# The Environment Statistics Self-Assessment Tool (ESSAT)





Workshop on Environment Statistics in support of the implementation of the Framework for the Development of Environment Statistics (FDES 2013)

(Arusha, Tanzania, 6-10 July 2015)



### Background of the ESSAT

- In 2013, the 44th session of the United Nations Statistical Commission approved the work programme of the implementation of the FDES. This included the development of a tool for countries to use in assessing and diagnosing the state of environment statistics in the application of the FDES.
- The Self-Assessment Tool was developed through the experience and suggestions of collaborating countries' work in the field of environment statistics, following a process which included assistance from many countries in UNSD's Pilot of the Draft Core Set of Environment Statistics in 2012.



### What is the ESSAT

- It is a tool containing relevant information on environment statistics at the national level consistent with the scope of the FDES.
- It consists of an assessment and comparison of the Basic Set of Environment Statistics (458 statistics) contained in the FDES with, inter alia, available national environment statistics, environmental policy objectives and reporting requirements/user requests.

### Objective of the Self-Assessment Tool

#### **Main Objective:**

- To improve the ability of nations to assess where they stand with respect to the environment statistics in their country.
  - It is a means for them to assess their current position and sets a basis from which they may build their capacities to produce environment statistics.
- The Environment Statistics Self-Assessment Tool should be completed by a country's leading organisation in the field of environment statistics (commonly the NSO in collaboration with relevant institutional stakeholders (such as the Ministry of Environment or equivalent, the Ministry of Agriculture, etc.)





### ES Self-Assessment Tool Output

#### The ESSAT can:

- ✓ Help nations gauge the present state of environment statistics
- ✓ Assess the relevance of the environment statistics topics of the FDES and the environment statistics within the Basic Set at the national level
- ✓ Identify data and statistical gaps given their own resources, priorities and needs and the primary causes for such gaps
- ✓ Identify current and potential partners for convening interagency platforms/committees for ES production
- ✓ Serve as a base of knowledge from which countries may plan their own strategies and programmes of environment statistics



### Use of the ESSAT

- Information systematized by using the ESSAT can be used to elaborate a plan for the development of environment statistics based on the needs, capacities and resources of each country.
- A plan which utilises the FDES 2013 can be constructed and implemented with the participation of different agencies and partners for the statistics identified by this tool.

### Structure of the ESSAT

### Consists of 2 parts:

#### Part I: Institutional Dimension of Environment Statistics

 focuses on the overall statistical organizational structure and on specific information regarding environment statistics in terms of organization, collaboration, resources, international cooperation, uses, etc.

#### Part II: Statistics Level Assessment

 goes in more detail and it captures information concerning the whole Basic Set of Environment Statistics, up to the individual environment statistics level.



## Structure of ESSAT Part I – Institutional Dimension

- A. Identification of institutions
- B. Existing national policies relevant to the environment
- C. Mandate and organization of national statistics
- D. Mandate and organization of environment statistics
- E. Production of environment statistics
- F. Uses of environment statistics
- G. Inter-institution collaboration for the production of environment statistics
- H. Existing and required resources for environment statistics
- I. International and regional work
- J. Technical assistance and training
- K. The way forward in environment statistics



## Section B – Existing national policies relevant to the environment

 Questions aimed at understanding existing national policies and priorities relevant to the environment.

#### Questions include:

- Are there specific environmentally-relevant policies or strategies in place, such as on environmental protection/sustainability, sustainable development (national sustainable development strategy), green economy/green growth, climate change etc.?
- Rank the most important national environmental issues. (H = High importance; M = Moderate importance; L = Lesser importance; N/A = Not applicable)



## Section C – Mandate and organization of all national statistics

- Questions aimed at determining the mandate for statistics (if in existence) in a country, and which parties are responsible and involved in delivering on this mandate.
- Part C is not directly relevant to environment statistics, but rather to statistics in general.

- Is there a Statistical Act or Law in place?
- Is there a national statistical system in place?
- Which institution is responsible for the national statistical system?
   Which other institutions are included/involved?
- Is there a national statistical work plan/programme/strategy (e.g. NSDS) in place?

## Section D - Mandate and organization of environment statistics

Questions are specific to environment statistics.

- Is there an institution with a legal mandate to produce environment statistics?
- Is there a national environment statistical system in place?
- Is there a department, division or unit responsible for environment statistics in the National Statistical Office?
- Are there other institutions (e.g., Meteorological Office, Ministry of Water) that have an environment statistics department, division or unit, or that have a responsibility to collect environmental information?

### Section E – Production of environment statistics

- Is the Framework for the Development of Environment Statistics (FDES 2013) being implemented at the national level?
- Is the FDES 2013 being used or planned to be used for strengthening statistical capacity to monitor the SDGs?
- What are the regular methods of disseminating environment statistics?
- List the Multilateral Environmental Agreements (MEAs) to which environment statistics are reported.



### Section F – Uses of environment statistics

- Are environment statistics used to design and assess national policies?
- Are environment statistics used to build environmental and sustainable development indicators?
- Were environment statistics used to compile indicators of the Millennium Development Goals, (Goal 7)?



## Section G – Inter-institutional collaboration for the production of environment statistics

- Is there a committee, inter-institutional working group or task force in place to coordinate the production of environment statistics?
- Are there technical committees, inter-institutional groups or task forces focusing on specific themes/topics of environment statistics?
- Is there is a forum where producers and users of environment statistics meet and discuss issues and priorities for the country?
- What are the main barriers to collaboration among institutions for the production of environment statistics?



## Section H - Existing and required resources for environment statistics

Questions asked, include:

H1. List the resources allocated for the last available year to the environment statistics departments, divisions or units:

	Main authorities dealing with environment statistics				
	National Statistical Office	Ministry of Environment or equivalent	Other (specify) (e.g., Ministry of Fisheries/ Agriculture/ Forestry)	Other (specify) (e.g., Ministry of Fisheries/ Agriculture/ Forestry)	
Last year available information:					
(Write the year to which the information					
in the column refers to)					
Human Resources (full time-					
equivalent number of persons)					
Professional					
Support					
10 year rate of change					
Financial Resources: Executed					
budget of the last year:					
Regular budget,					
Project extra-budgetary					
resources					
Currency used:					
Financial Resources: Difference in					
executed regular budget of last year					
with respect to that of 10 years ago:					
Amount in currency:					
10 year rate of change:					
Currency used:					



### Section I – International and regional network

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### Section J – Technical assistance and training

- Has your country requested technical assistance in the field of environment statistics (e.g., short-term assistance, project proposals) or capacity building to expert organisations in the field of environment statistics (e.g., United Nations Statistics Division, UN Regional Commissions, UNEP)?
- J2. What kind of assistance has your country received in terms of technical assistance and capacity building in the field of environment statistics?

Type of assistance received	When or duration dd/mm/yy to dd/mm/yy (or ongoing)	From whom	Main focus, objectives and results



## Section K - The way forward in environment statistics

n which areas are there plans to or activities in your country?	strengthen and develop environment statistics programmes, units
Legal framework (describe)	
Institutional set up (describe)	
Budgetary resources (describe)	
Human resources (describe)	
Technical assistance and training (describe)	
Advocacy (describe)	
Other (describe)	

- What are the main vehicles through which you require technical assistance and capacity building to develop environment statistics?
- What are the most important areas where your country needs technical assistance and capacity building to develop environment statistics? [i.e. water, energy, disasters, natural resources, emissions and concentration of pollutants, environmental surveys, geographical information systems, etc.] Please specify:

## Environment Statistics Self-Assessment Tool (ESSAT) Part II

- It is a diagnostic tool, designed to allow nations to assess the status of their own Environment Statistics production/systems.
- The Self-Assessment Tool consists of a set of questions comparing the statistics in the Basic Set with available national environment statistics, environmental policy objectives and international reporting requirements
- These questionnaires are not intended for international statistic compilation.

There are six components...

**Environmental Conditions and** 

Quality

Extreme Events and Disasters

**Environment** 

Protection,

Management and Engagement

Human

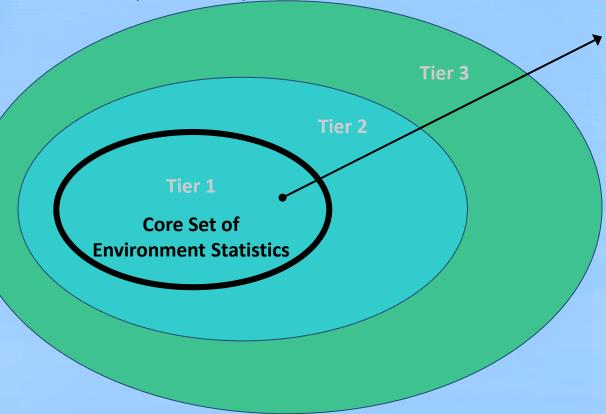
Settlements and Environmental Health 2. Environmental

**Resources and** 

their Use

Residuals

= 21 sub-components = 60 topics = 458 Basic Set Statistics, of which, 100 are Core Set Statistics



	Component 1	Component 2	Component 3	Component 4	Component 5	Component 6	Total
Tier 1	32	30	19	4	12	3	100
Tier 2	58	51	34	11	22	24	200
Tier 3	51	43	5	16	20	23	158
Total	141	124	58	31	54	50	458



### Objective of the ESSAT Part II

- To improve the capacity of countries to assess their national priorities and data availability at the topic and the statistic level.
- A means for countries to assess their current position and set a basis from which they may develop a strategy to strengthen their environment statistics programmes within the national statistical systems.



### Specific Objectives of the ESSAT Part II

- Establishing national environmental policy priorities and identifying the corresponding statistical requirements.
- Comparing the relevant elements of the Basic Set of Environment Statistics with those collected in the country in order to identify where the two sets of statistics align and where there are gaps.
- Identifying the primary reasons for any gaps which are identified.
- Develop a strategy to fill in the gaps.



Relevance of Statistic at the National Level (High /Medium /Low/Not Relevant/Not Applicable)					
Priority for National Data Collection (High /Medium /Low/Not a Priority)					
Identical	Yes	Ava of 0			
Similar	uilab Stati Stati t the ation Leve				
No		ility stic e e ial			

- Relevance refers to importance for national environmental concerns or policy considerations
- Priority (high, medium or low)
- Availability
  - Yes, identical: available nationally, exactly or very close to the one listed in the table.
  - Yes, similar: available nationally, but the statistic is not exactly the same as what is in the table
  - No: statistic is not available nationally.



		Resource constraints			
		Methodological /Technical difficulty in data collection			
	Main Reasons why Statistic is not Available	Insufficient quality			
	Please check all that apply	Accessibility			
	,	Lack of institutional set-up /coordination			
		Other (please specify):			

- Resource constraints: Refers to both financial and staff resource constraints within the environment statistics units and/or partner agencies involved in the production of each statistic
- Methodological/technical difficulty in data collection: Methodological examples: lack of methodologies including concepts, methods or classifications. Technical examples: technical problems interpreting remote sensing
- Insufficient quality: Data may not meet accepted statistical standards.
   This may relate to insufficient or non existent metadata, lack of accuracy, timelines or coherence



	Resource constraints		
	Methodological /Technical difficulty in data collection		
Main Reasons why	Insufficient quality		
Statistic is not Available Please check all that apply	Accessibility		
	Lack of institutional set-up /coordination		
	Other (please specify):		

- Accessibility: Unable to obtain data easily from responsible agency or primary source; data not available in an appropriate format
- Lack of institutional set-up / coordination: Institutional or policy barriers may present difficulty in accessing and utilizing primary data sets.
   Collaboration among necessary institutions may not be sufficient to grant adequate sharing of data or environment statistics
- Other:



Primary Institution(s) Responsible for Collecting Statistic Please check all that apply			Secondary Institution(s) Responsible for Collecting Statistic Please check all that apply		
NSO	Ministry of Environment or equivalent institution	Other (please specify):	OSN	Ministry of Environment or equivalent institution	Other (please specify):

- Primary institution: Institution who is first custodian to a statistic
- Secondary institution: Institution who then has responsibility to process data
- A distinction is made between primary and secondary institutions as in the case of water quality data, the primary institution could be a water quality monitoring station which may collect data on the concentrations of pollutants on an hourly basis. The secondary institution, for example the Ministry of Environment, may process these data into measurements of the highest 24-hour value.



#### Type of Data Source

- Statistical surveys (e.g., censuses or sample surveys of population, housing, agriculture, enterprises, households, employment, and different aspects of environment management);
- Administrative records of government and non-government agencies in charge of natural resources as well as other ministries and authorities;
- Remote sensing (e.g., satellite imaging of land use, water bodies or forest cover);
- Monitoring systems (e.g., field-monitoring stations for water quality, air pollution or climate);
- Scientific research;
- Special projects undertaken to fulfil domestic or international demand.



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National	Regional	International	Periodicity	Earliest Year Available	Latest Year Available	Format of Statistic

- Requirements: By level (national, regional, international)
- Periodicity: e.g. annual, monthly, daily, hourly
- Earliest/latest year available
- Format of statistic: e.g. in publication or report, Excel files, database, website, etc.

