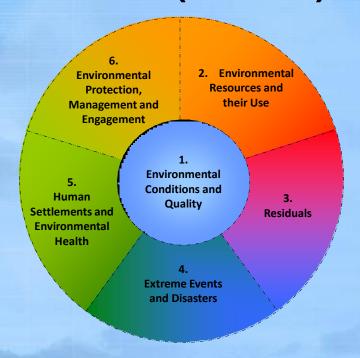


# Implementation of the FDES 2013 and the Environment Statistics Self-Assessment Tool (ESSAT)



Third Meeting of the Expert Group on Environment Statistics (EGES) (New York, 20-22 April 2016)

**Environment Statistics Section, United Nations Statistics Division** 

### Intries using the FDES for environment statistics development

essed interest/requested technical assistance to implement FDES)

Latin America and the Caribbean	Asia and the Pacific	Africa	Western Asia
Brazil	Australia	Botswana	Qatar
Bolivia	Bhutan	Burkina Faso	UAE
Chile	India	Mauritius	Gulf Cooperation Council (GCC) member states
Colombia	Indonesia	Nigeria	
Costa Rica	Nepal	Zambia	
Ecuador	Pakistan	Zimbabwe	
El Salvador	Philippines	Common Market for Eastern and Southern Africa (COMESA) member states	
Guatemala	Sri Lanka	East African Community (EAC) member states	6. Environmental Protection, Management and Engagement
Jamaica	Thailand	Economic Community of West African States (ECOWAS)	5. Human Settlements and Environmental Environmental Conditions and Quality Residuals
Mexico	Viet Nam		Health 4. Extreme Events
Trinidad and Tobago			and Disasters
IDB/INEGI/ECLAC Public Goods Project			



### How the FDES 2013 has been utilized



- Countries have used the FDES in different ways as it is a flexible and adaptable tool, prioritizing the development of what is most needed and feasible given each country's circumstances.
- The FDES has been used independently by countries, and as a basis for capacity building and technical assistance by UNSD and partner agencies, and has also been used by consultants assisting countries/regions/subregions to develop and strengthen environment statistics.
- Countries that have recently developed their environment statistics
  programmes are using the FDES structure and guidance to organize their
  own statistical databases and compendia of environment statistics
  (following the same components, sub-components, etc.)
- The FDES has been very helpful in providing guidance for countries on how to organize and develop environment statistics that are multi-purpose. This statistical series can be further utilized for compiling indicators, substantiating reports, and together with economic statistics, producing integrated accounts.



### How the FDES 2013 has been utilized

(continued)



- FDES has added value as it provides conceptual and methodological knowledge, a structure to organize statistics, as well as offers a three-tiered Basic Set of Environment Statistics (BSES), to help countries build their environment statistics in accordance to international recommendations.
- The BSES (<a href="http://unstats.un.org/unsd/environment/FDES/BasicSet.htm">http://unstats.un.org/unsd/environment/FDES/BasicSet.htm</a>) and the ESSAT (<a href="http://unstats.un.org/unsd/environment/FDES/essat.htm">http://unstats.un.org/unsd/environment/FDES/essat.htm</a>) provide a menu of statistics against which a country can identify what they need, what they have, who is producing what, enabling them to construct a national development program for environment statistics through time.
- Countries have used the FDES and its tools (e.g., BSES, ESSAT) as they complement each other. Forthcoming methodology sheets as part of the Manual on the Basic Set of Environment Statistics
   (http://unstats.un.org/unsd/environment/FDES/Manual\_BSES.htm) for each statistic of the Basic Set will be utilized as they become available.





## UNSD and the implementation of the FDES 2013



- UNSD is conducting a series of regional/ sub-regional training workshops on the FDES 2013 through its regular capacity development programmes.
- UNSD is currently engaged in two Development Account projects, one on green economy indicators covering pilot countries in the Latin American and Caribbean region and the Asian region, and the other on environment statistics covering the East African region. Both projects include training on the FDES 2013.
- The FDES 2013 is also being implemented at sub-regional levels in the Gulf Cooperation Council (GCC), Common Market for Eastern and Southern Africa (COMESA), the East African Community (EAC), the Economic Community of West African States (ECOWAS) regions.
- A Blueprint for Action, describing these and additional activities, is also available on UNSD's website at: <a href="http://unstats.un.org/unsd/statcom/doc13/BG-FDES-Environment Blueprint.pdf">http://unstats.un.org/unsd/statcom/doc13/BG-FDES-Environment Blueprint.pdf</a>



### **Background of the ESSAT**

In 2013, the 44th session of the United Nations Statistical Commission approved the Framework for the Development of Environment Statistics (FDES 2013) and the work programme for its implementation. This included the development of the Environment Statistics Self-Assessment Tool (ESSAT) for countries to use in assessing and diagnosing the state of environment statistics in the application of the FDES.

UNSD, in collaboration with the Expert Group on Environment Statistics, has since developed the ESSAT in support of the FDES 2013.





## Purpose of the ESSAT

### The purpose of the ESSAT is to assist countries in:

- developing their environment statistics programmes;
- collecting their own data on the environment; and
- assessing the state of environment statistics and the needs for their development at the national level while being consistent with the scope of the FDES 2013.





### Use of the ESSAT

The ESSAT should be used as a guide to a multi-stakeholder consultation and discussion process. The completion of the ESSAT, while usually led by the National Statistical Office or the Ministry of Environment, should be carried out as a joint effort by all main relevant stakeholders that play an active role in the production, dissemination and use of environment statistics.

It is therefore recommended that a country establishes or convenes a committee, inter-institutional working group or task force to bring together all the stakeholders to discuss and agree on a common set of responses representing the situation in the country, and that this process is carried out collaboratively in a clear and transparent manner.





## Use of the ESSAT (cont.)

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 in a sequential, modular and incremental fashion and implemented over time with the participation of different agencies and partners for the statistics as identified by this tool.

This collaboration is key not only to the well-informed assessment of the current state of environment statistics but also to the realistic identification of national priorities and the main elements of a common national environment statistics development strategy.





### Structure of the ESSAT

**Introduction** – defines background, use and structure of the ESSAT as well as key concepts. It summarizes the two parts.

Part I: Institutional Dimension of Environment Statistics – focuses on the overall institutional and organizational structure of national statistics, and on specific information regarding environment statistics in terms of policy frameworks, mandates, institutional setup, organization, collaboration, resources, international cooperation and uses.

Part II: Statistics Level Assessment – is based on the Basic Set of Environment Statistics. It follows the hierarchical structure of the FDES (in descending order: component, sub-component, statistical topic, statistic) and serves as a tool to assess the national relevance, importance, availability and sources of the individual statistics contained in the Basic Set. It also helps to identify relevant quantitative and qualitative data gaps, and to develop a plan for filling them in with a view to strengthen environment statistics according to national priorities, needs and available resources.





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

Part I contains much information which may be of interest from a managerial or policy perspective. It is divided into the following sections:

- 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-institutional collaboration for the production of environment statistics
- H. Existing and required resources for environment statistics
- I. International and regional network
- 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; NR = Not relevant; NAp = Not applicable)





## Section C – Mandate and organization of national statistics

Questions aimed at determining the mandate for statistics (if in existence) in a country, and determining the parties responsible and involved in delivering on this mandate.

Section 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 coordination of the national statistical system?
- Is there a national statistical plan/programme/strategy in place (e.g., National Strategy for the Development of Statistics)?





## Section D – Mandate and organization of environment statistics

Questions in this section focus only on 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 national 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 by the country.





## 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 include:**

H2. Are the executed resources steady, increasing or decreasing over time?

	National Statistical Office	Ministry of Environment or equivalent	Other (specify) (e.g., Ministry of Fisheries/ Agriculture/ Forestry)
Increasing			
Decreasing			
Steady			





## Section I – International and regional network

•	<ul> <li>I1. Does the National Statistical Office participate in the following?</li> <li>□ Expert Group on Environment Statistics (UNSD)</li> <li>□ Regional environment statistics expert group, committee or forum (specify)</li> </ul>
	Other (specify name)
	I2. Does the Ministry of the Environment or equivalent participate in the following?:  ☐ Expert Group on Environment Statistics (UNSD)  ☐ Regional environment statistics expert group, committee or forum (specify)
	Other (specify name)





### Section J – Technical assistance and training

- Has the country requested technical assistance (e.g., short-term assistance, project proposals) or capacity building in the field of environment statistics from organizations (e.g., United Nations Statistics Division, UN Regional Commissions, UNDP, UNEP, World Bank, regional development banks, regional institutions, international development agencies) or countries that support the development of national statistics?
- J2. What kind of assistance has the country received from organizations or countries in terms of technical assistance and capacity building in the field of environment statistics?

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





## Section K – The way forward in environment statistics

Legal framework (describe)	
Institutional set up (describe)	
Budgetary resources (describe)	
Human resources (describe)	
Technical assistance and	
training (describe)	
Advocacy (describe)	
	Institutional set up (describe)  Budgetary resources (describe)  Human resources (describe)  Technical assistance and

- What are the main vehicles through which the country requires technical assistance and capacity building to develop environment statistics?
- What are the most important areas where the country needs technical assistance and capacity building to develop environment statistics? [e.g., water, energy, disasters, natural resources, emissions and concentration of pollutants, environmental surveys, geographic information systems] Specify:





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

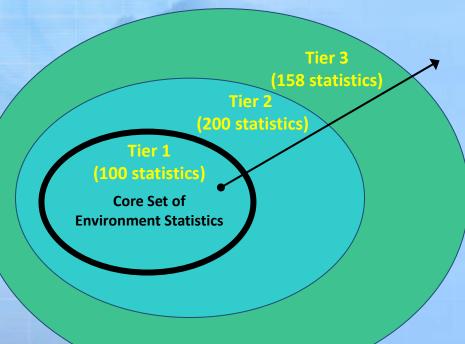
The Self-Assessment Tool Part II consists of a set of questions comparing the statistics in the Basic Set of Environment Statistics in terms of, inter alia, their national relevance, importance, availability and sources.





## Links among FDES, Basic Set and ESSAT

FDES consists of:
6 components
21 sub-components
60 topics
458 Basic Set statistics









## Objectives and Use of ESSAT Part II

- To improve the capacity of countries to assess where they stand with respect to the development of environment statistics.
- A means for countries to assess their current position and set a basis from which they may construct and/or strengthen their environment statistics programmes within the national statistical systems.





## Objectives and Use of ESSAT Part II (cont.)

### **Specific objectives of ESSAT Part II include:**

- Identifying and prioritizing those statistics that are of policy relevance to the country;
- Assessing data availability;
- Identifying sources of data and institutional partners; and
- Identifying data 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)

Availability of Statistic at the National Level (Identical/Similar/Not Available)

- Relevance refers to importance for national environmental concerns or policy considerations (High, Medium, Low, Not Relevant, Not Applicable)
- Priority for national data collection (High, Medium, Low, Not a Priority)
- Availability
  - Identical (I): available according to the concepts, definitions, classifications and methodology recommended in the FDES 2013.
  - Similar (S): available but not according to the concepts, definitions, classifications and methodology recommended in the FDES 2013.
  - Not Available (NAv): the statistic is not available nationally.



Primary
Institution(s)
Responsible for
Collecting
Statistic
Check all that
apply

Ministry of Environment or equivalent institution

NSO

Other (specify):

 Primary institution: Name of the institution responsible for collecting, processing and storing the data from the reporting units (e.g., meteorological institution for weather data).





### Type of Data Source

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





User Rep	r Req Colle ortin Stat	ments quests ction ig on istic that a	s for / this	her [specify])	ble	le	lividual records)	nt	
Sub-national	National	Regional	International	Periodicity (Annual/Monthly/Daily/Hourly/Other [specify])	Earliest Year Available	Latest Year Available	Format of Statistic (Publication/Excel/Database/Website/Individual records)	Unit of Measurement	

- Requirements: By level (subnational, national, regional (e.g., European Union, Caribbean Community), international);
- Periodicity: e.g., annual (A), monthly (M), daily (D), hourly (H), other (specify);
- Earliest/latest year available
- Format of statistic: e.g., in publication or report (P), Excel files (E), database (D), website (W), individual records not readily useable (I);
- Unit of measurement: e.g., m³, tonne, mm.



Resource constraints	Mai
Methodological/Technical difficulty in data collection	in Re is 1
Insufficient quality	asons not A :k all
Inaccessibility	s why vaila that a
Lack of institutional set-up /coordination	Stat ble apply
Other (specify):	istic

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



Resource constraints	Mai
Methodological/Technical difficulty in data collection	in Reis is a
Insufficient quality	asons not A :k all
Inaccessibility	s why vaila that a
Lack of institutional set-up /coordination	y Stat able apply
Other (specify):	istic

- Inaccessibility: 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 could 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.

