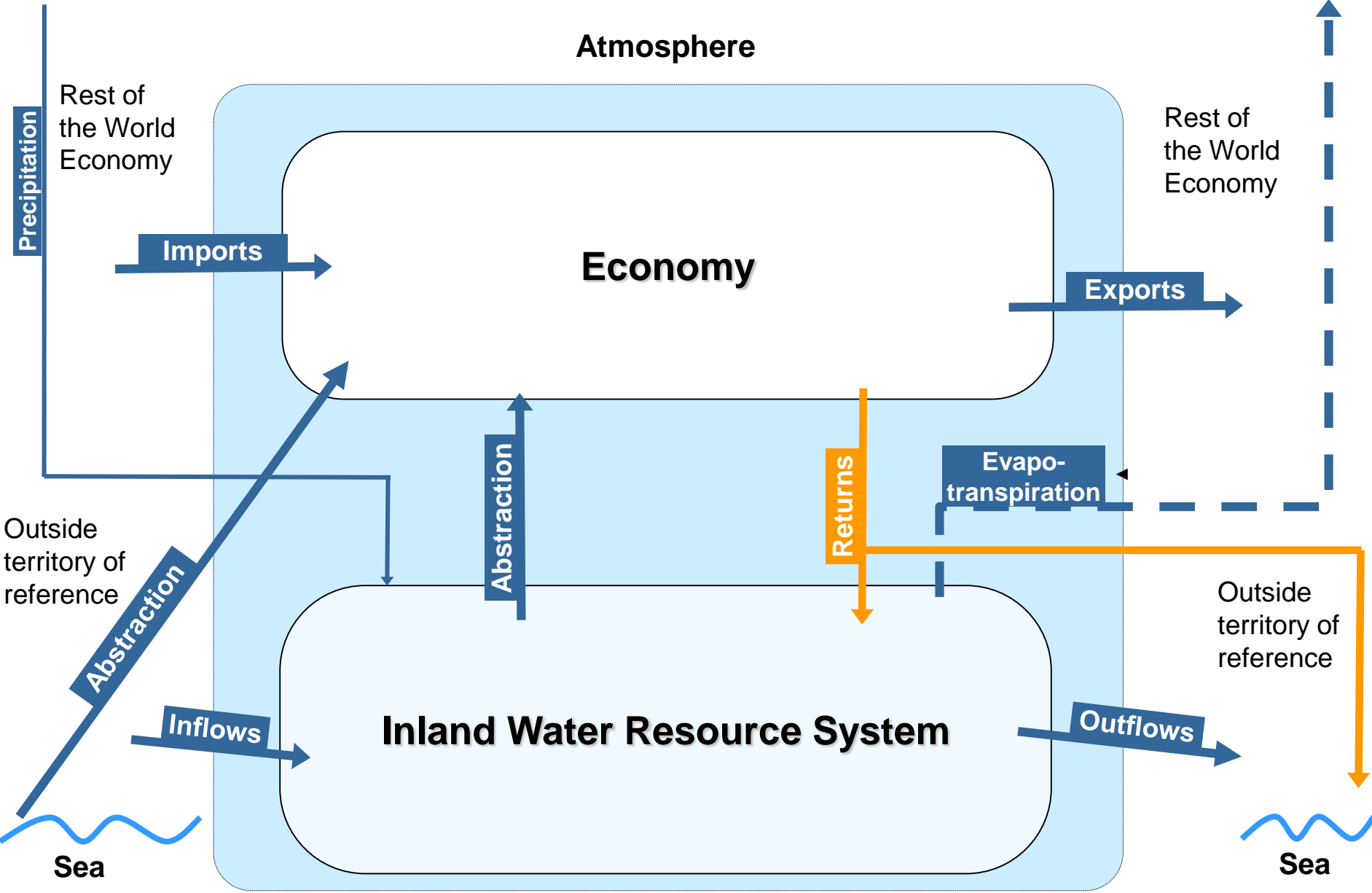
The SEEA-Water and the IRWS provide the framework for developing information that is comprehensive, consistent, and comparable through time and space.

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

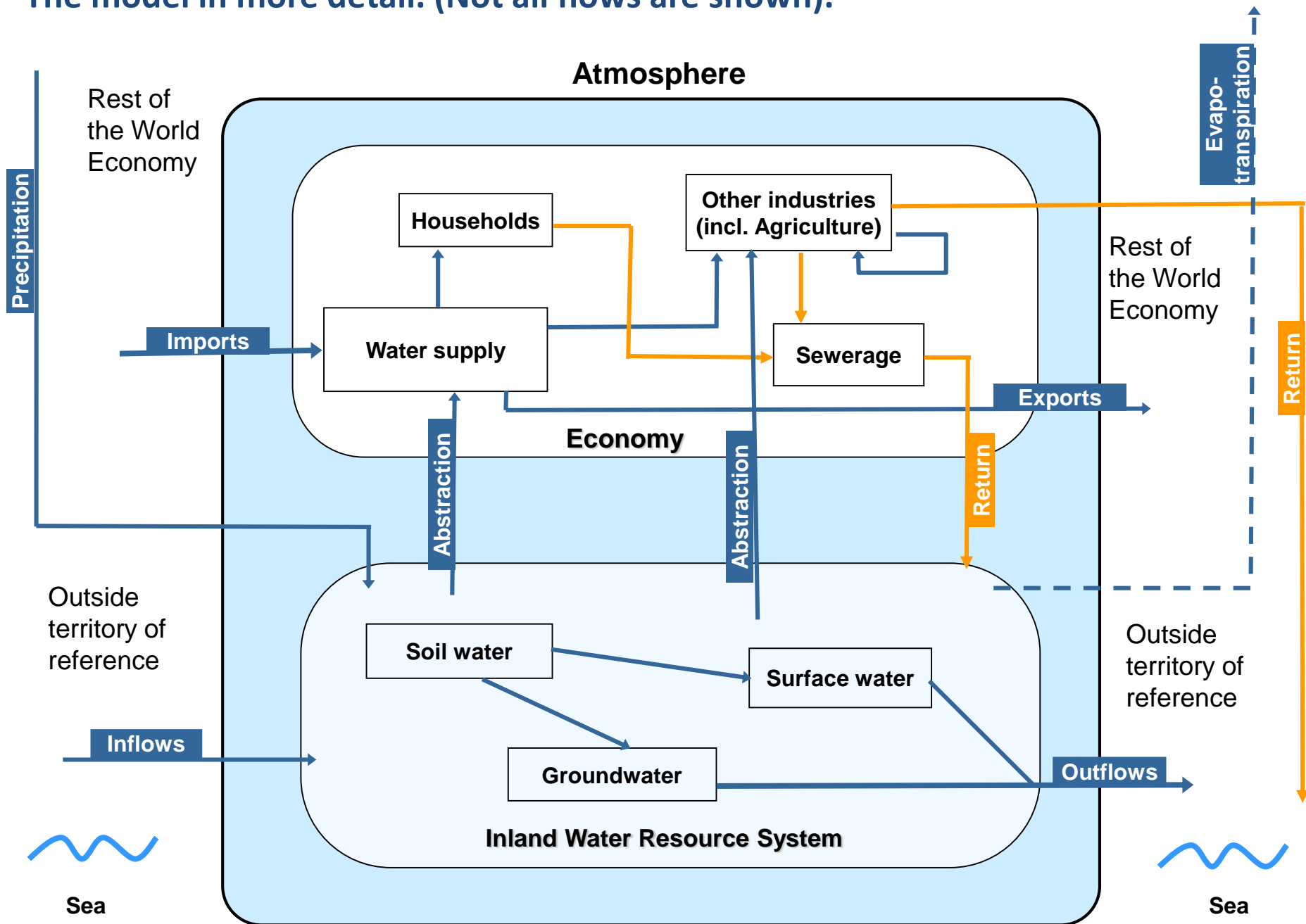


SEEA-Water and IRWS respond to the need of measuring progress towards the attainment of the objectives in the four groups.

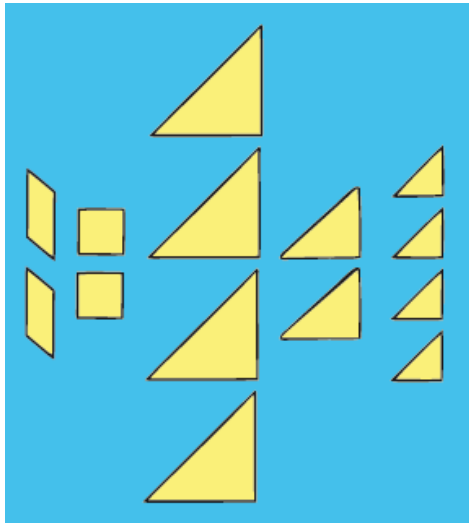
The SEEA-Water is based on a model made of two subsystems: the economy and inland water resources. (Not all flows are shown in the figure).



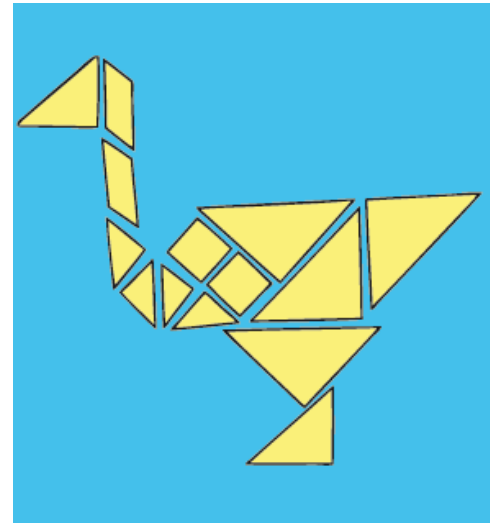
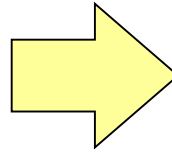
The model in more detail. (Not all flows are shown).



The SEEA provides a framework for transforming sectoral data into integrated policy-relevant information.



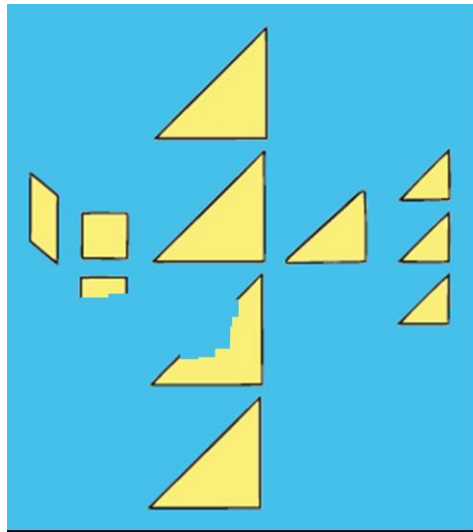
Sectoral Data



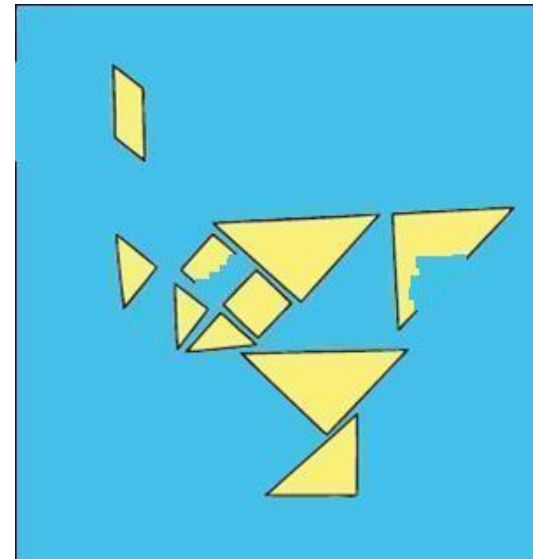
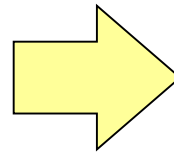
Integrated information

An integrated picture provides the basis for understanding the different ramifications in the decision-making process.

The data required is usually incomplete, but provides elements for developing an integrated picture.



Sectoral Data

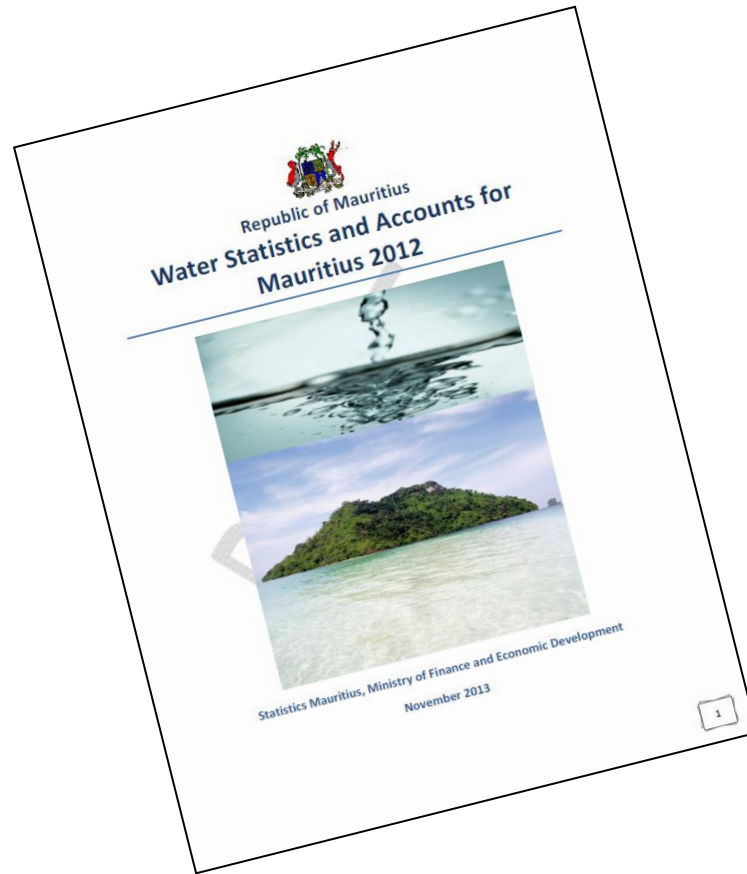


Integrated information

Integrating sectoral data for generating information starts a virtuous cycle for data improvement.

SIDS example: Mauritius

Statistics Mauritius, in partnership with the Water Resources Unit (WRU), the Central Water Authority (CWA) and the Wastewater Management Authority (WWMA) developed a draft first edition of water accounts.



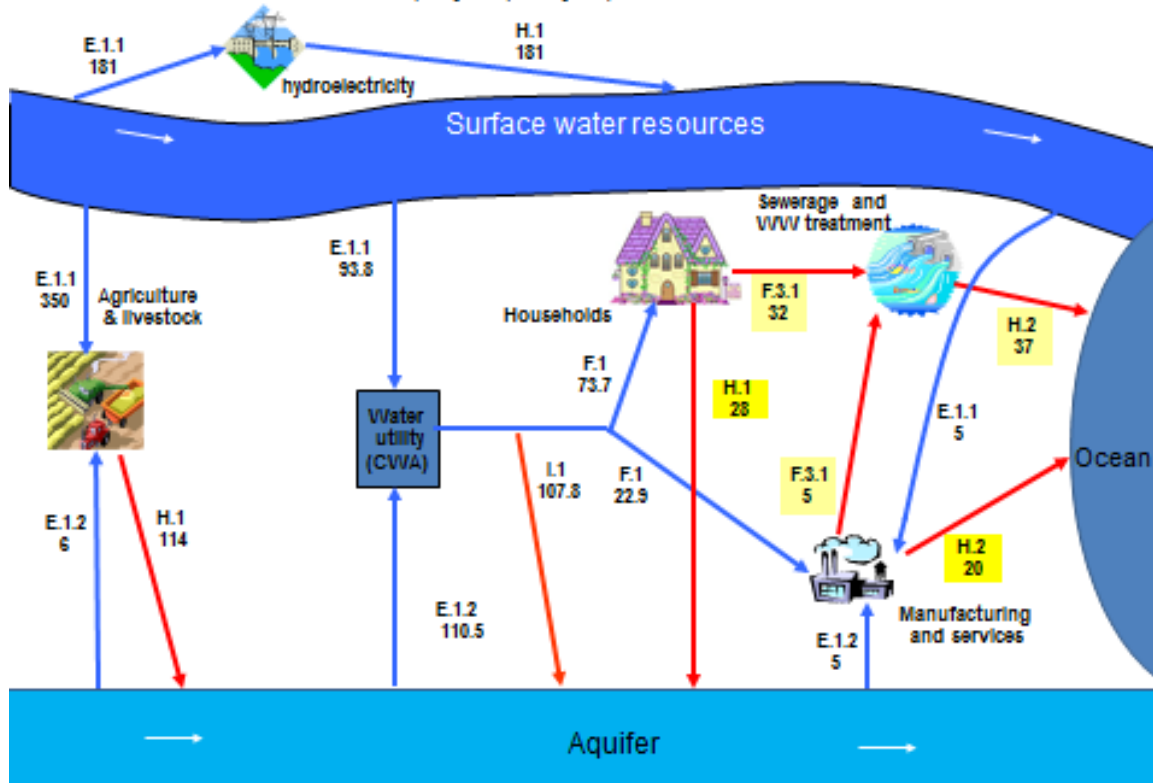
The accounts integrate all the policy relevant information about water in one single document: water supply and sanitation, water resources management, waterborne pollution, floods and droughts...

The SEEA-Water and the IRWS provided the methodological basis for integrating a wide range of information from different sources.

The accounts provide a bird's eye view of the water flows in the economy of Mauritius.

Mauritius. Water flows in the economy 2011.

Flows of water in million cubic meters per year (hm³/year).



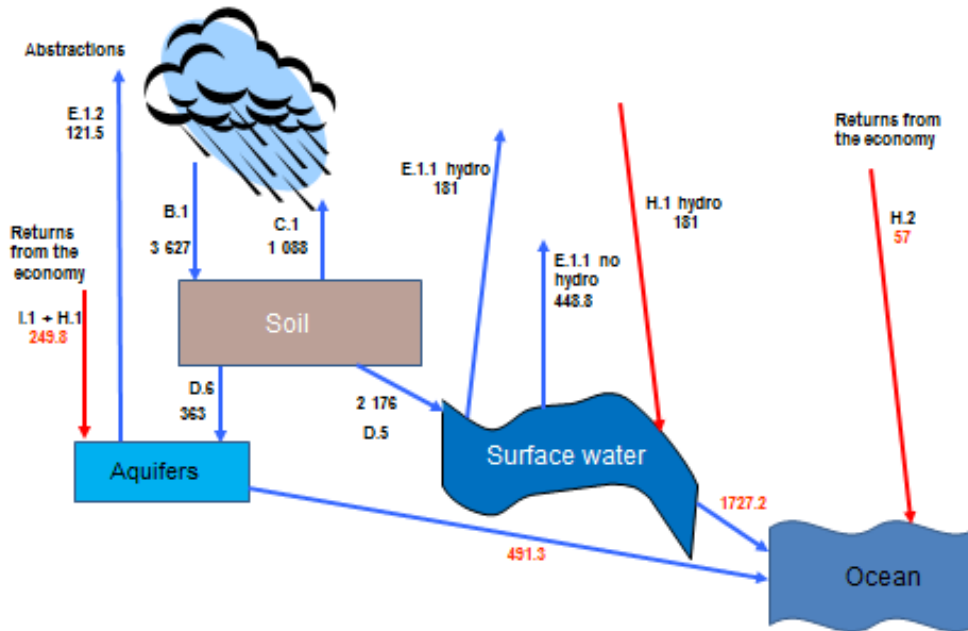
The data available is organized in order to provide a coherent message .

All data available were integrated to create a complete picture. Gaps were identified, and more detail will be added as needed.

The accounts are also a useful tool for integrating information about the natural water cycle.

Mauritius. Water flows to and from inland water resources

Flows of water in million cubic meters (hm³). Year 2011



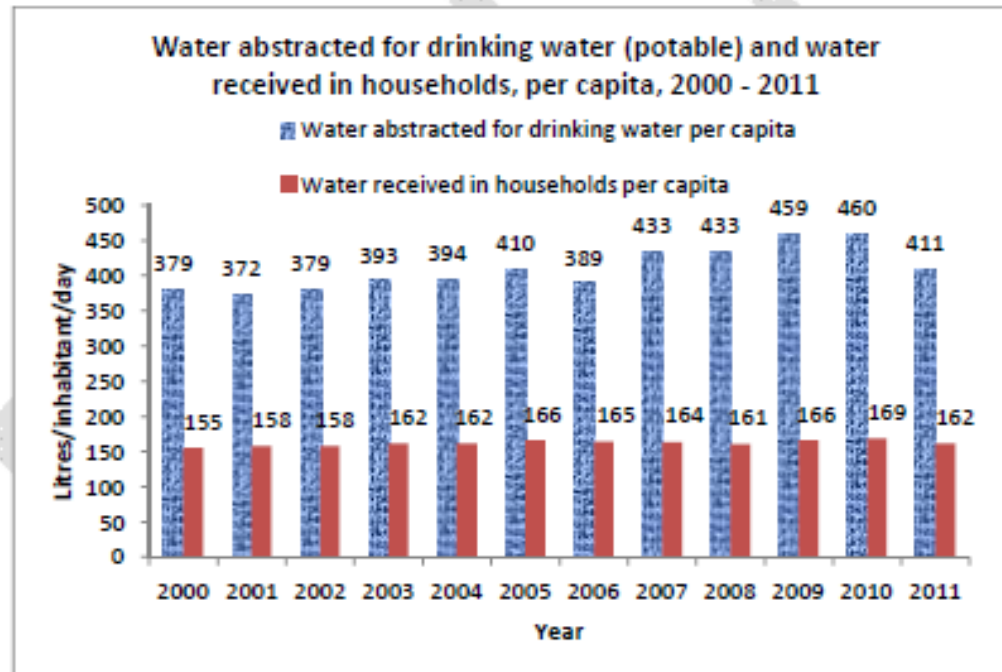
NOTE: Red numbers are rough estimates or balancing numbers.

Simplified diagram of the natural water cycle of Mauritius.

Even a simplified version of the accounts using the scarce data available is useful for developing a comprehensive, comparable and consistent picture of the water cycle, useful for policy design and evaluation.

From the accounts different time series can be produced and trends are identified using comparable information.

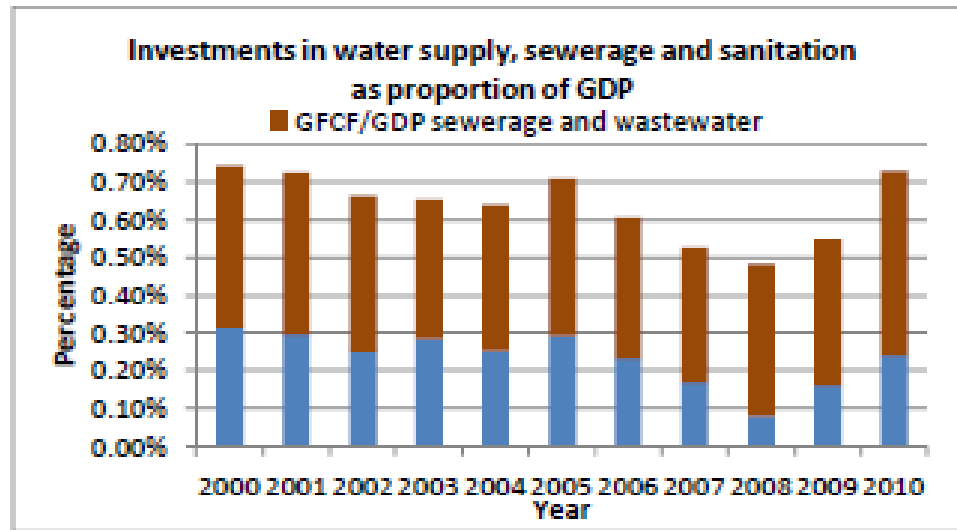
Figure 4: Water abstracted for drinking water (potable water)⁵ and water received by households, per capita, 2000 - 2011



A wide variety of indicators can be developed based on standardized definitions.

The SEEA-Water provides the basis for standardizing not only physical information, but also monetary data about water.

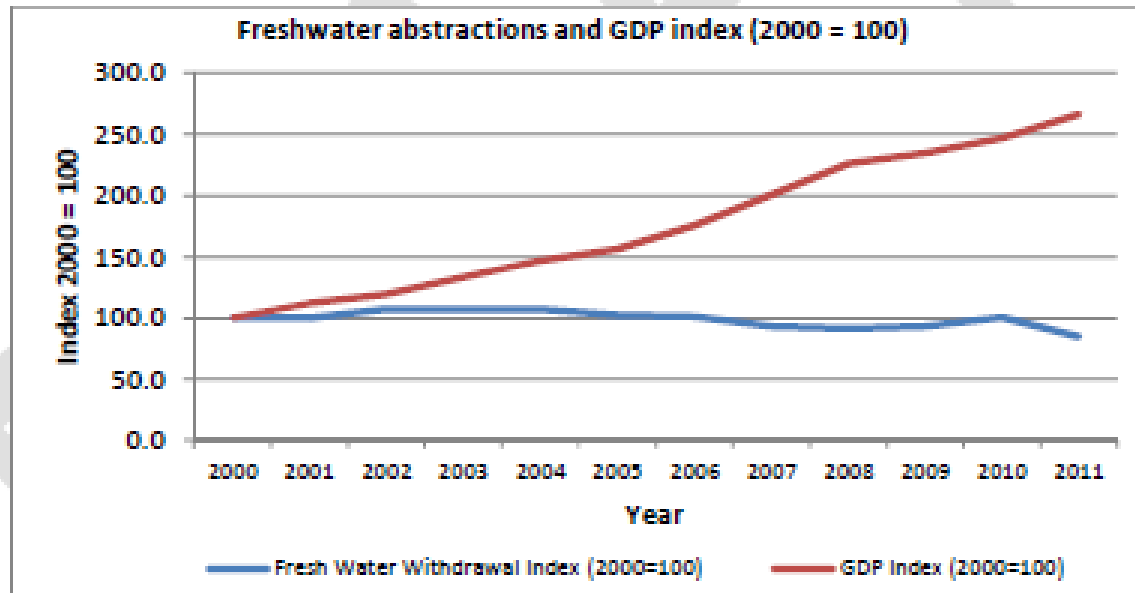
Figure 23 – Investment as proportion of GDP in the water and wastewater sectors, 2000 - 2010



Monetary information is compatible with national accounts information.

Monetary and physical data are seamlessly combined to understand interrelationships of economic decisions and environmental impact.

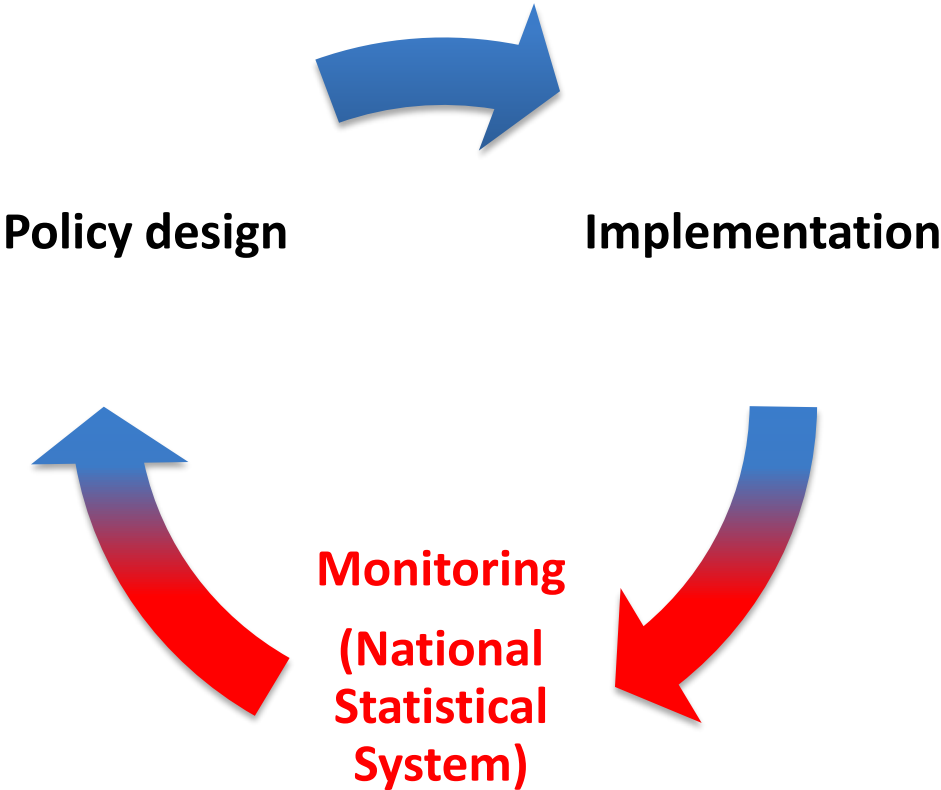
Figure 22 – Freshwater abstraction and GDP index, 2000 – 2011



Indicators can be tailored for specific policy concerns having an impact in a whole variety of issues.

**A cycle of continuous
improvement**

Countries implementing water accounts develop a self reinforcing loop in which better information creates the demand for better data, and in turn better data can generate better information.



The virtuous cycle of continuous improvement is developed at sub-national, national and international levels.

Preliminary core tables and accounts for water

Reasons and mandate

- Core tables provide concise, highly relevant information
- Information is key to deriving indicators and aids in developing evidence based public policies
- UNSC at its 44th session urged UNCEEA to develop a core set of tables and accounts
- Water is a key resource; there is a high demand from many developed and developing countries for water accounts
- Two core water tables are proposed

Building blocks to table 1

- Core table 1 is composed of 3 major blocks
- First block shown below—contains information on physical supply and use of water
- Information is part of the physical supply and use table for water which contains more details
- Codes correspond to data items from IRWS

	Industries (by ISIC categories)							Rest of the world	Taxes less subsidies on products, trade and transport margins	Actual final consumption			Total
	ISIC 01-03	ISIC 05-33, 41-43	ISIC 35	ISIC 36	ISIC 37	ISIC 38,39, 45-99	Total industry			Households	Government	Capital Formation	
6. Supply of water (Millions m3)	F+H	F+H	F+H	F+H	F+H	F+H	F+H	G.2+G.4				F+H+G2+G4	
Supply of water to other economic units	F	F	F	F	F	F	F	G.2+G.4				F+G2+G4	
Total returns	H	H	H	H	H	H	H					H	
Losses	I	I	I	I	I	I	I					I	
7. Use of water (Millions m3)	E+G	E+G	E+G	E+G	E+G	E+G	E+G	F.2+F.4				E+G+F.2+F.4	
Total Abstraction	E	E	E	E	E	E	E					E	
<i>of which:</i> Abstraction for own use	E.a	E.a	E.a	E.a	E.a	E.a	E.a					E.a	
Use of water received from other economic units	G	G	G	G	G	G	G	F.2+F.4				G+F.2+F.4	

Building blocks to table 1

- Second block shown below—contains information on supply and use for water products in monetary terms
- Information is part of the monetary supply and use table for water which contains more details
- National accounts data can be used to populate table to the extent possible

	Industries (by ISIC categories)							Rest of the world	Taxes less subsidies on products, trade and transport margins	Actual final consumption			Total
	ISIC 01-03	ISIC 05-33, 41-43	ISIC 35	ISIC 36	ISIC 37	ISIC 38,39, 45-99	Total industry			Households	Government	Capital Formation	
1. Supply of water products (Currency units)													
Natural water	L.1.1	L.1.1	L.1.1	L.1.1	L.1.1	L.1.1	L.1.1	L.1.1	M.1.1.1- [N.1.1.1+N.1.2.1]				L.1.1+M.1.1.1- [N.1.1.1+N.1.2.1]
Sewerage services	L.1.2	L.1.2	L.1.2	L.1.2	L.1.2	L.1.2	L.1.2	L.1.2	M.1.1.2- [N.1.1.2+N.1.2.2]				L.1.2+M.1.1.2- [N.1.1.2+N.1.2.2]
3. Intermediate consumption and final use (Currency units)													
Natural water	L.4	L.4	L.4	L.4	L.4	L.4	L.4	L.4					
Sewerage services	L.5	L.5	L.5	L.5	L.5	L.5	L.5	L.5					
Other products													
4. Gross value added (Currency units)													

Building blocks to table 1

- Third block contains monetary information on water related assets
- Information is relevant for a more complete understanding of the investment needs in the water sector

	Industries (by ISIC categories)							Rest of the world	Taxes less subsidies on products, trade and transport margins	Actual final consumption		Capital Formation	Total
	ISIC 01-03	ISIC 05-33, 41-43	ISIC 35	ISIC 36	ISIC 37	ISIC 38,39, 45-99	Total industry			Households	Government		
8. Gross fixed capital formation (Currency units)													
For water supply	P.1.1	P.1.1	P.1.1	P.1.1	P.1.1	P.1.1	P.1.1						P.1.1
For water sanitation	P.1.2	P.1.2	P.1.2	P.1.2	P.1.2	P.1.2	P.1.2						P.1.2
9. Closing Stocks of fixed assets for water supply (Currency units)	O.1.1	O.1.1	O.1.1	O.1.1	O.1.1	O.1.1	O.1.1						O.1.1
10. Closing Stocks of fixed assets for water sanitation (Currency units)	O.1.2	O.1.2	O.1.2	O.1.2	O.1.2	O.1.2	O.1.2						O.1.2

Core table 1

- Countries can start by compiling information that is most policy relevant and focus on the any of building blocks to core table 1 if information on other building blocks is not readily available
- Core tables are flexible in that if more detailed information is required, rows/columns can be further disaggregated as necessary.

Indicators

- Core tables contain the necessary information for deriving numerous indicators on water
 - Total renewable water resources
 - Total abstractions by industry
 - Intensity of use of water resources
 - Water productivity/intensity indicators
 - Investments in water infrastructure

Thank you!

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