

**Sixth Meeting of the Expert Group on Environment  
Statistics**

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**Secretariat Building**

**Room 2727**

***Templates for national  
data collection***

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# CONTEXT

- Many countries where FDES is being implemented, request for templates to facilitate data collection;
- There are so many statistics involved:
  - 100 core statistics
  - 500 basic set
- Demanding task to draft templates

# Example 1 template

- Simple

Metadata simple.xlsx - Excel (Product Activation Failed)

File Home Data Entry Insert Page Layout Formulas Data Review View Developer Power Pivot Tell me what you want to do... Anand Sookun Share

Clipboard Font Alignment Number Styles Cells Editing

1  
2 **THIS TEMPLATE ALLOWS TO DEVELOP A SIMPLE METADATA SHEET WHERE COMPONENTS, SUB COMPONENTS, TOPCS AND THEIR RELATED STATI**  
3  
4 **USERS ARE ADVISED TO CONSULT THE FDES ENVIRONMENT STATISTICS SELF ASSESSMENT TOOL (ESSAT) AND THE BASIC SET OF ENVIRONMENT STATISTICS, SEE <https://unstats.un.org/unsd/envstats/fdes.csh>**  
5  
6  
7 **COMPONENT 1** **COMPONENT 2** **COMPONENT 3**  
8  
9  
10 **NAVIGATION BUTTONS**  
11  
12 **COMPONENT 4** **COMPONENT 5** **COMPONENT 6**  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22

MAIN Component 1 Component 2 Component 3 Component 4 Component 5 Compr ...

Ready 100%

# Example 1 continued

## Easy navigation and sub-component selection

The screenshot displays the Microsoft Excel interface with the following data table:

	A	B	C	D	E	F	G
1		Sub Component	Topic	Statistics	Unit of measurement	Frequency of data	Data source
2	Main	Sub-component 1.1: Physical Conditions	Topic 1.1.1: Atmosphere, climate				
3							
4		Sub-component 1.1: Physical Conditions Sub-component 1.2: Land Cover, Ecosystems and Biodiversity Sub-component 1.3: Environmental Quality Sub-component 2.1: Mineral Resources Sub-component 2.2: Energy Resources Sub-component 2.3: Land Sub-component 2.4: Soil Resources Sub-component 2.5: Biological Resources					
5							
6							
7							
8							
9							

The interface includes the following elements:

- File Name:** Metadata simple.xlsx - Excel (Product Activation Failed)
- Worksheet Tabs:** MAIN, Component 1 (selected), Component 2, Component 3, Component 4, Component 5, Compr ...
- Navigation:** A blue arrow labeled "Main" points to cell B2. A dropdown menu is open in cell B4, listing sub-components 1.1 through 2.5.

# Challenges

- Building a database from the data entered into the template, e.g. database

Year	Region	Period	Min temp	Max temp	Long term average
1990		Daily			
1991		Daily			
etc					

# Further country examples

- Mauritius

The screenshot shows an Excel spreadsheet with a table of contents for Mauritius data. The spreadsheet is titled "Digest\_Env\_Yr16.xls [Compatibility Mode] - Excel (Product Activation Failed)". The table of contents is as follows:

Table ID	Description
Table 1.1	Main islets by geographical district and area, 2016
Table 1.2	Monthly Mean temperature, 2007 - 2016
Table 1.3	Monthly Mean maximum temperature, 2007 - 2016
Table 1.4	Monthly Mean minimum temperature, 2007 - 2016
Table 1.5	Mean annual rainfall by region, 2007 - 2016
Table 1.6	Monthly Mean rainfall by region, 2016
Table 1.7	Monthly (24-hourly maximum) rainfall by station, 2007 - 2016
Table 1.8	Monthly mean relative humidity (%) with extremes, 2016
Table 1.9	Mean monthly and extreme values of mean sea level atmospheric pressure at Plaisance aeronautical station, 2007 - 2016
Table 1.10	Monthly mean wind speed and highest gusts at Plaisance aeronautical station, 2007 - 2016
Table 1.11	Monthly total hours of sunshine by region and station, 2007 - 2016
Table 1.12	Gross storage capacity and characteristics of reservoirs and major lakes
Table 1.13	Percentage water level by month and reservoir, 2015 - 2016
Table 1.14	Invasive alien plant and animal species
Table 1.15	Number of mangroves planted and area covered, 2012 - 2016
Table 1.16	Fauna population, Republic of Mauritius, 2014
Table 1.17	Flora population, Republic of Mauritius, 2014

# MAURITIUS

## Simple table

Digest\_Env\_Yr16.xls [Compatibility Mode] - Excel (Product Activation Failed)

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G19

1 [Back to Table of Contents](#)

2 **Table 1.1 - Main islets by geographical district and area, 2016**

3

	Name	Geographical district	Area (ha)
4			
5	1 Serpent Island (Nature Reserve)	Riviere Du Rempart	31.6
6	2 Round Island (Nature Reserve)		168.8
7	3 Pigeon Rock (National Park)		0.63
8	4 Flat Island (Nature Reserve)		253.25
9	5 Gabriel Island (Nature Reserve)		42.21
10	6 Gunner's Quoin (Nature Reserve)		76.00
11	7 Ilot Matapan		4.96
12	8 Ilot Bemache		10.12
13	9 Ile d'Ambre (National Park)		128.00
14	10 Ilot Foumi		0.04
15	11 Ilot Aigrettes (Nature Reserve)		26.00
16	12 Islet at Pte de Flacq		0.21
17	13 Islet at Pte de Flacq		0.63
18	14 Lerique Islet		0.42
19	15 Goyaves de Chine		0.22
20	16 Bambaras Islet	0.42	
21	17 Ilot Grosse Bite	0.12	
22	18 Islets opp. P.G. Bras D'Eau	0.49	
23	19 Ilot Maino	0.42	
24	20 Ilot Vacoas (National Park)	1.36	
25	21 Ilot de la Batterie	0.62	

Table contents Main indicators t.1.1 t.1.2 1.3 1.4 t.1.5 t.1.6 t.1.7 t.1.7 contd ...

Ready 80%



# MAURITIUS COMPLEX TABLE

Digest\_Env\_Yr16.xls [Compatibility Mode] - Excel (Product Activation Failed)

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23.8

Year \ Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Mean annual temperature													
	LTM <sup>1</sup> (26.1)	LTM (26.2)	LTM (25.8)	LTM (24.9)	LTM (23.2)	LTM (21.4)	LTM (20.6)	LTM (20.7)	LTM (21.3)	LTM (22.3)	LTM (23.9)	LTM (25.3)	LTM (23.5)													
	Mean Difference from L/TM	Mean Difference from L/TM	Mean Difference from L/TM	Mean Difference from L/TM	Mean Difference from L/TM	Mean Difference from L/TM	Mean Difference from L/TM	Mean Difference from L/TM	Mean Difference from L/TM	Mean Difference from L/TM	Mean Difference from L/TM	Mean Difference from L/TM	Mean Difference from L/TM													
2007	26.8	0.7	26.6	0.4	25.6	-0.1	25.2	0.3	23.7	0.5	21.3	-0.1	21.3	0.7	20.9	0.3	21.6	0.3	22.3	0.1	24.1	0.3	25.8	0.6	23.8	0.3
2008	26.1	0.0	26.2	-0.1	25.3	-0.5	25.0	0.1	23.1	-0.1	21.3	-0.1	20.4	-0.2	21.3	0.6	21.8	0.5	22.8	0.5	24.7	0.8	25.9	0.7	23.6	0.1
2009	26.9	0.8	26.8	0.6	26.2	0.4	25.8	0.9	23.8	0.6	22.4	1.0	21.0	0.4	20.9	0.3	21.5	0.3	23.0	0.7	24.2	0.3	25.8	0.6	24.0	0.5
2010	26.4	0.4	26.9	0.7	26.5	0.7	25.3	0.4	24.4	1.2	22.8	1.4	21.0	0.4	20.8	0.2	21.4	0.1	23.2	1.0	23.8	0.0	25.3	0.1	24.0	0.5

Table contents Main indicators t1.1 t1.2 1.3 1.4 t1.5 t1.6 t1.7 t1.7 contd ...

Ready Average: 24.0 Count: 10 Sum: 240.0 100%





# NAMIBIA

## Complex table

Namibia reporting format010318 (1).xlsx - Excel (Product Activation Failed)

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B20

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	<i>Components 2: Environmental Resources and their Use</i>																			
2																				
3	[HS codes to sector as per NSA designation]																			
4	<a href="http://www.wcoomd.org/en/topics/nomenclature/instrument-and-tools/hs-nomenclature-2017-edition/hs-nomenclature-2017-edition.aspx">http://www.wcoomd.org/en/topics/nomenclature/instrument-and-tools/hs-nomenclature-2017-edition/hs-nomenclature-2017-edition.aspx</a>																			
5																				
6	<b>Table X: Imports and Exports by Value</b>																			
7	<b>Imports</b>	2010	2011	2012	2013	2014	2015	2016	2017	<b>Exports</b>	2010	2011	2012	2013	2014	2015	2016	2017		
8	<b>Minerals [identify which HS Codes are covered]</b>																			
9	Product 1																			
10	Product 2																			
11	etc																			
12																				
13																				
14	<b>Energy [identify which HS Codes are covered]</b>																			
15	Product 1																			
16	Product 2																			
17	etc																			
18																				
19																				
20	<b>Fish [identify which HS Codes are covered]</b>																			
21	Product 1																			
22	Product 2																			

NSA PHC Census Trade MoE Meteorology Solid Waste Fisheries Forestry Water CropsLivestock Energy Minerals Tourism NCRST Oti ...

Select destination and press ENTER or choose Paste

100%



# Example 2

## Graphical User Interface (GUI)

MetadataFDES

Component

Sub Component

Topic

Statistics as per FDES, e.g monthly average temperature, area of forests, etc

Unit, e.g. °C, m, ha, etc

Frequency of data availability, e.g. daily, monthly, annual, etc

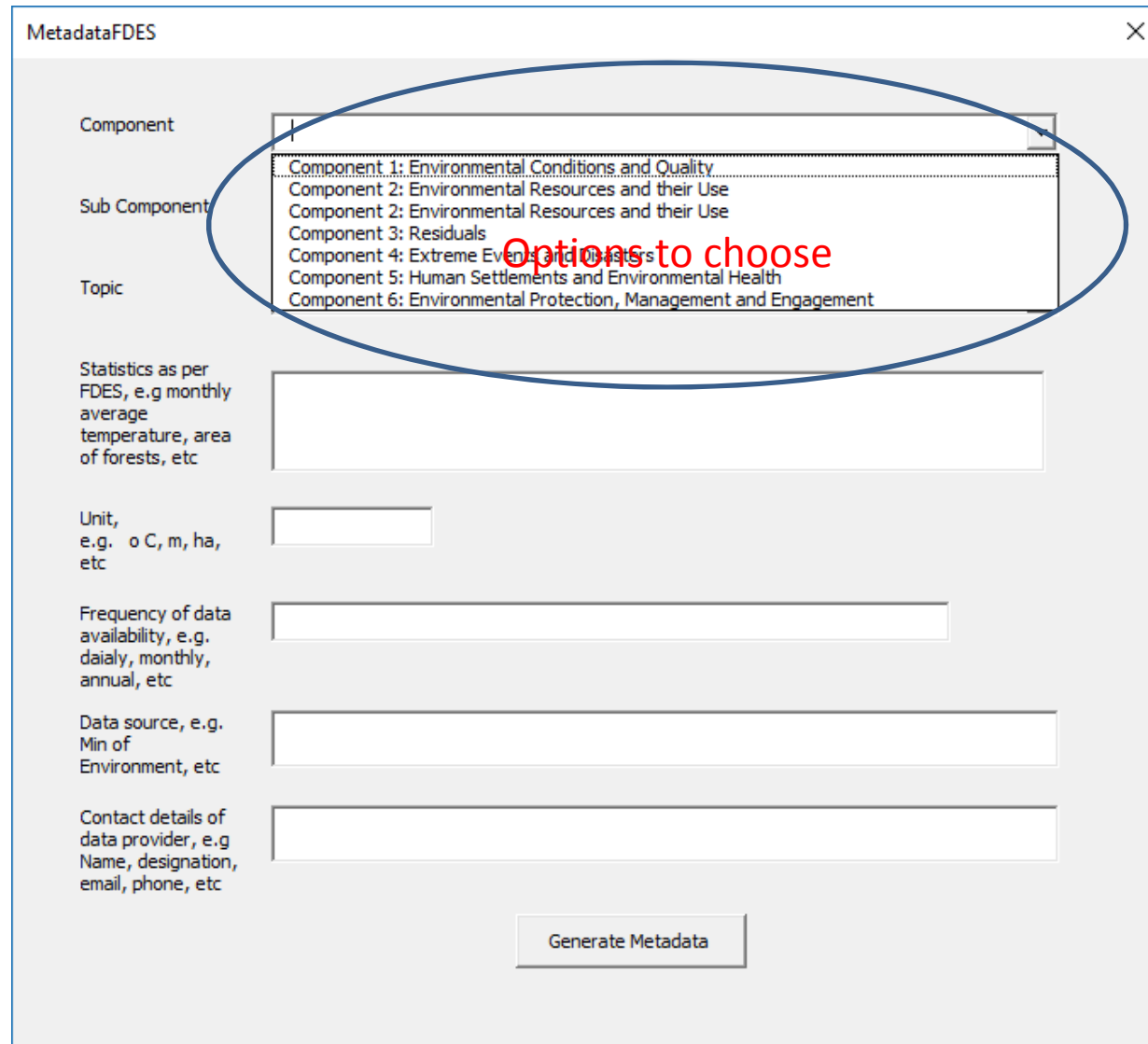
Data source, e.g. Min of Environment, etc

Contact details of data provider, e.g. Name, designation, email, phone, etc

Options to choose

Component 1: Environmental Conditions and Quality  
Component 2: Environmental Resources and their Use  
Component 2: Environmental Resources and their Use  
Component 3: Residuals  
Component 4: Extreme Events and Disasters  
Component 5: Human Settlements and Environmental Health  
Component 6: Environmental Protection, Management and Engagement

Generate Metadata

The image shows a screenshot of a web-based graphical user interface (GUI) titled "MetadataFDES". The interface is designed for generating metadata and includes several input fields and a dropdown menu. The dropdown menu, which is highlighted with a blue oval and labeled "Options to choose", lists six components: Component 1: Environmental Conditions and Quality; Component 2: Environmental Resources and their Use (listed twice); Component 3: Residuals; Component 4: Extreme Events and Disasters; Component 5: Human Settlements and Environmental Health; and Component 6: Environmental Protection, Management and Engagement. Below the dropdown menu, there are input fields for "Statistics as per FDES, e.g monthly average temperature, area of forests, etc", "Unit, e.g. °C, m, ha, etc", "Frequency of data availability, e.g. daily, monthly, annual, etc", "Data source, e.g. Min of Environment, etc", and "Contact details of data provider, e.g. Name, designation, email, phone, etc". At the bottom of the form is a button labeled "Generate Metadata".

# Challenges

- Requires special IT skills
- Time consuming to design
- Design of database to be used to extract data, e.g. using pivot tables

# Standardization

Using statistical classification helps to standardize data for:

- International data comparison
- For consistency by establishing boundaries
- Aggregations
- Allows smooth sharing of data
- Analytical tools, e.g. ISIC at its lower levels of detail can show the economic interactions taking place between the different activities, allowing understanding of the interlinkages of the production of an economy.

# Discussion points

- there are six components and most of them are different in terms data collection frequency; geographical coverage, sectoral coverage, classifications to be used and units of measurement, among other issues.
- The issues exist within and among the different components.
- How many templates do we need, for basic set or for the core set?
- How many topics can be included – should we have a priority list?
- How to choose the dis aggregation levels e.g. catchment, economic sectors, aquifer zones, region, agroecological zones and administrative units.
- Use of international definitions against national ones e.g. forest area.



**The End**

❖ **THANK YOU**

❖ **MERCI**

❖ **GRACIAS**