



## Environment statistics

Environment statistics describe the qualitative and quantitative aspects of the state and changes of the environment and its interaction with human activities and natural events. Environment statistics are integrative, measure human activities and natural events that affect the environment, monitor the impacts on the environment and the social responses to environmental impacts. Environment statistics is an emerging statistical field in official statistics in most countries and it is indispensable for evidence based policies and decision making to support sustainable development.

### Towards a revised framework for the development of environment statistics and a core set of environment statistics

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UNSD developed a *Framework for the Development of Environment Statistics (FDES)* that was published in 1984. The FDES presented a systematic approach to the organization and development of environment statistics. It was accompanied by two technical reports which described detailed sets of statistical variables within the FDES entitled *Concepts and Methods of Environment Statistics: Human Settlements Statistics* published in 1988 and *Concepts and Methods of Environment Statistics: Statistics of the Natural Environment* published in 1991. The FDES was considered a successful framework that has been used by many countries.

The Statistical Commission at its forty-first session in 2010 endorsed a work programme to revise the FDES, based on improved scientific knowledge about the environment and new requirements created by emerging environmental concerns. Linked to the revision of the FDES a programme to develop a core set of environment statistics was also endorsed. The revision is organized over the period 2010-2012 and implemented by UNSD with the help of the Expert Group on the Revision of the FDES.

An assessment of different theories and approaches, international and country practices, and data requirements created by international conventions,

will feed into the FDES revision and provide the basis for the core set of environment statistics.

### Collection and dissemination of global environment statistics and indicators

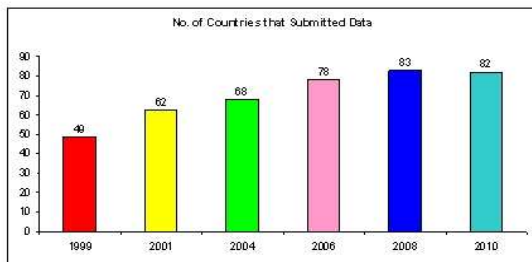
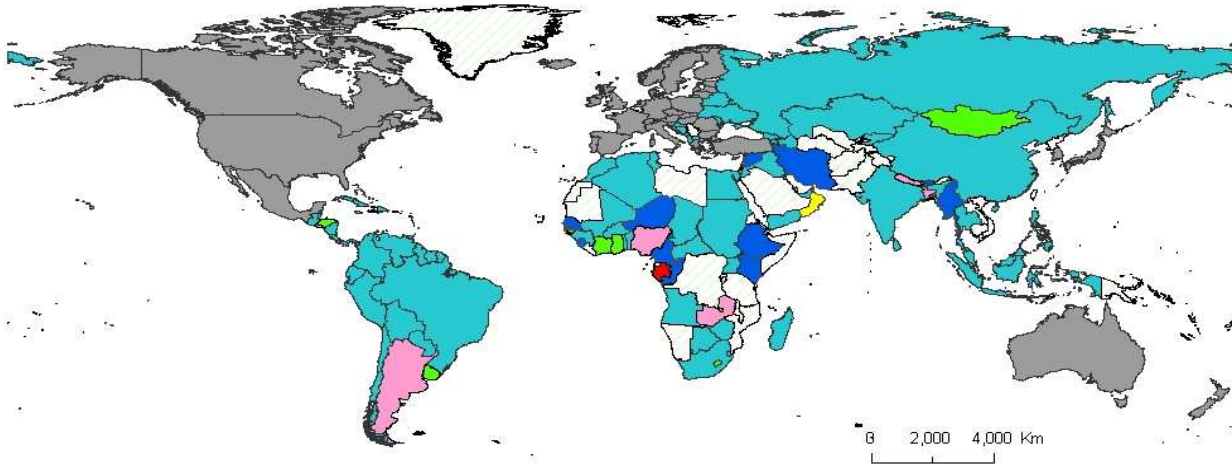
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The Statistical Commission in 1995 approved the proposal by the Intergovernmental Working Group on the Advancement of Environment Statistics that UNSD carry out a global compilation of environmental indicators from national statistical services, based on a core set of indicators. UNSD embarked on the collection of environment statistics from national statistical offices in 1999, covering all non-OECD/Eurostat countries. The data collection has since been established on a biennial basis as part of UNSD's data collection programme. UNEP joined the data collection in 2004. The most recent round of data collection took place in 2010 and the responses can be seen in the map below showing the coverage of UNSD environmental data collections. The next round of data collection from the countries will take place in 2012.

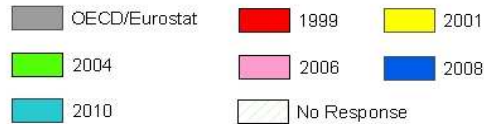
The UNSD/UNEP Questionnaire on Environment Statistics covers the areas of water, air, land and waste. The last three data collections focused on water and waste. Response rates vary strongly by region. The best response rates are from Eastern Europe, Latin America and the Caribbean, and Asia. Africa and the Pacific show low response rates.

While the number of countries responding with data to the Questionnaire has increased since 1999, many countries still have only scattered data and are able to reply only on a limited number of variables.

# Coverage of UNSD Environment Data Collections



## Most recent response year



## Technical cooperation and capacity building



Following a thorough validation process selected data sets, together with data from OECD, Eurostat and other sources, are published by UNSD through two main web-based products: the [UNSD Environmental Indicators](#) and [Country Snapshots](#).

Ten themes have been selected to organize the current set of UNSD Environmental Indicators: Air and Climate; Biodiversity; Energy and Minerals; Forests; Governance; Inland Water Resources; Land and Agriculture; Marine and Coastal Areas; Natural Disasters; and Waste. The Country Snapshots include many of the indicators from the UNSD Environmental Indicators list, as well as other economic and demographic background information.

UNSD has organized and facilitated several international, regional, sub-regional and national training workshops, meetings and seminars in the field of environmental statistics and indicators. In addition, technical assistance in environment statistics through statistical capacity building projects was provided in the CARICOM, ESCWA and ECOWAS regions. Within these projects, several activities were undertaken including workshops, inter-country study tours, and direct technical assistance to selected countries.

A major output of the CARICOM project was a regional publication entitled *The CARICOM Environment in Figures 2002*, which was followed by a second one for 2004, and the next regional compendium is planned for 2012. UNSD has continued to provide technical assistance in this subject to the CARICOM Secretariat and its Member States.

The ESCWA and ECOWAS projects resulted in the publication of detailed assessments of the situation of environment statistics in the countries of these two regions.

A strategic *Framework for Strengthening Capacity in the Development and Institutionalisation of Environment Statistics in the ECOWAS Region* was developed and is being implemented by the ECOWAS Secretariat.

Parallel with ongoing methodological work on the FDES and the core set of environment statistics UNSD is currently developing a long-term training and implementation plan to assist countries in establishing environment statistics as part of their official statistics system.

## Coordination of international activities in environment statistics

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The Statistical Commission at its thirty-fourth session in 2003 empowered UNSD to convene an Intersecretariat Working Group on Environment Statistics (IWG-ENV) to coordinate and harmonize methodological work, data collection, dissemination, training and capacity building programmes in environment statistics. The permanent members of the IWG-ENV are those organisations that have well-established international programmes on environment statistics (current members are UNSD, UN-ECE, UN-ECLAC, UN-ESCWA, UNEP, OECD, Eurostat and FAO). The IWG-ENV also works through thematic sub-groups as needed.

## Milestones in the history of environment statistics

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The United Nations Conference on the Human Environment (Stockholm, June 1972) was the first global conference to signal that environmental concerns had increasingly become the subject of mainstream socioeconomic policies

The first initiatives pertaining to the development of environment statistics at the international level stemmed from two meetings of the Economic Commission for Europe (ECE) in 1973. Given the global environmental concerns, a draft programme of international work in environment statistics was first submitted to the Statistical Commission at its eighteenth session in 1974.

The second major global conference in the environmental field was the United Nations Conference on Environment and Development (Rio de Janeiro, June 1992) where a groundbreaking consensus was achieved that strategies of sustainable development should integrate environmental issues into development plans and policies. Specific recommendations by Agenda 21 to UNSD referred to the development and

implementation of integrated environmental and economic accounting and indicators of sustainable development.

While work at UNSD concentrated on conceptual frameworks, indicators and environmental-economic accounting, the UN-ECE Statistics Division pioneered work on standard environment statistics classifications. Environment statistics programmes also started at OECD and later at Eurostat, focusing on data collection and indicator development.

In the late 1990's UNSD embarked on data collection. The first global collection of environment statistics was launched in 1999 and since then it has been established on a biennial basis.

In 2000 most countries signed the Millennium Declaration and committed themselves to reach the declaration's goals and targets by 2015, including Goal 7 on environmental sustainability, using 10 globally agreed environmental indicators to monitor progress.

The World Summit on Sustainable Development (Johannesburg, August 2002) put the emphasis on reaching specific targets in specific time frames and monitoring progress, thus reaffirming the need for statistics, indicators and integrated information systems that measure and track progress.

Ecosystem assessments, climate negotiations and discussions of measuring progress and green growth are recent developments that have a major influence on current work in environment statistics.

## Information on the Web

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**ENVSTATS**, Environment Statistics News and Notes report about national, regional and international events and developments in environment statistics at <http://unstats.un.org/unsd/environment/newsletters.htm>

For more on ongoing methodological work in environment statistics, questionnaires, indicators, country data, access to data sources and publications visit <http://unstats.un.org/unsd/environment/default.htm>

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