



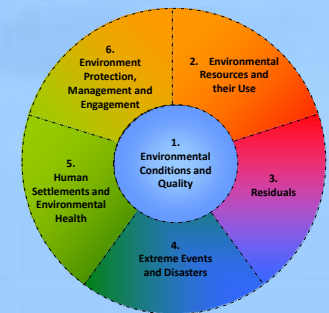
FDES toolkit

Tool 1: Manual of the Basic Set of Environment Statistics

Environment Statistics Section, UNSD

First ESEG Meeting. Session 1

United Nations DC2 Building 4th Floor – 461 New York March 26-28, 2014



Outline



Brief recap about FDES structure, Basic and Core Set of Environment Statistics and the new tools under development



Tool 1: The Manual of the Basic and Core Set of Environment Statistics

What it is, audience

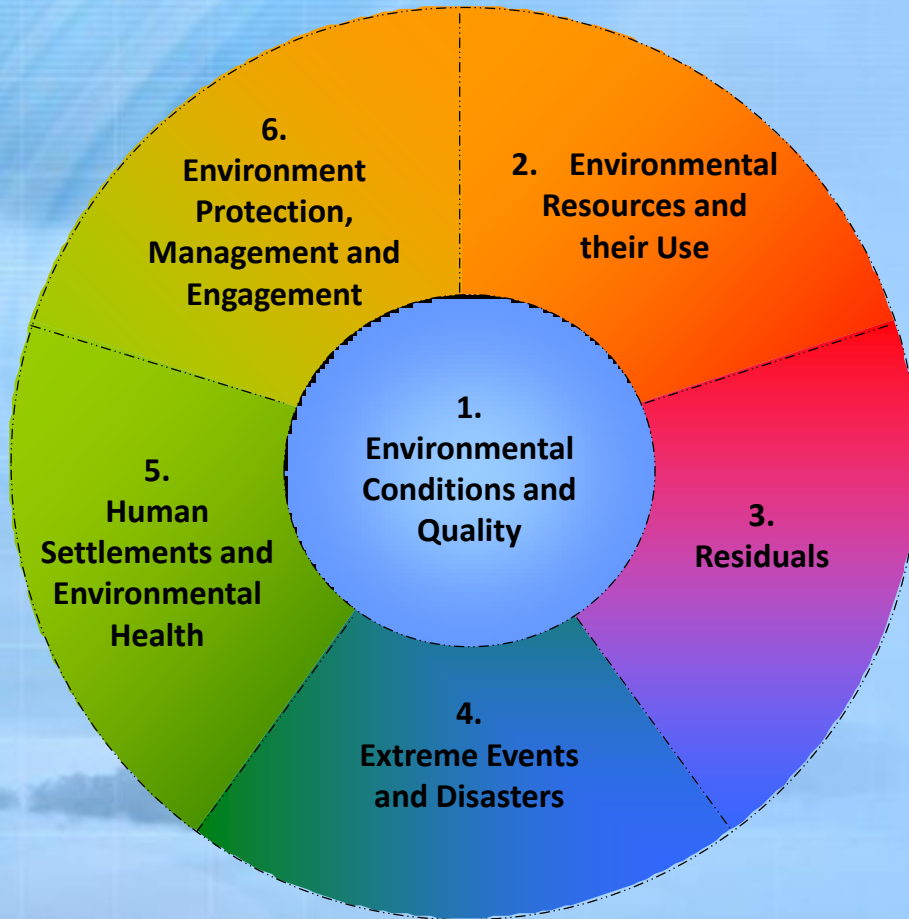
The method of work

The template of the methodological sheets

What we have done and learned so far

Examples

The FDES 2013 structure



- Six components
- At the centre of the FDES: Environmental conditions and quality
- All of the components relate to each other
- Multi-layered
- Flexible
- Adaptable

Multi-layered structure of the FDES

Levels of the FDES

1 digit	2 digits	3 digits	4 or 5 digits
Component	Sub-component	Statistical Topic	Statistics

Component 1: Environmental Conditions and Quality	Sub-component 1.1: Physical Conditions Sub-component 1.2: Land Cover, Ecosystems and Biodiversity Sub-component 1.3: Environmental Quality
Component 2: Environmental Resources and their Use	Sub-component 2.1: Non-energy Mineral Resources Sub-component 2.2: Energy Resources Sub-component 2.3: Land Sub-component 2.4: Biological Resources Sub-component 2.5: Water Resources
Component 3: Residuals	Sub-component 3.1: Emissions to Air Sub-component 3.2: Generation and Management of Wastewater Sub-component 3.3: Generation and Management of Waste
Component 4: Extreme Events and Disasters	Sub-component 4.1: Natural Extreme Events and Disasters Sub-component 4.2: Technological Disasters
Component 5: Human Settlements and Environmental Health	Sub-component 5.1: Human Settlements Sub-component 5.2: Environmental Health
Component 6: Environment Protection, Management and Engagement	Sub-component 6.1: Environment Protection and Resource Management Expenditure Sub-component 6.2: Environmental Governance and Regulation Sub-component 6.3: Extreme Event Preparedness and Disaster Management Sub-component 6.4: Environmental Information and Awareness

Basic Set of Environment Statistics

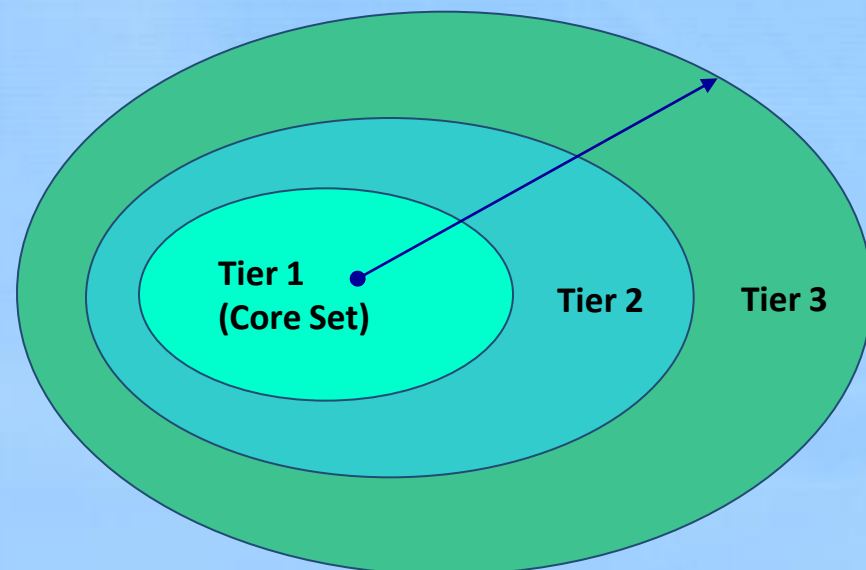
Component 1: Environmental Conditions and Quality	
Sub-component 1.2: Land Cover, Ecosystems and Biodiversity	
Topic	Statistics and Related Information (Bold Text - Core Set/Tier 1 ; Regular Text - Tier 2; <i>Italicized Text - Tier 3</i>)
Topic 1.2.3: Biodiversity	a. Flora - terrestrial, freshwater and marine (also in 1.2.2.c)
	1. Number of known species by status category
	2. Species population
	3. Number of endemic species
	4. Number of invasive alien species
	5. <i>Habitat fragmentation</i>
	b. Fauna - terrestrial, freshwater and marine (also in 1.2.2.c)
	1. Number of known species by status category
	2. Species population
	3. Number of endemic species
4. Number of invasive alien species	
5. <i>Habitat fragmentation</i>	

Flexibility and adaptability: prioritizing components, sub-components and topics

Flexibility and adaptability: tiers

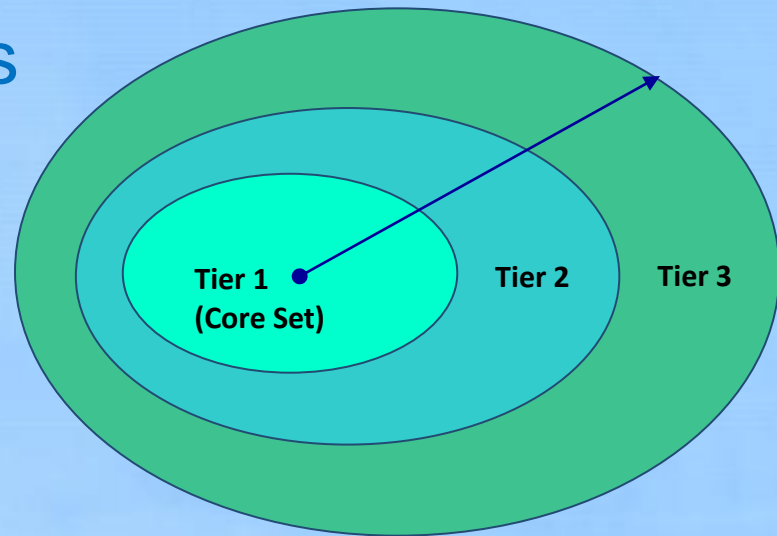
The Basic Set of Environment Statistics

- The **Basic Set of Environment Statistics** organizes a comprehensive (though not exhaustive) list of environment statistics
- The Basic Set is organized in **three tiers**, based on the level of relevance, availability and methodological development of the statistics.



- The **Core Set of Environment Statistics** correspond to **Tier 1**
- **Tier 2** includes environment statistics that are of priority and relevance to most countries but need more investment in time, resources or methodological development.
- **Tier 3** includes environment statistics which are either of less priority or require significant methodological development.

Number of statistics in the Basic and Core Set of Statistics



Core Set or Tier 1 = 107
Basic Set = 492

	Component 1	Component 2	Component 3	Component 4	Component 5	Component 6	Total
Tier 1	35	35	19	4	11	3	107
Tier 2	83	46	33	12	17	21	212
Tier 3	64	43	5	17	21	23	173
Total	182	124	57	33	49	47	492

Basic Set = 21 Sub-components and 60 Topics

Basic Set of Environment Statistics

(experts have a print out)

Environment Statistics Section of the United Nations Statistics Division
Basic Set of Environment Statistics

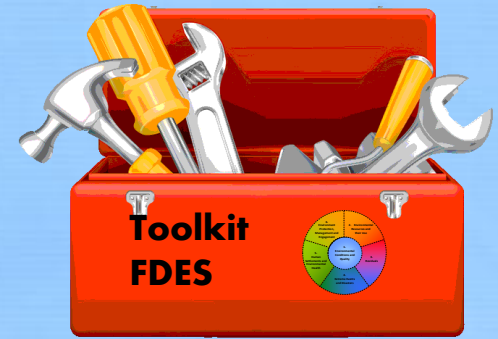
Preliminary, subject to change

Sub-component 1.1: Physical Conditions						
Topic	Statistics and Related Information (Bold Text - Core Set/Tier 1; Regular Text - Tier 2; <i>Italicized Text</i> - Tier 3)		Category of Measurement	Potential Aggregations and Scales	Methodological Guidance	
Topic 1.1.1: Atmosphere, climate and weather (CONTINUES ON NEXT PAGE)	a.	Temperature		<ul style="list-style-type: none"> ▪ National ▪ Sub-national 	<ul style="list-style-type: none"> ▪ World Meteorological Organization (WMO) ▪ Intergovernmental Panel on Climate Change (IPCC) ▪ National Oceanic and Atmospheric Administration (NOAA)/ National Aeronautics and Space Administration (NASA) 	
	1.	Monthly average	Degrees			
	2.	Minimum monthly average	Degrees			
	3.	Maximum monthly average	Degrees			
	b.	Precipitation (also in 2.6.1.a)				
	1.	Annual average	Height			
	2.	Long-term annual average	Height			
	3.	Monthly average	Height			
	4.	Minimum monthly value	Height			
	5.	Maximum monthly value	Height			
	c.	Relative humidity				
	1.	Minimum monthly value	Number			
	2.	Maximum monthly value	Number			
	d.	Pressure				<ul style="list-style-type: none"> ▪ National ▪ Sub-national ▪ By station
	1.	<i>Minimum monthly value</i>	Pressure unit			
2.	<i>Maximum monthly value</i>	Pressure unit				
e.	Wind speed		<ul style="list-style-type: none"> ▪ National ▪ Sub-national 			
1.	<i>Minimum monthly value</i>	Speed				
2.	<i>Maximum monthly value</i>	Speed				

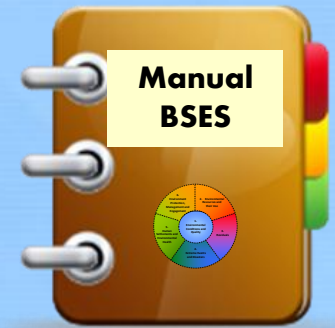
The Basic Set is presented into the FDES structure, supplemented with additional guidance

Component 4: Extreme Events and Disasters				
Sub-component 4.1: Natural Extreme Events and Disasters				
Topic	Statistics and Related Information (Bold Text - Core Set/Tier 1; Regular Text - Tier 2; <i>Italicized Text</i> - Tier 3)	Category of Measurement	Potential Aggregations and Scales	Methodological Guidance
Topic 4.1.1: Occurrence of natural extreme events and disasters	a. Occurrence of natural extreme events and disasters:		<ul style="list-style-type: none"> ▪ By event • National • Sub-national 	<ul style="list-style-type: none"> ▪ Centre for Research on the Epidemiology of Disasters ▪ Emergency Events Database (CRED EM-DAT) ▪ Economic Commission for Latin America and the Caribbean (ECLAC) Handbook for Estimating the Socio-economic and Environmental Effects of Disasters
	1. Type of natural disaster (geophysical, meteorological, hydrological, climatological biological)	Descriptive		
	2. Location	Location		
	3. Magnitude (where applicable)	Intensity		
	4. Date of occurrence	Date		
	5. Duration	Time period		
	6. Hazard prone areas	Area		
7. Population living in hazard prone areas	Number			
Topic 4.1.2: Impact of natural extreme events and disasters	a. People affected by natural extreme events and disasters		<ul style="list-style-type: none"> ▪ By event • National • Sub-national 	<ul style="list-style-type: none"> ▪ Centre for Research on the Epidemiology of Disasters ▪ Emergency Events Database (CRED EM-DAT) ▪ Economic Commission for Latin America and the Caribbean (ECLAC) Handbook for Estimating the Socio-economic and Environmental Effects of Disasters
	1. Number of people killed	Number		
	2. Number of people injured	Number		
	3. Number of people homeless	Number		
	4. Number of people affected	Number		
	b. Economic loss due to natural extreme events and disasters (e.g., damage to buildings transportation networks, loss of revenue for businesses, utility disruption, etc.)	Currency	<ul style="list-style-type: none"> ▪ By International Standard Industrial Classification of all Economic Activities (ISIC) economic activity ▪ National ▪ Sub-national ▪ By direct and indirect damage 	
	c. Physical loss/damage due to natural extreme events and disasters (e.g., area and amount of crops, livestock, aquaculture, biomass etc.)	Area, Descriptive, Number		
	d. Effects of natural extreme events and disasters on integrity of ecosystems		<ul style="list-style-type: none"> ▪ By event ▪ By ecosystem • National • Sub-national 	
	1. <i>Area affected by natural disasters</i>	Area		
	2. <i>Loss of vegetation cover</i>	Area		
	3. <i>Area of watershed affected</i>	Area		
	4. <i>Other</i>	Descriptive		
	e. <i>External assistance received</i>	Currency	<ul style="list-style-type: none"> ▪ By event • National 	

FDES Toolkit



- Tool 1 Manual of the Basic Set of Environment Statistics
- Tool 2 ESSAT
- Tool 3 Handbook for producing/strengthening environment statistics programmes
- Tool 4 Training and capacity building tools



Tool 1: The Manual of the Basic and Core Set of Environment Statistics

What it is, audience

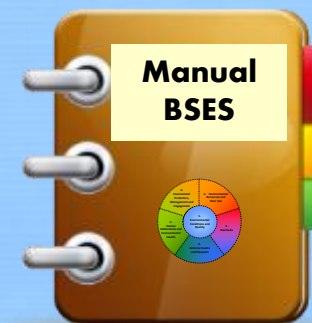
The method of work

The template of the methodological sheets

What we have done and learned so far

Examples

Manual of the Basic Set of Environment Statistics



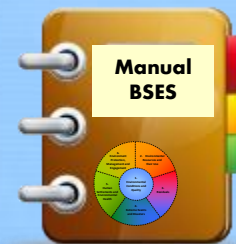
What?

- The manual will provide methodological guidance for developing countries with regard to the compilation and collection of environmental data and its transformation into statistics
- The manual is a practical and detailed guide to each of the BCSES themes, including variable definitions, description of sources and data collection, methods of data compilation/processing for environment statistics production, dissemination and other relevant information. The manual will include boxes, diagrams and good practices.

For who?

- Practitioners working in environment statistics programs or within specific areas of environment statistics. They may work at NSOs, Environmental Ministry or other relevant line ministry at the national and sub-national levels. This manual can also serve sub-regional and regional agencies working or planning to work in environment statistics production and dissemination.

Proposed outline of Manual



Introduction

- Present the main objective and audience of the Manual and briefly describe how it can be used.

The Basic and Core Set of the FDES 2013

- Describe what are the BSES and the CSES, what are their main objectives and how were they built and structured according to the FDES 2013.
- Describe how the BCSES can be adapted and completed according to each country's priorities, data availability and developmental path.

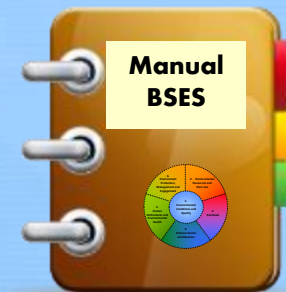
Methodology and metadata sheets for the BCSES statistics

- Brief Introduction about how the template works, describing the fields, and its organization
- Collection of methodological sheets following the template (see later)

Compilation of good practices

- A selection of national practices used in the collection/compilation of environment statistics

Concept of Manual



Objective

To develop a set of methodological and metadata sheets in support of the collection/compilation of the variables included in the Basic and Core Sets of Environment Statistics contained in the FDES 2013. (i.e.: definitions, classifications, the most important attributes, data sources, data collection methods, etc.)

Method

This work will be coordinated by UNSD and will be carried out in a collaborative way with the Expert Group on Environment Statistics (EGES) and other thematic experts from specialized agencies as needed, using a common template.

Decisions about describing individual variables or grouping them is to be discussed. From the examples elaborated preliminarily by UNSD the cluster or grouping approach seems to work better.

Concept of manual



Time Frame 2014-2015

The aim is to complete the set of methodological sheets or metadata for the Basic and Core Set of Environment Statistics by the end of 2015. Previously, sets of methodological sheets that are ready will be disseminated through the webpage of UNSD on a first come first uploaded basis

Partners

UNSD Section of Environment Statistics, EGES members, Experts from other specialized agencies as needed

Plan of Work

1. Preparation

This stage includes the preparatory work to be carried out by UNSD, including the following tasks:

- Prepare work program, metadata template
- Discuss with experts
- Distribute work among experts

2. Elaboration of draft methodology/metadata sheets

•Elaboration of methodology/metadata sheets (filling all fields of template) for the topics/statistics by responsible experts: UNSD, EGES, other experts from specialized agencies as needed.

3. Review and finalization

•The peer review of the drafts of the methodological sheets will be carried out on a continuous basis as drafts become available. Both national and international experts will be called upon to review submitted methodology/metadata sheets before their finalization.

4. Dissemination

•Those methodology sheets that have been finalized will be disseminated through the webpage and finally all will be part of the Manual which, after editing, will also be disseminated electronically and in hard copy.

Preliminary time table for elaboration of Manual

		2013		2014				2015			
Task	Who	Nov	Dec	i	ii	iii	iv	i	ii	iii	iv
1 PREPARATION											
1.1 Prepare work program	UNSD										
1.2 Prepare metadata template	UNSD										
1.3 Prepare metadata examples	UNSD										
1.4 Distribution of variables/clusters among collaborators	UNSD and experts										
2 ELABORATION OF DRAFT METADATA											
2.1 Elaboration of metadata for themes/topics Group 1	UNSD										
2.2 Elaboration of metadata for themes/topics Group 2	EG experts										
2.3 Elaboration of metadata for themes/topics Group 3	Specialized agencies										
3 PEER REVIEW AND FINALIZATION											
3.1 UNSD revision of submitted metadata	UNSD										
3.2 EG revision of submitted metadata	EG experts										
4 DISEMINATION											
4.1 Upload sets of metadata to UNSD Website	UNSD										
4.2 Edition of Manual	UNSD Consultant										
4.3 Upload Manual website UNSD	UNSD										

What we've learned with the examples

1. We developed and improved the template for the methodological sheet reviewing many other available ones
2. We then worked in filling in the template for 9 individual variables
 - Find lot of redundancy for fields other than definitions (for example extreme events and disasters, waste, environmental conditions in general)
 - Difficulty with only core set, since some closely related variables were tier 2 (basic set)
3. We discussed about the cluster approach, grouping variables at the topic or sub-component level as appropriate, including but not restricted to tier 1 variables, in one single methodological sheet
 - Find this work better
 - Developed an example (waste sub-component)
 - Would like to discuss with the experts

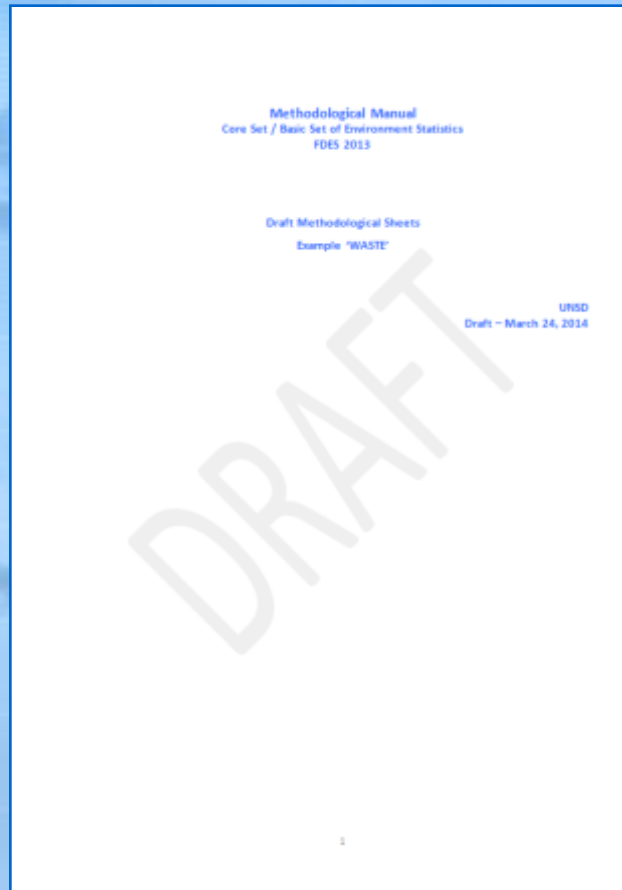
Template Structure

Theme				
Code and location in the FDES 2013				
Component	Sub-Component	Topic	Environment codes and denomination	Statistic

1. Introduction
2. Definitions and description of the variables
 - 2A. Definition of the variables
3. International sources and recommendations
 - 3A. Classifications and groupings
 - 3B. Reference to international recommendations, frameworks and standards
 - 3C. Sources of global and regional environment statistics and indicators series
4. Methodological Guidance for countries
 - 4A. Data collection and sources of data
[i.e Surveys, Administrative records, Statistical estimation methods, Combination of the foregoing methods]
 - 4B. Data compilation (procedures and instruments) and transformation into environment statistics series
Statistical unit, Measurement unit, Statistical population, Validation, Metadata
5. Other relevant information
 - 5A. Potential presentation/dissemination formats
 - 5B. Commonly used indicators that incorporate this statistic
 - 5C. Potential disaggregations:

Examples: Waste and water

Christian will go over the examples with the participants looking at their print out



Waste					
Component	Sub-Component	Topic	Code and location in the FDES 2013		
3. Residuals	3.3 Generation and Management of Waste	3.3.1 Generation of waste	3.3.1.g Amount of waste generated by economic activity		
			3.3.1.b Amount of waste generated by waste category		
			3.3.1.c Amount of hazardous waste generated		
		3.3.2 Management of waste	3.3.2.a Municipal waste	3.3.2.a.1 Total municipal waste collected	
				3.3.2.a.2 Amount of municipal waste treated by type of treatment	
				3.3.2.a.3 Number of municipal waste treatment and disposal facilities	
				3.3.2.a.4 Capacity of municipal waste treatment and disposal facilities	
				3.3.2.b Hazardous waste	3.3.2.b.1 Total hazardous waste collected
					3.3.2.b.2 Amount of hazardous waste treated by type of treatment
					3.3.2.b.3 Number of hazardous waste treatment and disposal facilities
					3.3.2.b.4 Capacity of hazardous waste treatment and disposal facilities
					3.3.2.c Other/industrial waste
				3.3.2.c.1 Total other/industrial waste collected	3.3.2.c.2 Amount of other/industrial waste treated by type of treatment
					3.3.2.c.3 Number of other/industrial waste treatment and disposal facilities
				3.3.2.c.4 Capacity of industrial waste treatment and disposal facilities	
				3.3.2.d Amount of recycled waste	
3.3.2.e Imports of waste					
3.3.2.f Exports of waste					
3.3.2.g Imports of hazardous waste					
3.3.2.h Exports of hazardous waste					

1. Introduction

Environment statistics on **Waste** provide important information to policymakers to support the protection of the environment, which may be compromised by waste generation and treatment. Understanding the quantity of waste generated and, importantly, whether the waste is hazardous or not, is required to plan for present and future waste management, in terms of transportation and treatment facilities required. More importantly, waste can also be a resource when recycled or used as a fuel source.

Statistics on waste **generation** and **management** allow for the preparation of environmental impact assessments and are useful in developing strategies to encourage waste prevention, reduction, reuse and recycling. Statistics on **municipal waste**, already produced by many countries for many years, allow for the monitoring of household consumption patterns and management practices by municipalities.

2

Location in the FDES

Waste			
Code and location in the FDES 2013			
Component	Sub-Component	Topic	Environment Statistic Codes
3. Residuals	3.3 Generation and Management of Waste	3.3.1 Generation of waste	3.3.1.a Amount of waste generated by economic activity
			3.3.1.b Amount of waste generated by waste category
			3.3.1.c Amount of hazardous waste generated
			3.3.2.a Municipal waste
			3.3.2.a.1 Total municipal waste collected
			3.3.2.a.2 Amount of municipal waste treated by type of treatment
			3.3.2.a.3 Number of municipal waste treatment and disposal facilities
			3.3.2.a.4 Capacity of municipal waste treatment and disposal facilities
			3.3.2.b Hazardous waste
		3.3.2.b.1 Total hazardous waste collected	
		3.3.2.b.2 Amount of hazardous waste treated by type of treatment	
		3.3.2.b.3 Number of hazardous waste treatment and disposal facilities	
		3.3.2.b.4 Capacity of hazardous waste treatment and disposal facilities	
		3.3.2.c Other/industrial waste	
		3.3.2.c.1 Total other/industrial waste collected	
		3.3.2.c.2 Amount of other/industrial waste treated by type of treatment	
		3.3.2.c.3 Number of other/industrial waste treatment and disposal facilities	
		3.3.2.c.4 Capacity of industrial waste treatment and disposal facilities	
		3.3.2.d Amount of recycled waste	
		3.3.2.e Imports of waste	
		3.3.2.f Exports of waste	
		3.3.2.g Imports of hazardous waste	
		3.3.2.h Exports of hazardous waste	

Component:
3. Residuals

Sub-Component:
3.3 Generation and management of waste

Topic:
3.3.1 Generation of waste
3.3.2 Management of waste

Statistic:
3.3.1.a Core set (Tier 1)
3.3.1.b Basic set (Tier 2)
3.x.y.z Basic set (Tier 3)

Template

1. Introduction *[of the sub-component]*

2. Definitions and description of the variables

2A. Definition of the variables **Core set statistics in bold**

2B. Definition of related variables

3. International sources and recommendations

3A. Classifications and groupings

Coverage

Groupings

3B. Reference to international recommendations, frameworks and standards

3C. Sources of global and regional environment statistics and indicators series

Template *(continued)*

4. Methodological guidance for Countries

4A. Data collection and sources of data

Surveys

Administrative sources

[...]

4B. Data compilation (procedures and instruments) and transformation into environment statistics series

Statistical population

Statistical unit

Reporting unit

Measurement unit

Validation

[...]

Metadata

Challenges / Questions

More than one definition exists:

“Simple example” Water: 2.6.1.a.1 Precipitation

2.6.1.a.1 Precipitation:

Precipitation: Total volume of atmospheric wet precipitation (rain, snow, hail...). Precipitation is usually measured by meteorological or hydrological institutes.

[Source: [OECD/Eurostat: Data Collection Manual for the Joint Questionnaire on Inland Waters](#), page 30]

– or –

Precipitation: Any kind of water that falls from clouds as a liquid or a solid.

[Source: [FAO Aquastat, Glossary of definitions](#)]

– or –

Precipitation: (B.1) is the volume of water that flows from the atmosphere to inland water resources via rain, snow, sleet, hail, dew, mist, etc. Precipitation falls onto land and water surfaces. It is desirable to compile data on precipitation at different spatial levels [...] [Source: [UNSD: International recommendations for Water Statistics - IWRS](#), page 52]

– or –

Precipitation: Precipitation consists of the volume of atmospheric wet precipitation (rain, snow, hail, etc.) on the territory of reference during the accounting period before evapotranspiration takes place. Most of the precipitation would fall on the soil and would thus be recorded in the column under soil water in the asset accounts. [...] [Source: [UNSD: SEEA Water](#), page 94 and [SEEA 2012](#), page 215]

– or –

Atmospheric **Precipitation:** The settling out of water from cloud in the form of dew, rain, hail, snow, etc.

[Source: [EEA GGeneral Multilingual Environmental Thesaurus – GEMET](#)]

➤ OECD/Eurostat

➤ FAO

➤ IRWS

➤ SEEA

➤ EEA

Challenges / Questions (continued)

Which level of detail will meet your needs?

Example Water: Validation

validation of existing data observations, and possible aggregation and estimation procedures. Complementarily, treatment of missing data points would involve interpolation and imputation procedures as long as the existing data set allows for it.

The starting point for construction of statistics is the careful analysis of existing raw data that is scattered in different institutions according to the country's institutional system. Starting from the consideration of water rights and concessions as a reference, the statistician can move on to compile data for the households, industries and agriculture using diverse ways to aggregate and estimate as needed. In most cases, the method will involve the estimation and compilation of water uses as proxies to water abstraction. One important consideration about the difference between the amount abstracted and the amount finally used is the amount of water that is estimated as water losses in the distribution network. These losses are high proportions of the total water abstracted, depending on the quality of the network. The piping system can be outdated or not enough maintained, leading to high water losses around the network and more abstraction needed for the same amount of water delivered.

... to be revised and shortened [?] ...

Household water use is usually compiled referring to ISIC 36 (water supply) and in most cases it can be measured/estimated because it is one enterprise or company supplying the households per municipality or region according to the country's water institutional set up. In rural areas, some households can bring the water home from municipal supply points, receive the water from water trucks and extract the water for their use directly from wells, in which cases estimation of these amounts using average water consumption per capita parameters and demographic data (possibly geo references data) can be considered as estimation methods.

Industry water use can be determined by the same methodological case as households, although the volumes involved in the use will be considerably higher for some economic activities and sectors. Industries such as mining that require high volumes of water can be off the grid, and can extraction water for its own use. The methods will then involve compilation from users if they register and/or estimation using parameters and volume of production per establishment if available.

For agricultural water use, estimation can begin with the determination of the extension of the crops at the national level. The relevant data sources can be an agricultural Census, agricultural surveys or an inventory of the type of crops and the amount of each one in hectares. There are estimations of the water use per crop that can be used as reference (FAO), but caution must be exerted since the amount of water used in agriculture comes from both irrigation and precipitation. Data on irrigation is actually insufficient to say the least

Challenges / Questions (continued)

Which level of detail will meet your needs?

Example Water: Validation

validation of existing data observations, and possible aggregation and estimation procedures. Complementarily, treatment of missing data points would involve interpolation and imputation procedures as long as the existing data set allows for it.

The starting point for construction of statistics is the careful analysis of existing raw data that is scattered in different institutions according to the country's institutional system. Starting from the consideration of water rights and concessions as a reference, the statistician can move on to compile data for the households, industries and agriculture using diverse ways to aggregate and estimate as needed. In most cases, the method will involve the estimation and compilation of water uses as proxies to water abstraction. One important consideration about the difference between the amount abstracted and the amount finally used is the amount of water that is estimated as water losses in the distribution network. In some cases, high proportions of the total water abstracted, depending on the type of network, are lost. The piping system can be outdated or not enough maintained, leading to high water losses around the network and more abstraction needed for the same amount of water delivered.

... to be revised and shortened [?] ...

Household water use is usually compiled referring to ISIC 36 (Construction, repair and maintenance of buildings and supply) and in most cases it can be measured/estimated because it is one enterprise or company supplying the households per municipality or region according to the country's water institutional set up. In rural areas, some households can bring the water home from municipal supply points, receive the water from water trucks and extract the water for their use directly from wells, in which cases estimation of these amounts using average water consumption per capita parameters and demographic data (possibly geo references data) can be considered as estimation methods.

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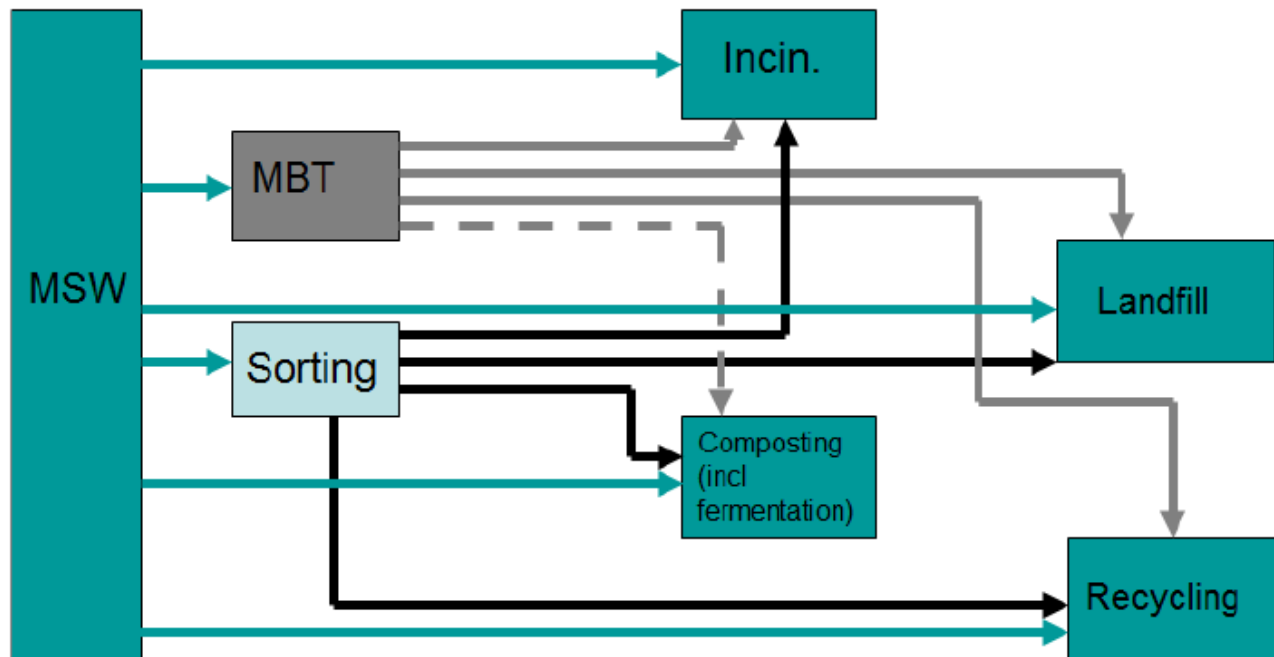
- edit/re-write existing material for better comprehension?
- refer to existing sources only?
... *provide (links)*
- selection criteria for sources?

Challenges / Questions *(continued)*

Enhance with graphs / flow charts / decision trees ?

Example **Waste:** Municipal waste treatment

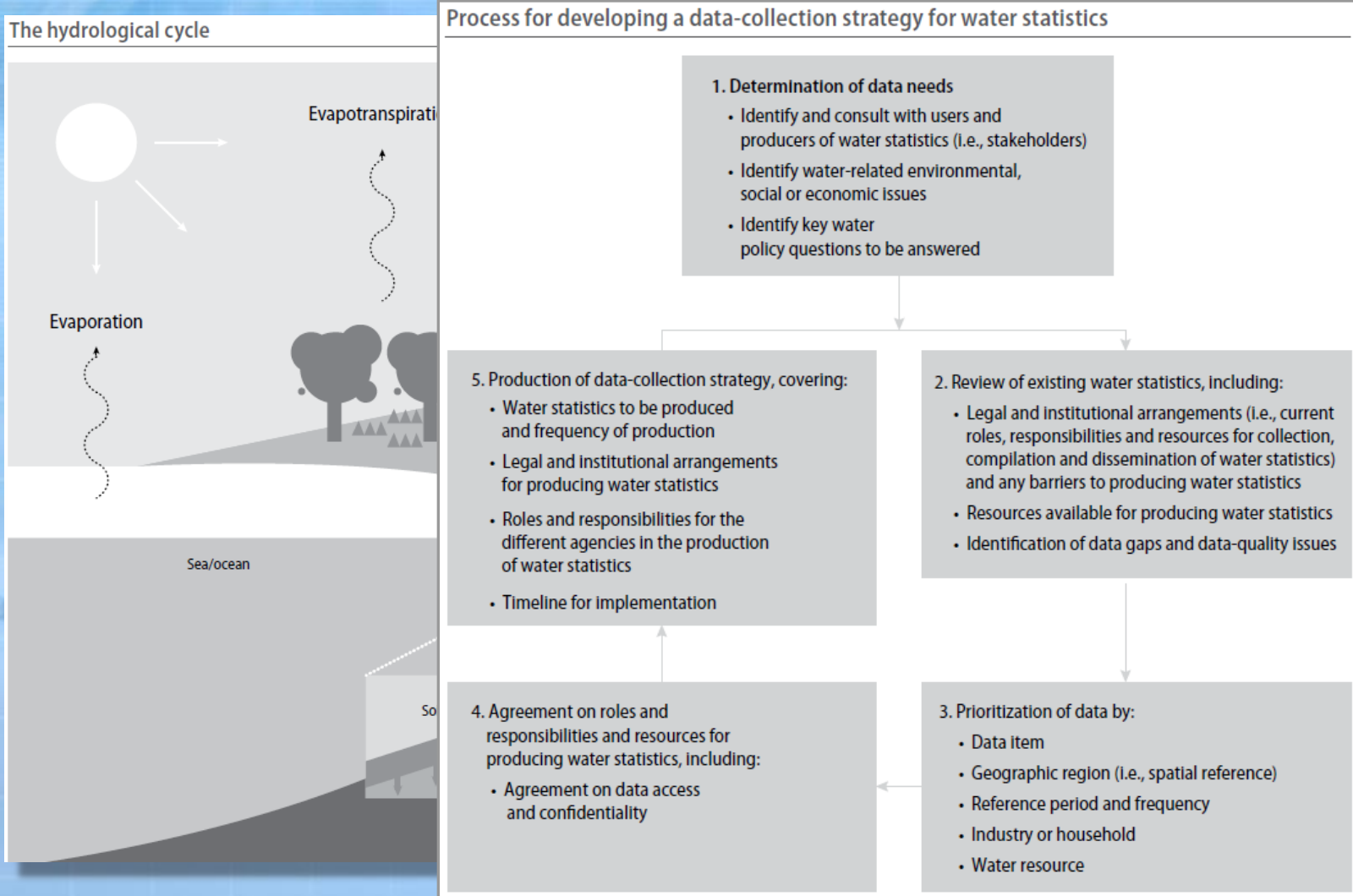
- Incineration (separately for with and without energy recovery)
- Landfilling
- Recycling (excluding composting or fermentation)
- Composting



Challenges / Questions (continued)

Enhance with graphs / flow charts / decision trees ?

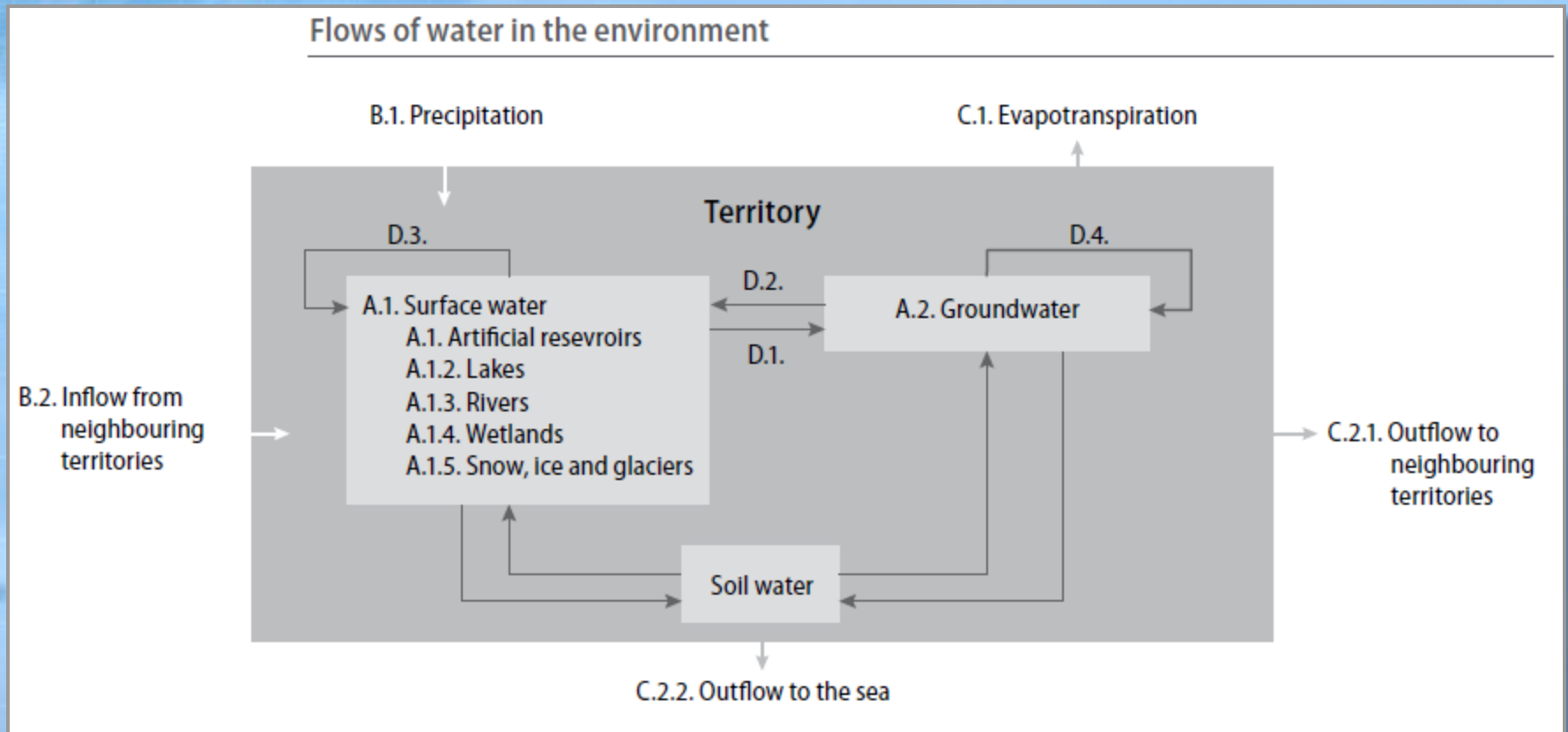
Example **Water: Planning data collection**



Challenges / Questions *(continued)*

Enhance with graphs / flow charts / decision trees ?

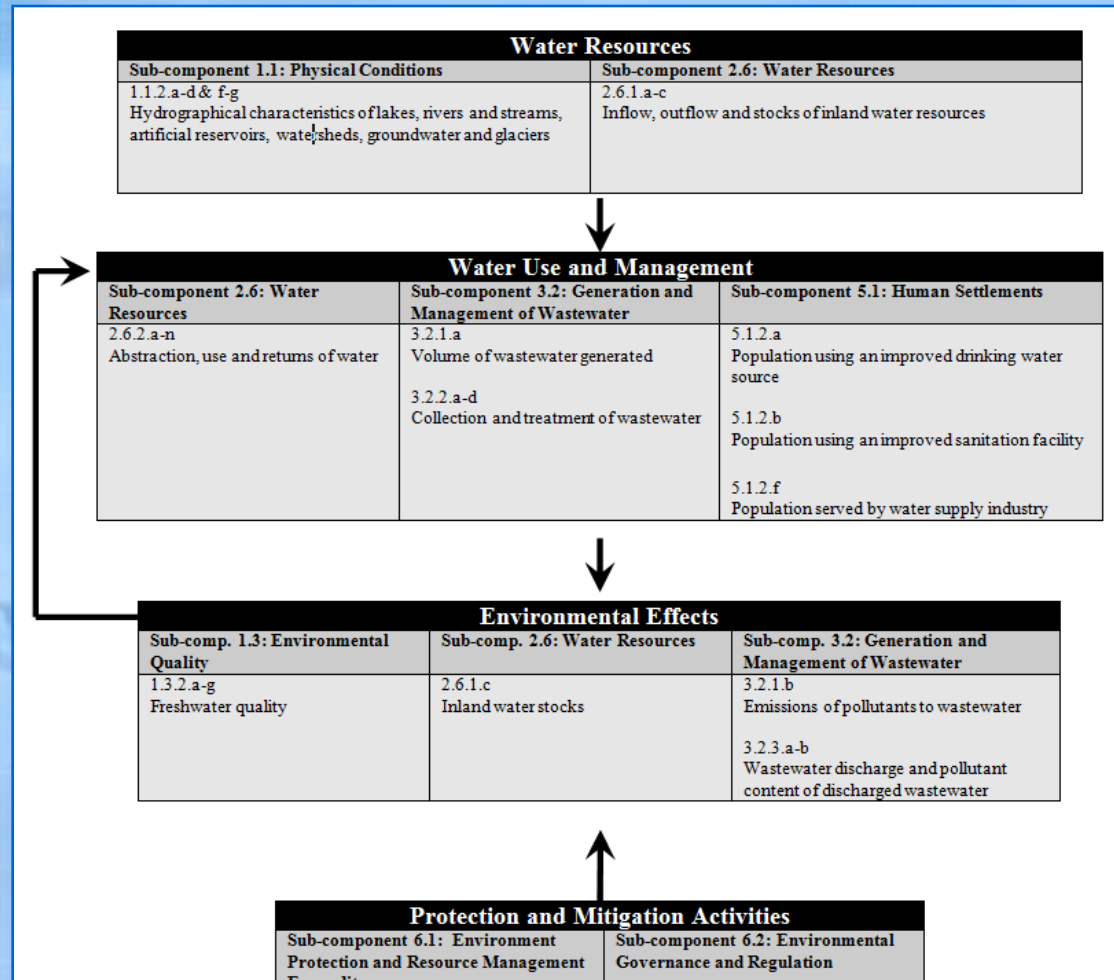
Example **Water**: Flows of water in the environment



Challenges / Questions (continued)

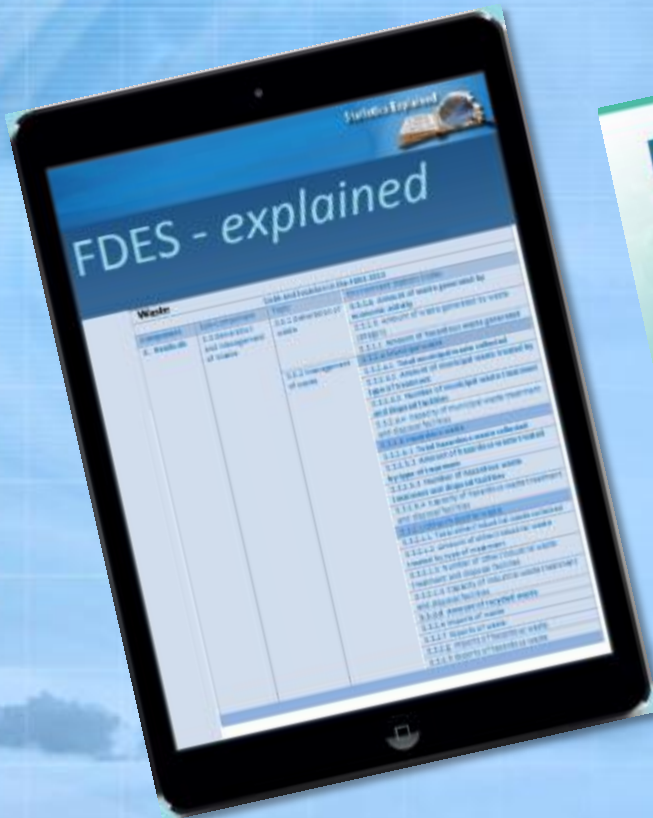
Enhance with graphs / flow charts / decision trees ?

Example **Water**: How are FDES Topics, Components, Sub-components and Statistics related ?



Challenges / Questions (continued)

“Living” document / printed manual ?



Questions (to guide discussion later)

- a. Is the template for the methodological sheets OK?
- b. For the manual: grouping 'environment statistics' or individual variable ? Recall commonalities in the fields within closely related statistics
- c. Scope will cover the Basic Set of Environment Statistics, not only the Core Set. Tier 1, 2, 3 variables are very interrelated
- d. What level of detail in the description?
- e. Examples, diagrams and boxes to be included OK?
- f. How to link best to SEEA core tables?
- g. Is the program of work OK? Time table 2014-2015
- h. Is the organization of the work OK?
- i. Is the modular and incremental dissemination proposal OK?
- j. Collaboration from experts?