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Items for information: environment statistics

Environment statistics

Report of the Secretary-General

Summary

> The present report, which was prepared in accordance with Economic and Social Council decision 2015/216 and past practices, provides a summary of activities carried out in 2015, including the progress on the implementation of the Framework for the Development of Environment Statistics, development in methodological work (including the Framework toolkit), the second meeting of the Expert Group on Environment Statistics and training and capacity-building provided to regions, subregions and countries. It also lays out the workplan for 2016-2017. As the work programme includes global collection, compilation and dissemination of environment statistics and indicators, the present report provides a summary of the results of the international collections of environment statistics carried out by the Statistics Division of the Department of Economic and Social Affairs of the Secretariat from 1999 to 2013, and contains conclusions with relevance to future work (especially in relation to the Sustainable Development Goals with an emphasis on the environment). It also provides an outline of a work programme for the improvement of the regular collection, compilation and dissemination of international environment statistics. The Statistical Commission is invited to take note of the report.

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* E/CN.3/2016/1.

I. Introduction

1.   At its forty-sixth session, held from 3 to 6 March 2015, the Statistical Commission took note of the report of the Secretary-General on environment statistics (E/CN.3/2015/26), in which the Secretary-General summarized developments in the implementation of the Framework for the Development of Environment Statistics 2013, its associated technical cooperation and capacity-building activities, and the plans for 2015.

2.   The present report provides an overview of the activities carried out in 2015, including a status report of the publication and use of the Framework for the Development of Environment Statistics, the progress of methodological work, the second meeting of the Expert Group on Environment Statistics, the advancement of the application of the Framework in countries, related training and capacity-building activities, data collection activities and advocacy. It also discusses the remaining tasks and plans for the period 2016-2017. A background document to the report (see para. 18 below) contains more details on the data collection and dissemination activities carried out by the Statistics Division of the Department of Economic and Social Affairs of the Secretariat and other international organizations.

II. Activities carried out in 2015

A. Methodological work

Framework for the Development of Environment Statistics and Expert Group on Environment Statistics

3.   The Framework for the Development of Environment Statistics was submitted to the editor for a final and detailed review and submitted to copy preparation and printing in 2015. The final draft of the Framework, subject to official editing, is available from the website of the Statistics Division (http://unstats.un.org/unsd/environment/fdes.htm).

4.   Further developments in the Framework include the continuation of the work of the Expert Group on Environment Statistics, which is assisting the Statistics Division in methodological development, in particular with the Manual on the Basic Set of Environment Statistics that will provide detailed guidance on how to compile environment statistics. The Expert Group held its second meeting in New York in March 2015. The report of the meeting is available from the website of the Statistics Division (http://unstats.un.org/unsd/environment/FDES/fdes_eges2.html).

Manual on the Basic Set of Environment Statistics

5.   The Expert Group discussed the status and first batch of draft chapters of the Manual on the Basic Set of Environment Statistics. It was agreed that each methodology sheet should, among other things, focus on statistical methods used in the collection and compilation of environment statistics; give guidance on the necessary metadata to be provided when the application of the recommended methodology is not possible by a country or national definitions and classifications are used; and, when applicable, use definitions and classifications consistent with those used in international questionnaires on environment statistics.

6.   Following the circulation of the first batch of draft chapters among the Expert Group for review and comments, revised versions were discussed at the second meeting of the Expert Group and submitted to additional peer review before their finalization. Chapters containing methodology sheets for clusters of the topics covered in the Framework, subcomponents or components will be posted on the website of the Statistics Division.

Environment Statistics Self-Assessment Tool

7.   Following the endorsement of the Framework, the Environment Statistics Self-Assessment Tool was developed. The Expert Group reviewed the revised version of the Self-Assessment Tool prepared by the Statistics Division for final approval and welcomed it as a very valuable instrument for undertaking an assessment of the level of development in environment statistics, and to develop a strategy for strengthening environment statistics in a country. Depending on the national institutional set-up, either the national statistical office or the ministry of environment or the equivalent may take the leading role, and involve all the national stakeholders, in the completion of the Self-Assessment Tool.

8.   The Statistics Division has since finalized the Self-Assessment Tool (the introduction, part 1, on the institutional dimension of environment statistics; and part 2, on statistics level assessment). Countries applying the Self-Assessment Tool should be able to determine the level of policy relevance, identify national priorities, major challenges, main stakeholders and data sources, determine the availability and gaps in their environment statistics and consequently develop their environment statistics programmes. The Self-Assessment Tool has been applied successfully in regional training workshops and country initiatives. It is available in English and French from the website of the Statistics Division and is currently being translated into Arabic, Portuguese and Spanish, in collaboration with partner institutions and experts.

B.   Implementation of the Framework for the Development of Environment Statistics, according to country, training and capacity-building activities

9.   In 2015, the Statistics Division organized three separate training workshops entitled, "Environment statistics in support of the implementation of the Framework for the Development of Environment Statistics 2013". Training was received by member States of the Common Market for Eastern and Southern Africa at a session held in Mauritius in January, the East African Community (EAC) at a session held in the United Republic of Tanzania in July and the Economic Community of West African States at a session held in Togo in October. The workshops were found to be extremely useful for strengthening national capacities for the implementation of the Framework and to provide statisticians from national statistical offices and experts from ministries of environment (or equivalent institutions) with detailed knowledge and understanding of contemporary approaches to environment statistics. The workshop organized with EAC was the first activity of the United Nations Development Account project entitled "Supporting Member States in developing and strengthening environment statistics and integrated environmental-economic accounting for improved monitoring of sustainable development".

10.   The Framework is also being used in the Development Account project entitled "Supporting developing countries measure progress towards achieving a green economy" that is in progress in the Asia-Pacific and Latin American and Caribbean regions. The project is focused on strengthening national capacities to produce basic statistics, including energy, industry, agricultural and environment statistics, in support of green economy and sustainable development indicators. Regional training workshops were held in Peru and Viet Nam in 2015, the objectives of which were to provide training on selected green economy indicators and their underlying statistics, with the overall goal of strengthening national statistical capacities to produce and sustain these indicators. Furthermore, technical assistance missions were delivered to six of the eight pilot countries in 2015.

11.   The National Institute of Statistics and Geography of Mexico, together with the Economic Commission for Latin America and the Caribbean, led a regional public goods project, which was supported by the Inter-American Development Bank, to strengthen environment statistics in the region, using the Framework, the Basic Set of Environment Statistics and adapting the Environment Statistics Self-Assessment Tool to serve as an instrument for collecting data in their assessment phase of the project.

12.   To date, more than 50 countries are using the Framework in some capacity. This strong degree of interest in such a short time reflects the strong demand for this product, especially in the light of its applicability to the Sustainable Development Goals. For example, in 2015, several countries, including Brazil, Burkina Faso, Guatemala, Italy, Jamaica and Mauritius, have used the Framework in support of their environment statistics systems and outputs such as compendia, databases and so forth.

C. Data collection and dissemination activities

13.   The Statistics Division conducted its first data collection in 1999, requesting data from 168 countries and areas. Six subsequent data collection rounds have taken place, with the most recent one in 2013 requesting data from 173 countries and areas. According to the agreement between the Organization for Economic Cooperation and Development (OECD), Eurostat and the Statistics Division, the countries and areas covered by the joint OECD/Eurostat Questionnaire on the State of the Environment were not included in the data collection carried out by the Statistics Division. Both data collection processes are well coordinated and the questionnaires are fully compatible using identical definitions and classifications. Those indicators already being collected by other United Nations agencies and other international institutions were excluded from the Statistics Division/United Nations Environment Programme (UNEP) Questionnaire on Environment Statistics, wherever possible, allowing for the Statistics Division to focus its limited resources on more narrowly concentrated fields and to avoid duplication on selected tables. In the 1999, 2001 and 2004 data collection rounds, the Statistics Division obtained data on air, land, waste and water, but in harmonizing with other international collections, as of 2006, the Division has solely collected data on waste and water.

14.   Although the trend shows the receipt of more data and more countries and areas responding, it is still insufficient, given the growing demands for environment statistics. The gap between data points collected and validated against total potential

data points considering individual series and number of countries and areas responding reflects the relatively emerging nature of environment statistics, particularly in developing countries.

15. Table 1 presents a summary of the responses in the seven Statistics Division data collection rounds by year of data collection. Fluctuation in total questionnaires sent across the seven rounds is owing to newly independent countries, States Members of the United Nations gaining accession to OECD or the European Union, and so on.

Table 1
Summary of responses for all data collection rounds, 1999 to 2013

	1999	2001	2004	2006	2008	2010	2013
Total responses	49	62	68	78	83	83	81
Non-responses	119	115	90	85	88	89	92
Response rate (percentage)	29	35	43	48	49	48	47
Countries and areas that received the questionnaire	168	177	158	163	171	172	173

16. Substantial differences can be observed in the development and availability of environment statistics when the questionnaire results are analysed at the regional level. Table 2 gives a regional overview of number of responses and response rates for each data collection. Each year in table 2 refers to the year of the data collection.

Table 2
Number of responses and percentage of response rates by geographical region and year of data collection[a]

	1999		2001		2004		2006		2008		2010		2013	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Africa	8	14	13	23	22	39	16	28	21	37	23	40	21	37
Asia	20	43	21	46	20	43	24	52	27	59	25	54	22	48
Europe	10	71	9	64	7	50	12	86	11	79	10	71	11	79
Latin America and the Caribbean	11	28	18	45	19	48	27	68	23	58	25	63	27	68
Oceania	2	13	1	7	–	–	–	–	1	7	–	–	–	–
Total	**51**	**29**	**62**	**35**	**68**	**43**	**79**	**48**	**83**	**49**	**83**	**48**	**81**	**47**

[a] Response rates calculated per number of countries or areas in each geographical region on the Statistics Division M49 list as of 2013. The M49 list of countries or areas, codes and abbreviations is available from: http://unstats.un.org/unsd/methods/m49/m49alpha.htm.

17. With direct relevance to the Sustainable Development Goals, existing and future data collected by the Statistics Division will be invaluable, in particular for the Sustainable Development Goals targets that require environment statistics. Table 3 shows counts of responses for selected variables that have high relevance to Goals 6, 11 and 12. Note that the lower values for two of the wastewater variables are

attributable mainly to the fact that these data have only been collected once, which was in the data collection in 2013. All other variables have been collected multiple (in some cases, seven) times, which suggests the reason for increased responses and greater stability in time series. The count of responses for data provided in 2010, 2011 and 2012 may appear less than for the preceding years since the data for these latest three years have only been collected once (in the 2013 data collection). Years in the table refer to the year for which the data were provided. Given the importance of producing national data on water and waste for quality and informed decision-making, and that these data are extremely pertinent to monitoring the Sustainable Development Goals, it is critical to improve the production of environment statistics, and thus the great need for training and capacity-building in environment statistics.

Table 3
Count of responses by selected variables that have high relevance to the Sustainable Development Goals and targets (target number in parentheses)

	2000	*2007*	*2008*	*2009*	*2010*	*2011*	*2012*
Water							
Renewable freshwater resources (6.4.2)	26	31	25	24	17	19	17
Freshwater abstracted (6.4.1)	41	50	47	43	31	29	25
Total freshwater use (6.4.1, 6.4.2)	18	29	31	29	27	27	29
Total population supplied by water supply industry (6.1.1)	27	34	35	35	27	28	27
Total wastewater generated (6.3.1)	10	7	9	8	9	10	10
Wastewater treated in urban wastewater treatment plants (6.3.1)	20	13	13	13	14	16	15
Wastewater treated in other treatment plants (6.3.1)	7	4	5	5	5	5	5
Wastewater treated in independent treatment facilities (6.3.1)	8	1	2	2	2	2	3
Waste							
Total amount of municipal waste collected (11.6.1, 12.5.1)	38	48	47	49	37	37	40
Municipal waste managed in country (11.6.1)	26	28	31	28	21	21	23
Municipal waste managed in country (recycled) (11.6.1, 12.5.1)	15	25	26	23	17	17	18
Municipal waste managed in country (composted) (11.6.1)	12	18	19	17	14	14	20
Municipal waste managed in country (incinerated) (11.6.1)	14	21	24	21	18	19	20
Municipal waste managed in country (landfilled) (11.6.1)	23	27	30	28	26	26	29

18.   The background document to the present report provides further analysis of all water and waste variables for which data was collected in the data collection in 2013. The document also contains a tabulation of regular, international primary data collections and disseminations from national sources on environmental issues undertaken by the United Nations, its specialized agencies, intergovernmental organizations and conventions.

19.   Complementarily, the Statistics Division compiles and disseminates environmental indicators and global environment statistics on 10 indicator themes from a wide range of statistical sources. The themes and indicator tables are selected on the basis of current demands for international environment statistics and the availability of internationally comparable data. Indicator tables and charts with

relatively good quality and coverage across countries and areas, as well as links to other international data sources, are available from the website of the Statistics Division (http://unstats.un.org/unsd/environment/qindicators.htm).

D. Advocacy

Side event at the forty-sixth session of the Statistical Commission

20. A side event entitled "Strengthening environment statistics for monitoring the Sustainable Development Goals" was held during the forty-sixth session of the Statistical Commission in March 2015 in New York. During the event, it was shown that about half of the Sustainable Development Goal targets need environment statistics to calculate their potential indicators. This analysis was elaborated through a correspondence table between the Goals and their targets with the environment statistics embedded in the Basic Set of Environment Statistics contained in the Framework that was presented by the Statistics Division and discussed with the audience composed primarily of chief statisticians of national statistics offices, several of which also made presentations. All presentations are available from the website of the Statistical Commission (http://unstats.un.org/unsd/statcom/ statcom_2015/seminars/environment/default.html).

III. Plans for the period 2016-2017

21. In the period 2016-2017, work on the implementation of the Framework will focus on the following: (a) the finalization of the second batch of methodology sheets of the Manual on the Basic Set of Environment Statistics; (b) encouraging and facilitating the use of the Environment Statistics Self-Assessment Tool in countries; (c) translation of the Framework into all the official languages of the United Nations; (d) the continued development of training material and platforms in support of the implementation of the Framework in countries; (e) the continuation of the two Development Account projects and support to other training and capacity-building activities. These activities will be carried out in close collaboration with the Expert Group.

22. In addition, the following will also be undertaken by the Statistics Division: (a) the development of a repository of specialized environmental surveys and environmental questions in censuses; and (b) the eighth round of the Statistics Division/UNEP Questionnaire on Environment Statistics.

IV. Action required by the Statistical Commission

23. The Statistical Commission is invited to take note of the present report.

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