The use and application of the FDES at the national level

Workshop on Environment Statistics in support of the implementation of the Framework for the Development of Environment Statistics (FDES 2013) (Calodyne, Mauritius 26-29 January 2015)

Environment Statistics Section, United Nations Statistics Division
Countries that have used/piloted the FDES Basic Set of Environment Statistics and the draft ESSAT

- Piloted the BSES
  Developing: Belize, Botswana, Brazil, Cameroon, China, Costa Rica, Cote d’Ivoire, Cuba, Ecuador, India, Jamaica, Mauritius, Mexico, Nigeria, Philippines, Qatar, Sri Lanka, Venezuela, Vietnam, United Arab Emirates
  Developed: Hungary, Italy, Netherlands, Sweden, USA
  International organizations – Eurostat, UNEP

- Ecuador, Colombia, Indonesia, Philippines, Mongolia – more recently have been using the ESSAT Tool

- Botswana – using the FDES and Basic Set

- Arab countries in 2013 (workshop) – used the ESSAT

Countries using the FDES 2013 for environment statistics development

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<th>Americas</th>
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<th>Africa</th>
<th>Arab region</th>
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Examples of use of the FDES

**QATAR:** In 2012 Statistics Authority (since June 2013 Ministry of Development Planning and Statistics) reviewed its environment statistics according to international standards and to better match it with the national and international policy and information needs. The overall goal was to develop a single national source of environmental statistics which can be used for multiple purposes. The FDES played an important role in this process. Qatar was one of the pilot countries for the UN-FDES and feedback on some practical issues was provided to the UN and the international Expert Group. Based on the FDES, a draft Qatari Framework for Environment Statistics (QFES) was developed, specifying data providers and data collection methods, helping to bridge institutional frameworks and laying down the statistics to be collected on a regular basis. The QFES is continuously further developed in close cooperation with the key-stakeholders and fully consistent with the UN-FDES. The first data collection process under this new Framework was finished in the first half of the year 2013 and one of the first dissemination products is the Qatari environment Statistics Report 2013.
Examples of use of the FDES

• **PHILIPPINES**: The Philippines have been using the FDES as the framework for their environment statistics programme since 1999 when the Philippines Framework for the Development of Environment Statistics had been initiated. The Compendium of Environment Statistics, also based on the FDES, has been published every second year since 2000. After the adoption by the Statistical Commission of the revised FDES, training workshop has been conducted in order for Philippines to update the implementation of the FDES 2013, and at the same time to use the BSES and the ESSAT, to identify data gaps and prioritize actions to fill them in, and to test the applicability of the FDES 2013 as a framework for climate change related statistics.

• **COLOMBIA**: The National Administrative Department of Statistics “Departamento Administrativo Nacional de Estadísticas de Colombia” (DANE) has used the FDES as a guiding document for their environment statistics development, and is coordinating the development of a Strategic Plan to put into practice the Framework for the Development of Environment Statistics.
Examples of use of the FDES

• **BOTSWANA**: Statistics Botswana, through its Environment Statistics Unit (ESU), produced its first report on environment statistics in 2000. The areas covered in the report include climate, land, water, forestry, energy, agriculture, wildlife and mining. The 1984 FDES developed by UNSD was used to compile the statistics. The FDES provided the necessary guidance on what sort of data to collect and analyse, and how to organize the statistics. In the process, ESU learnt of the challenges inherent in the production of environment statistics due to its multi-disciplinary nature and it being sourced from a variety of data producers. In compiling the latest statistical reports ESU used the revised FDES 2013. The FDES 2013 was found to be well structured, flexible and easy to use. Its strength lies in the way it organizes statistics into components, sub-components, statistical topics and individual statistics. It also assisted them in identifying the main sources of data.

• **ECUADOR**: The INEC (NSO) has constructed the national system of environment statistics (SIEA) based on the guidance and the structure of components of the FDES. They have complemented this information with indicators derived from their National Development Plan.
Examples of use of the FDES

- **AUSTRALIA**: Measures of Australia's Progress (MAP) provides a digestible selection of statistical evidence about how Australians are doing. The range of statistical measures that MAP presents demonstrates change. They are grouped under three broad headings: the society, the economy and the environment. Within these broad domains, several dimensions are addressed, such as biodiversity in the environmental domain. Within the dimensions, a headline indicator is used to tell a story about the extent of progress, supported by contextual measures. The FDES 2013 has been used as one of the sources for the development of components of the environmental dimension. The Tier 1 - Core Set of Environment Statistics was used to highlight possible sets of key indicators, particularly around Environmental Conditions and Quality, and Emissions, Residuals and Waste.

- **VIETNAM**: the application of the FDES 2013 in Vietnam is related to the need for environmental data with a view to improve its National Statistical Indicator System (NSIS). For the review of the environmental indicators within the NSIS, the FDES 2013 was used as the main reference. Given the comprehensiveness of the FDES, including its Core Set of Environment Statistics organized by specific environmental themes, the revision process was greatly enhanced.
Example: System of Environment Statistics of Ecuador

http://www.ecuadorencifras.gob.ec/sistema-integrado-de-estadisticas-ambientales-siea/
Six FDES Components Of System of Environment Statistics of Ecuador

- **FDES Component 1**: Condiciones y Calidad Ambiental
  - Información Geológica y Geográfica
  - Características del Suelo
  - Biodiversidad
  - Calidad del Aire
  - Recursos Ambientales y su Uso
  - Producción y Comercio de Minerales no Energéticos
  - Producción y Consumo de Energía de Fuentes Renovables y no Renovables
  - Uso del Suelo
  - Recursos Acuáticos
  - Cultivos
  - Ganado
  - Extracción, Uso y Returns de Agua

- **FDES Component 2**: Residuos
  - Recolección y Tratamiento de Aguas Residuales
  - Descargas de Agua Residual al Ambiente
  - Gestión de Residuos: Residuos
  - Gestión de Residuos: Gestores
  - Gestión de Residuos: Instalaciones
  - Aplicación de Bioquímicos

- **FDES Component 3**: Eventos Extremos y Desastres
  - Ocurriencia de Eventos Naturales
  - Impacto de los Eventos Naturales
  - Ocurriencia de Desastres Tecnológicos
  - Impacto de los Desastres Tecnológicos

- **FDES Component 4**: Asentamientos Humanos y Salud Ambiental
  - Población Urbana y Rural
  - Acceso a Agua, Saneamiento y Energía
  - Condiciones de la Vivienda
  - Cuestiones Ambientales Específicas de los Asentamientos Urbanos
  - Enfermedades y Condiciones Transmitidas por el Aire
  - Enfermedades y Condiciones Relacionadas con el Agua
  - Enfermedades Transmitidas por Vectores
  - Problemas de Salud Asociados a la Exposición Excesiva a la Radiación Ultravioleta

- **FDES Component 5**: Protección Ambiental, Gestión y Participación/Acción Ciudadana
  - Gasto Público en Protección Ambiental y en Gestión de Recursos Naturales
  - Gasto de Empresas Privadas, Instituciones Sin Fines de Lucro y Hogares en Protección Ambiental y en Gestión

- **FDES Component 6**: Fortaleza Institucional
  - Regulación Ambiental e Instrumentos
  - Percepción y Conciencia Ambiental
Ecuador System of Environment Statistics

Area under environmental conservation and management

Nombre:
Superficie de Territorio Marino Costero Continental Bajo Conservación o Manejo Ambiental

Descripción:
Se refiere a las hectáreas del territorio marino costero que se encuentran bajo conservación o manejo ambiental, tomando en cuenta que la superficie de territorio abarca hasta los 10 km desde el punto de marea más alta.

Categoría de Medición:
Superficie

Unidad de Medida:
Miles de ha

Periodicidad:
Anual

Cobertura:
Nacional
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 individual country’s circumstances.

- The FDES have been used independently by countries, as a basis for capacity building and technical assistance by UNSD and partner agencies, and has also been used by consultants assisting countries/regions/sub-regions to develop and strengthen environment statistics.

- Countries more recently developing their environment statistics programmes are using its 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, substantiate reports and together with economic statistics produce integrated accounts.
How the FDES 2013 has been utilized

- FDES has added value as it provides conceptual and methodological knowledge, a structure to organize statistics; as well as offering a three-tiered Basic Set of Environment Statistics, to help countries build their environment statistics in accordance to international recommendations.

- The BSES and the ESSAT provide a menu of statistics against which each 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, Manual) as they complement each other. Forthcoming Methodological Sheets for each statistic of the Basic Set will be utilized as they become available.

- To increase its usefulness, countries have requested UNSD to expedite the translation of the FDES and tools to all UN languages.
UNSD and the implementation of the FDES 2013

- UNSD is conducting a series of regional and sub-regional training workshops on the FDES 2013 through its regular capacity development programmes.

- UNSD is currently engaged in two Development Account projects on green economy indicators, and on environment statistics, covering pilot countries in the Latin American and Caribbean region, Asian region and East African region. Both these projects include training on the FDES 2013.

- A Blueprint for Action, describing these and additional activities, is also available on UNSD’s website.