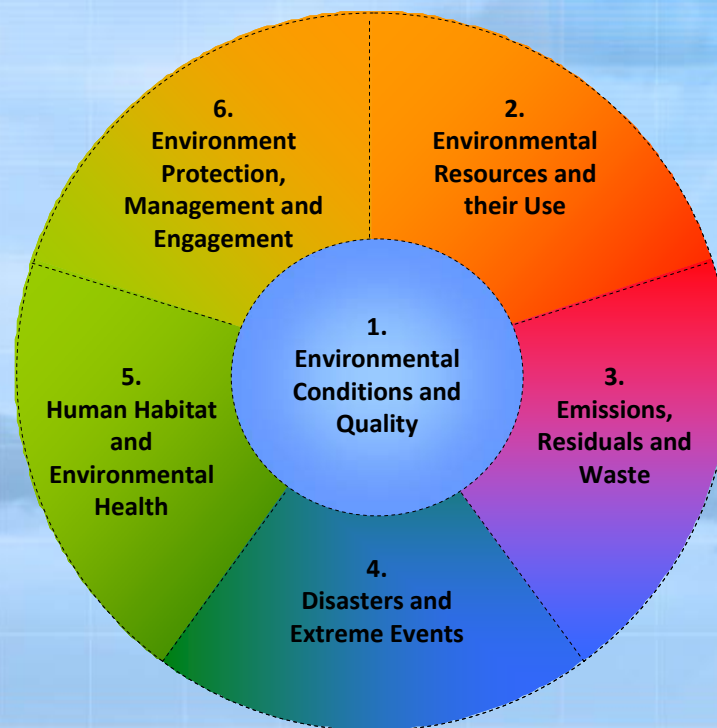


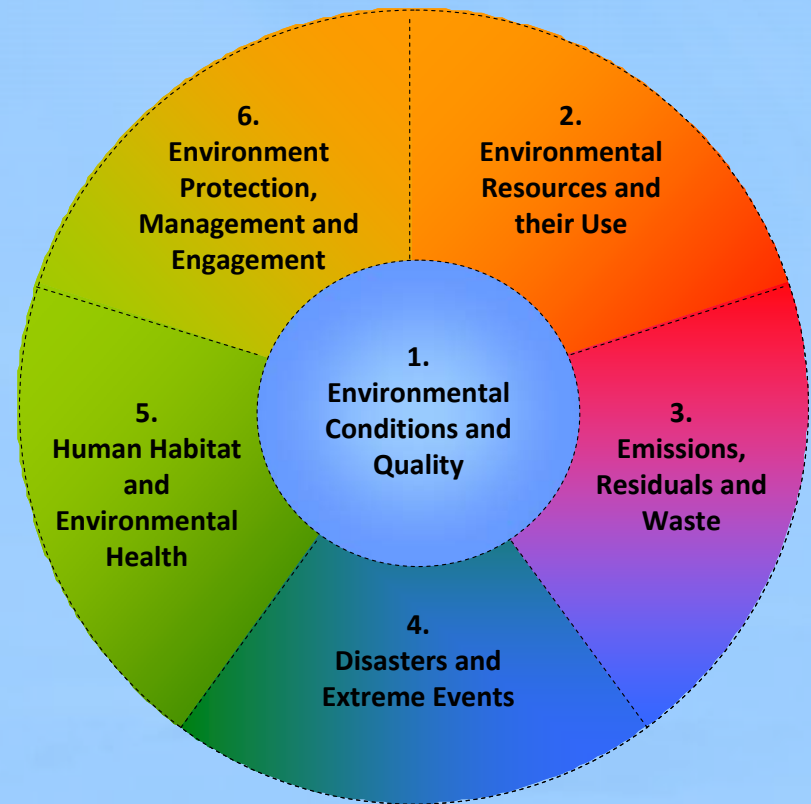


Revised Framework for the Development of Environment Statistics (FDES)



What is the FDES?

- The FDES is a flexible framework that enables and facilitates the production and development of environment statistics.
- It marks out the scope of environment statistics
- Provides an organizing structure for quantitative and qualitative statistics on the environment
- Helps identify the role of different stakeholders in the production of environment statistics

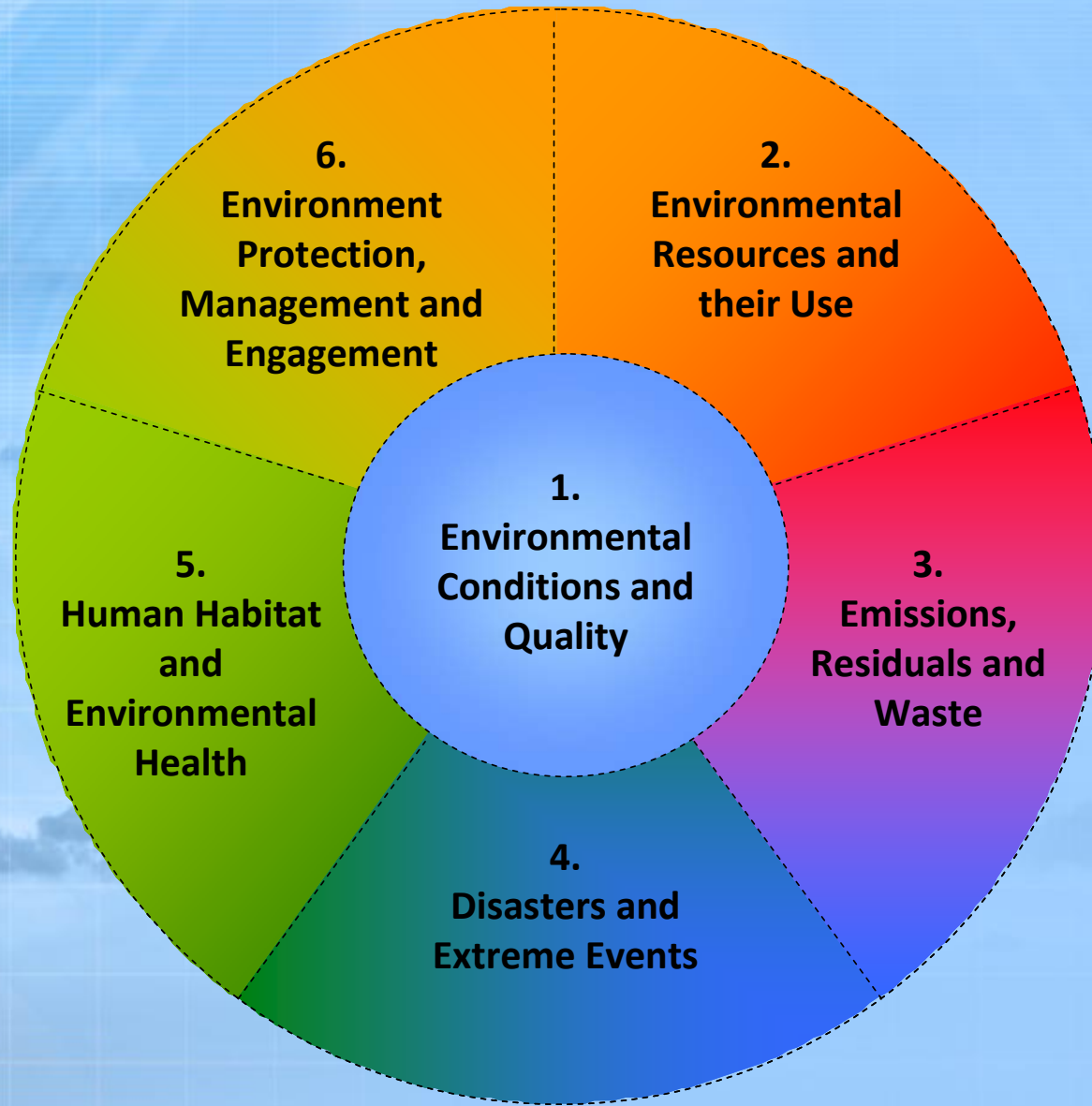


Objectives of the FDES

- **The main purpose of the revised FDES is to serve as a reference and guide for the development of environment statistics at the national, regional and international levels.**
- **The FDES is designed to provide guidance to countries in the early stages of developing environment statistics, but it can also guide the evaluation of the coverage and focus of more advanced countries.**
- **Specific objectives of the FDES include:**
 - **Identifying the main quantifiable aspects of the environment;**
 - **Identifying the components, sub-components and topics that are relevant and statistically feasible according to defined needs and priorities;**
 - **Facilitating the development of a national programme of environment statistics;**
 - **Contributing to the assessment of data requirements, sources, availability and gaps;**
 - **Guiding the development of databases that can be used for multiple purposes; and**
 - **Assisting in the co-ordination and organization of environment statistics given the inter-institutional nature of the domain.**



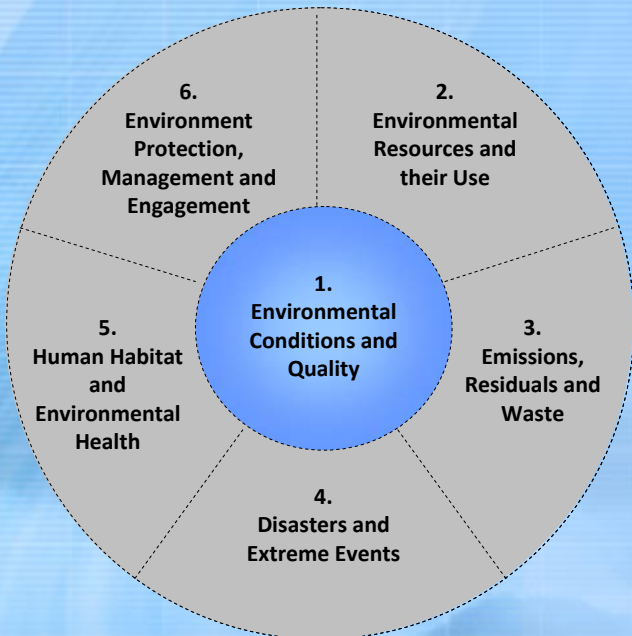
The Six Components of the FDES



The FDES is a work in progress and is subject to revision.



Component 1: [\(Link to SEEA EEA\)](#) Environmental Conditions and Quality – Subcomponents and Topics



Sub-component 1.1: Physical Conditions

Topic 1.1.1: Atmosphere, climate and weather

Topic 1.1.2: Hydrological systems

Topic 1.1.3: Geological and geographic information

Sub-component 1.2: Soil and Land Cover

Topic 1.2.1: Soil characteristics

Topic 1.2.2: Land cover

Sub-component 1.3: Biodiversity and Ecosystems

Topic 1.3.1: Biodiversity

Topic 1.3.2: Ecosystems

Topic 1.3.3: Forests

Sub-component 1.4: Environmental Quality

Topic 1.4.1: Air quality

Topic 1.4.2: Freshwater quality

Topic 1.4.3: Marine water quality

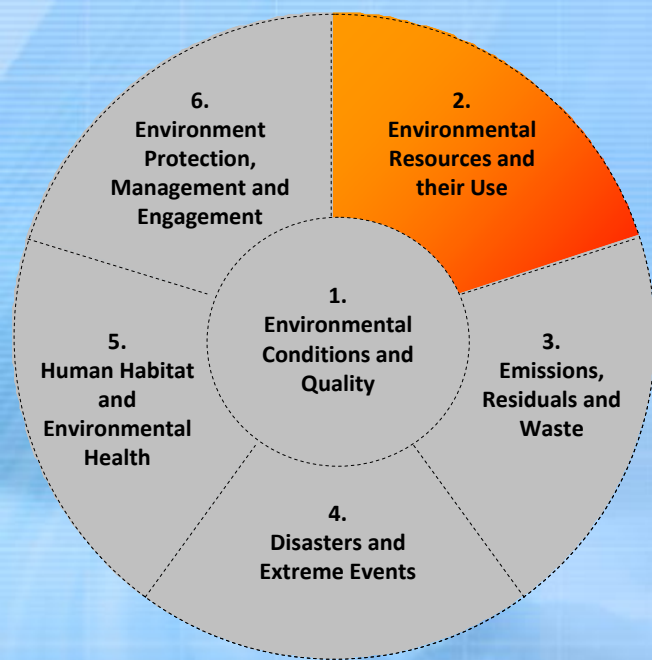
Topic 1.4.4: Soil quality

Topic 1.4.5: Noise



Component 2: (Link to SEEA CF Asset and Physical flow accounts)

Environmental Resources and their Use



Sub-component 2.1: Non-Energy Mineral Resources

Topic 2.1.1: Stocks and changes of non-energy mineral resources

Topic 2.1.2: Extraction of non-energy mineral resources and related activities

Sub-component 2.2: Energy Resources

Topic 2.2.1: Stocks and changes of mineral energy resources

Topic 2.2.2: Extraction of mineral energy resources and related activities

Topic 2.2.3: Production and use of energy resources and related activities

Sub-component 2.3: Land

Topic 2.3.1: Land use

Topic 2.3.2: Land use changes

Sub-component 2.4: Soil Resources

Topic 2.4.1: Soil Resources

Sub-component 2.5: Biological Resources

Topic 2.5.1: Timber resources and their use

Topic 2.5.2: Aquatic resources and their use

Topic 2.5.3: Crops

Topic 2.5.4: Livestock

Topic 2.5.6: Wild, uncultivated biological resources



Component 3: (Link to SEEA CF Physical flow accounts)

Residuals

Sub-component 3.1: Emissions to Air

Topic 3.1.1: Emissions to air

Sub-component 3.2: Generation, Management and Discharge of Wastewater

Topic 3.2.1: Generation and pollutant content of wastewater

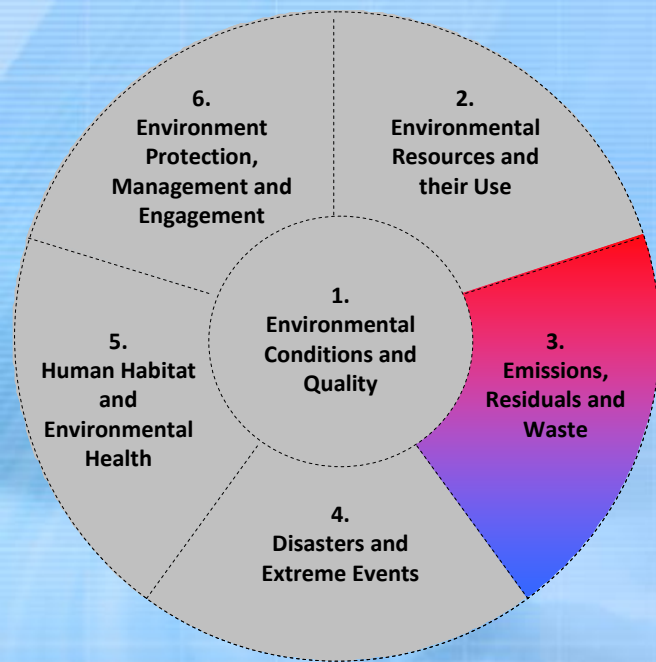
Topic 3.2.2: Collection and treatment of wastewater

Topic 3.2.3: Discharge of wastewater to the environment

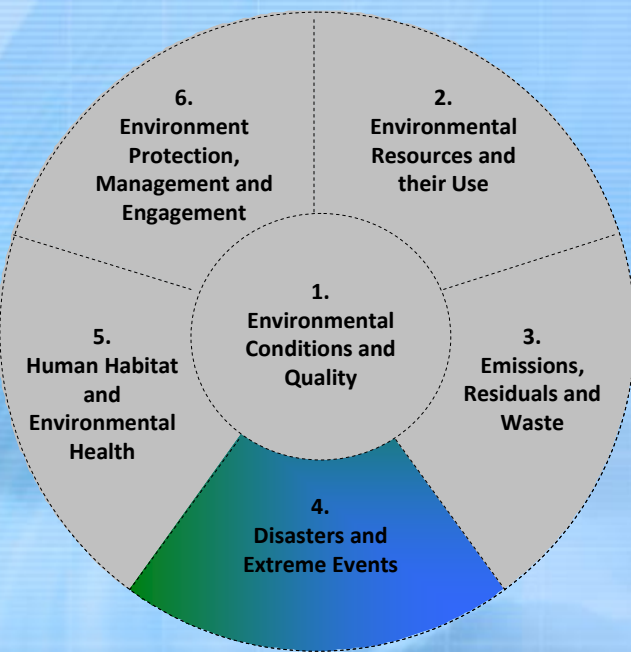
Sub-component 3.3: Generation and Management of Waste

Topic 3.3.1: Generation of waste

Topic 3.3.2: Management of waste



Component 4: Disasters and Extreme Events



Sub-component 4.1: Natural Disasters and Extreme Events

Topic 4.1.1: Occurrence of natural disasters and extreme events

Topic 4.1.2: Impact of natural disasters and extreme events

Sub-component 4.2: Anthropogenic/technological Disasters

Topic 4.2.1: Occurrence of anthropogenic/technological disasters

Topic 4.2.2: Impact of anthropogenic/technological disasters



Component 5: Human Habitat and Environmental Health

Sub-component 5.1: Human Habitat

Topic 5.1.1: Urban and rural population

Topic 5.1.2: Water and sanitation

Topic 5.1.3: Housing conditions

Topic 5.1.4: Exposure to ambient pollutants related to spatial location of population

Topic 5.1.5: Other urban habitat concerns

Sub-component 5.2: Environmental health

Topic 5.2.1: Airborne diseases and conditions

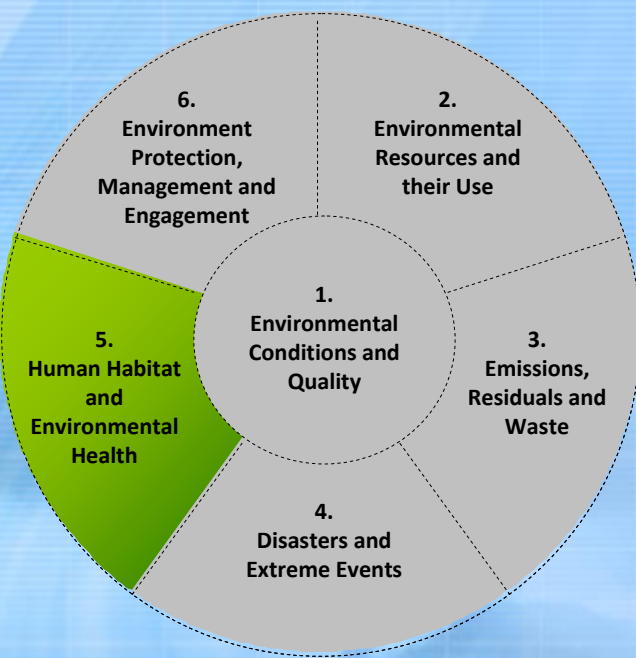
Topic 5.2.2: Water-related diseases and conditions

Topic 5.2.3: Vector-borne diseases

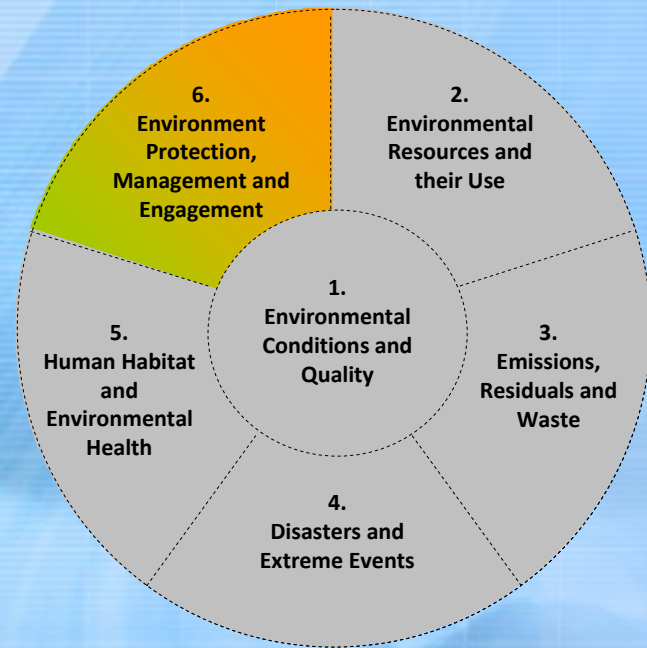
Topic 5.2.4: health problems associated with excessive UV radiation exposure

Topic 5.2.5: Toxic substance related diseases and conditions

Topic 5.2.6: Nuclear radiation related diseases and conditions



Component 6: Environment Protection, Management and Engagement



Sub-component 6.1: Environment Protection and Management Expenditure ([Link to SEEA CF Environmental activity accounts](#))

Topic 6.1.1: Government environment protection and management expenditure

Topic 6.1.2: Corporate, non-profit institution and household environment protection and management expenditure

Sub-component 6.2: Environmental Governance, Regulation and Engagement

Topic 6.2.1: Institutional strength

Topic 6.2.2: Environmental regulation and instruments ([Link to SEEA CF Environmental activity accounts](#))

Topic 6.2.3: Participation in multilateral environmental agreements (MEAs) and environmental conventions

Sub-component 6.3: Disaster Preparedness and Management

Topic 6.3.1: Disaster preparedness and management for natural disasters and extreme events

Topic 6.3.2: Disaster preparedness and management for anthropogenic/technological disasters

Sub-component 6.4: Environmental Information, Education and Perception

Topic 6.3.1: Environmental information

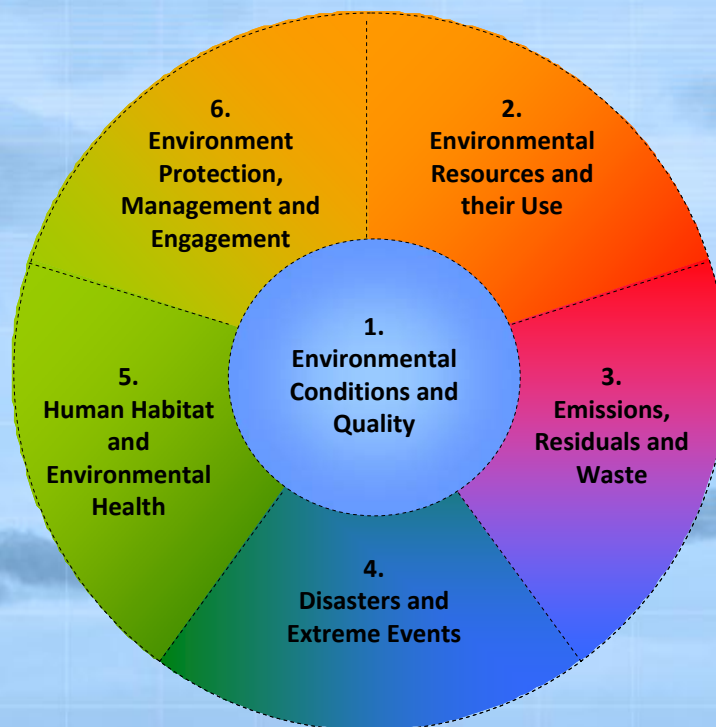
Topic 6.3.2: Environmental education and awareness

Topic 6.3.3: Environmental participation and perception





The Core Set of Environment Statistics



The Core Set of Environment Statistics is a work in progress and is subject to revision.

Objectives of the Core Set

The primary objectives of the Core Set of Environment Statistics are:

- To provide guidance to countries with limited resources and at early stages in the development of environment statistics;
- To serve as a comparable minimum set of environment statistics that most countries will be able to produce;
- To supply national and international policy-makers with the most necessary information on issues of interest to countries, but also on issues that go well beyond national boundaries;
- To facilitate the assessment of international data collection and monitoring of major global and regional indicator initiatives;
- To consider the most pertinent data needs created by global environmental conventions and MEAs; and
- To serve as the underlying statistics for deriving environmental indicators.



Pilot of the Draft Core Set of Environment Statistics

The pilot of the draft Core Set took place Aug-Oct 2012

- **The objective of the pilot was to improve the draft Core Set through the experience and suggestions of collaborating countries. Specific objectives included:**
 - **Assessing the relevance of the statistical topics;**
 - **Comparing the Core Set with national environment statistics production;**
 - **Comparing the Core Set with environment statistics required for collection by national environmental policies and international reporting requirements; and**
 - **Identifying the primary reasons for any gaps which are identified.**
- **The pilot in each country mainly consisted of a comparison of the draft Core Set with available national environment statistics, environmental policy objectives and international reporting requirements, as well as a subsequent analysis of gaps.**



Pilot of the Core Set of Environment Statistics

**25 countries
and 2
international
organizations
took part in
the pilot**

- **Both developed and developing countries, in all regions, were represented:**
 - **20 developing countries**
 - **Belize, Botswana, Brazil, Cameroon, China, Costa Rica, Cote d'Ivoire, Cuba, Ecuador, India, Jamaica, Mauritius, Mexico, Nigeria, Philippines, Qatar, Sri Lanka, Venezuela, Vietnam and United Arab Emirates**
 - **5 developed countries**
 - **Hungary, Italy, Netherlands, Sweden and the United States**
- **International organizations participating in the pilot included Eurostat and UNEP.**



Applications of the draft revised FDES as a tool to develop a programme on environment statistics

- Qatar
- Bhutan



Global Consultation on the FDES

UNSD received feedback from over 70 countries and international organizations.

The global consultation covered *general* questions, e.g.:

- Is the FDES comprehensive?
- Is the scope of the FDES adequate for the purposes of developing an environment statistics programme?
- Is the FDES relevant for national policy concerns?
- Is the FDES useful in identifying gaps in environment statistics in your country?

as well as *specific* questions chapter by chapter.



- Final revision based on feedback from the Pilot and the Global Consultation as well as on the conclusions of the EGM (5-7 November 2012) is ongoing.
- The revised FDES together with a plan for its implementation will be submitted to the 44th Session of the Statistical Commission for endorsement.





Putting the FDES to work: a Blueprint for action



Fundamental pillars of the Strategy

- I. Partnerships among global, regional and national agencies: main partners and stakeholders
- II. Methodological development and dissemination of know-how
- III. Capacity building and technical assistance to the countries in need
- IV. Networking
- V. Resource mobilization
- VI. Advocacy

Pillars are strongly interrelated and support one another



Global level - main lines of work and additional resources needed

Strategic pillar	Main lines of work	Additional resources needed	Main players
Methodological development and dissemination of know-how	Dissemination of FDES and Core Set of Environment Statistics	Increasing the speed of editing and translation of manuals and website material	UNSD with the support of the Expert Group on environment statistics can lead the finalization of methodological guidance manuals and oversee their translation to United Nations official languages.
	Development of a handbook or implementation manual for the Core Set of Environment Statistics	Expert consultants to supplement available technical resources	IWG-ENV and regional commissions can edit and finalize translation.
	Metadata for common environmental indicators		IWG-ENV and regional collaborating agencies can organize the electronic and physical dissemination of the methodological resources as they become available.
	Guidelines for building institutional capacities for environment statistics		
	Digital resources for the dissemination of methodological resources		
Capacity building and technical assist. to countries	Provide technical assistance and capacity building to regions and countries	Donor resources in a substantial proportion to finance the provision of supplementary technical resources in countries and regions.	UNSD, IWG-ENV members and regional partner agencies, together with more advanced countries, will be the main technical assistance and capacity building providers. Less advanced countries will be benefited by these actions (in an inter-agency manner).
Net-working	Construct a global network of experts and institutions working in environment statistics	Investment to develop an online forum for networking	Through the Statistical Commission and other forums by UNSD, UN agencies and other intergovernmental organizations, United Nations Regional Commissions as well as countries.
Resource mobilization	Mobilize incremental resources for capacity building and technical assistance projects	Current resources should be enough to formulate project proposals and develop new ones to secure new resources	Global partner agencies and working groups can work together to mobilize resources
Advocacy	Develop communication strategy	Production of materials to support advocacy	UNSD, global partner agencies, global working groups and interagency collaborative committees can organize and strengthen this network
	Provide materials to advocate the importance of developing improving quality of environment statistics		

Regional level of the Blueprint - main lines of work and additional resources needed

Strategic pillar	Main lines of work	Additional resources needed	Main players
Capacity building and technical assistance to the countries in need	Implement regional projects for development of environment statistics in their regions	Donor resources mobilized by international or regional sources	UNSD and regional partner agencies, together with more advanced countries, will be the main technical assistance and capacity building providers. Less advanced countries will benefit from these actions
Networking	Organize / strengthen regional working groups of environment statistics including NSOs, environmental ministries and other relevant agencies		Regional partner agencies, regional working groups and interagency collaborative committees at the national level can organize and strengthen these networks
Resource mobilization	Mobilize incremental resources for capacity building and technical assistance regional projects	Current resources should be enough to formulate project proposals and develop new ones to secure new resources	Regional partner agencies, regional working groups and NSOs and Environmental Ministries can work together to mobilize resources

National level of the Blueprint - main lines of work and additional resources needed

Strategic pillars	Main lines of work	Additional resources needed
Partnerships among global, regional and national agencies	Start/strengthen national committees for inter-institutional collaboration in the development of environment statistics	National resources have to be mobilized in order to build and/or strengthen national inter-agency organizations
Methodological development and dissemination of know-how	Start/strengthen national development of environment statistics	National resources have to be mobilized to properly fund environment statistics programmes
Capacity building and technical assistance to the countries in need	Delivering capacity building, technical assistance and networking to countries. Global and regional bodies, as well as more advanced countries will be the providers.	International/regional projects should mobilize donor resources to finance the investment of technical capacity building into the national statistical systems
Networking	Develop national capacities to integrate into or create regional and global networking	No significant additional resources are needed for networking, existing national resources should suffice
Resource mobilization	Organize and strengthen the contribution of statistical, policy/management and expert communities to contribute to the production of environment statistics	National resources have to be mobilized in order to secure the participation of the three key communities of stakeholders
Advocacy	Ensure the legal mandate and management organs that are put in place are appropriate for accomplishing the tasks at hand	National resources have to be mobilized in order to give environment statistics its prominence

The FDES and the SEEA CF (and EEA)

- The implementation of the FDES will include capacity building and technical assistance to countries, and through those activities will help countries develop a comprehensive set of environment statistics that feed different user needs and different products. It will support the development of environmental-economic accounting.
- Implementation of SEEA-CF will include capacity building and technical assistance to countries, and through those activities, environment statistics that support the compilation of the accounts will also be strengthened.
- As the FDES and the SEEA-CF are frameworks that build on and support one another, coordination of methodological work, technical assistance and capacity building for the implementation of the FDES and that of the SEEA-CF is necessary to achieve synergies of these programmes.

