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envstats News and Notes

Environment Statistics Section
United Nations Statistics Division (UNSD)/DESA

FOCUS:

Czech Statistical Office hosted the Fourth Meeting of the Expert Group on Environment Statistics

(Contributed by Iva Ritschelová, Egor Sidorov, and Miloslava Veselá, Czech Statistical Office)

The Czech Statistical Office (CZSO) hosted the Fourth Meeting of the UN Expert Group on Environment Statistics (EGES) that took place from 3 to 5 May 2017. All previous meetings of the EGES, for which the United Nations Statistics Division (UNSD) is Secretariat, had been held in the UN headquarters in New York, USA. This year, for the first time, the meeting was held in Prague, Czech Republic, upon an agreement of Ms. Iva Ritschelová, President of the CZSO, who has been the Chairperson of the Group for several years, and Mr. Stefan Schweinfest, Director of UNSD.

The EGES consists of experts representing all regions of the world. Besides national statistical offices, there are representatives of international organisations. The meeting participants consisted of 36 experts representing 13 international organisations and a total of 17 countries.

The objective of the EGES is to support countries with the implementation of the revised Framework for the Development of the Environment Statistics (FDES 2013) by developing methodological instruments, providing practical advice, or training materials. The original FDES was developed as early as in 1984. Since that time the FDES 1984 has served a number of countries as an important tool for establishing and developing their environmental statistics systems, as well as their environmental policies. Experts of the Czech Statistical Office played a key role in the preparation of the revised FDES 2013 as well.

During the three-day event a number of issues from the field of the environment statistics were addressed. The main point of the meeting agenda in Prague was to discuss draft chapters of the Manual on the Basic Set of Environment Statistics. The main objective of the Manual is to support the implementation of the revised FDES 2013. The meeting agenda focused on discussing the chapters on environmental protection expenditure, waste, air quality, land use, and forests among others. Experts of the CZSO also took part in the meeting and presented their experiences in the above-mentioned fields.

The EGES meeting agenda also included issues of possibilities to further support the Framework. A proposal of a reporting template for the Environment Statistics Self-Assessment Tool (ESSAT) was also discussed. Plans to finalise chapters of the Manual

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that were still under development and directions of further work were dealt with as well. In the course of the three days numerous presentations demonstrated various national experiences in the collection, processing, and dissemination of the environment statistics data. In addition, due to the mandate by the 47th session of the Statistical Commission, where UNSD was requested to develop a global set of climate change statistics and indicators building on the work of the UN-ECE Task Force on Climate Change-Related Statistics and Indicators, discussions were held on this initiative in the form of working groups.

One of the sessions of the meeting focused on issues pertaining to the environmentally-related SDG indicators. Experts of the CZSO delivered a presentation on the set of indicators for the strategic framework of the Czech Republic 2030 which is a national reflection of the 2030 Agenda. Their presentation was focused on the current state of the related work and at the same time pointed out a number of unsolved issues, for instance, concerning the concrete form of the reporting mechanism. One should mention that the Environment Statistics Unit of the Czech Statistical Office is responsible for the set of indicators applied by the CZSO strategic framework of the Czech Republic 2030 assessment.

The experts positively appraised the meeting concerning both its content and organisation. UNSD expressed its deep satisfaction with the support provided by the CZSO as well as with the outcomes of the meeting. The meeting of experts was also accompanied with a varied social programme.

The CZSO Environment Statistics Unit that took active part in the meeting was established back in 1993. It was Ms. Iva Ritschelová, who actually stood behind its foundation and who headed it for several years. The original version of the FDES published in 1984 was actively applied while building the environment statistics system in the Czech Republic back in the 1990s.

At present the Environment Statistics Unit of the CZSO is responsible for three statistical surveys – waste statistics, environmental expenditure statistics and water statistics. Since 1993 the regular annual survey on waste has been carried out. The CZSO measures waste generated by businesses according to CZ-NACE and by type of waste. It also measures the municipal waste generation (i.e., waste generated by population), waste management methods by type, and waste imports and exports. In 2011 the scope of the survey was extended to include secondary raw materials.

Environmental protection investment time series are available since 1986. In 2003, based on the requirement of Eurostat, a survey on environmental protection expenditure was introduced. It is aimed at measuring both environmental protection investment and non-investment expenditures, as well as economic benefits from environmental protection activities. The data are disseminated by sector, by economic activity according to the CZ-NACE, and by the international Classification of Environmental Protection Activities and Expenditures (CEPA 2000).

Finally, water statistics of the CZSO has the tradition dating back to the 1960s. It monitors data on abstraction of surface water as well as groundwater, and on wastewater discharge into watercourses by respective groups of users. It also provides data on the production and supply of drinking water, on public water supply and sewerage systems, as well as on collection and treatment of wastewater, on the proportion of the population covered by public water supply and sewerage systems, and on wastewater treatment plants.

Compilation of environmental accounts based on existing data also forms a part of the environment statistics of the CZSO. In this area material flow accounts, environmental taxes accounts, environmental protection expenditure accounts, environmental goods and services sector accounts, and physical energy flow accounts are developed. In collaboration with the Czech Hydrometeorological Institute the CZSO also compiles the ambient air emissions accounts.

All data concerning the environment statistics produced by the CZSO are available at https://www.czso.cz/csu/czso/environment_zem.

UNSD Regular Data Collection on Environment Statistics

The UNSD/UNEP Questionnaire on Environment Statistics provides data for several SDG targets and indicators, including:

Water
6.3.1 Proportion of wastewater safely treated
6.4.1 Change in water-use efficiency over time
6.4.2 Level of water stress: freshwater withdrawal as a proportion of available water resources
Waste
11.6.1 Proportion of urban solid waste regularly collected and with adequate final discharge out of total urban solid waste generated, by cities
12.4.2 Hazardous waste generated per capita and proportion of hazardous waste treated, by type of treatment
12.5.1 National recycling rate, tons of material recycled

The Questionnaire, which is now in its eighth round of data collection, follows the request and mandate of the United Nations Statistical Commission and its Working Group on International Programmes and Coordination. Since 2006, the Questionnaire has collected data purely on the themes of Waste and Water. Consequently, this has helped build an established time series.

The UNSD/UNEP Questionnaire 2016 on Environment Statistics was sent out in November 2016 to more than 170 countries and territories, excluding OECD and European Union members (for which comparable data are collected as part of the OECD/Eurostat Joint Questionnaire on the State of the Environment). The Questionnaire was sent to both National Statistical Offices and Ministries of Environment and asked for coordination within the country. The Questionnaire was first administered in 1999 and was repeated in 2001, 2004, 2006, 2008, 2010, 2013 and 2016.

To date, about 74 countries have responded to the UNSD/UNEP Questionnaire 2016 on Environment Statistics and reminders were sent to all countries that have not yet replied. The last reminder was sent on 2 May 2017. UNSD has started validating the data and is contacting countries for further information as necessary. After validating each country's responses, the data are disseminated on the UNSD website. Indicator tables will subsequently be developed and data will also be disseminated via UNdata: http://data.un.org/.

UNSD appreciates countries' continuing support on the improvement of reliable global environment statistics. If you have any questions or comments, please send them to: envstats@un.org.

UNSD's 2017 Pilot Questionnaires on Electronic Waste and Water Quality

In 2017, UNSD is undertaking two pilot collection exercises on electronic waste (e-waste) and water quality in an effort to advance methodology in these two challenging fields. Eurostat, the Organisation for Economic Cooperation and Development (OECD), UNECE, UN Environment, and the United Nations University have all collaborated with UNSD for these pilots. 40 countries were selected by UNSD to participate in these pilots with country selection was based upon whether or not a country had already been recipient to the UNECE e-waste pilot, whether or not the country had a colleague whom UNSD knew could communicate in English, whether or not the country had identified a focal point for the regular biennial UNSD/UNEP Questionnaire on Environment Statistics (regular questionnaire), and whether or not they had replied to the 2013 round of the regular questionnaire.

UNSD is still receiving responses to these pilots and is most appreciative to those who have provided data and useful feedback. Following completion of these pilots, UNSD and its collaborating partners will be better informed at taking decision as to how to progress methodologies in e-waste and water quality in future. Variables within both pilots will be considered for addition to future rounds of the regular questionnaire.

Expert Group on Environment Statistics (see also FOCUS article)

The fourth meeting of the Expert Group on Environment Statistics (EGES) was held from 3 to 5 May 2017, organized by UNSD and hosted by the Czech Statistical Office. In attendance were some 36 participants from 17 countries, 12 international and regional

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organizations, and academia. This meeting provided opportunity for UNSD to further deliver on its mandate from the UN Statistical Commission's 44th session in 2013, which called for the establishment of an expert group on environment statistics to collaborate with UNSD in the development of the necessary methodological tools to support the implementation of the FDES 2013.

Several work areas were presented and discussed, namely:

1. The Manual on the Basic Set of Environment Statistics, the implementation of the FDES 2013 and one of its key supporting tools, the Environment Statistics Self-Assessment Tool (ESSAT) and its Reporting Template.
2. Participants detailed experiences and exchanged views on how best to implement and monitor environmentally-related SDG indicators.
3. The data collection, pilot surveys and disseminations of water and waste statistics of the UNSD, OECD and EUROSTAT, including the UNSD compilation of censuses and surveys related to environment statistics.
4. The work of the UNECE Task Force on key climate change-related statistics and indicators was presented, and discussion was held on the way forward in advancing the mandate of the 47th Statistical Commission in 2016 that UNSD develop a global set of climate change statistics and indicators, using the UNECE set as a basis.
5. A briefing was given on ongoing work of the UNECE Task Force on Waste Statistics of which UNSD is a part, the Conference of European Statisticians Task Force on Measuring Extreme Events and Disasters, the work of the Asia-Pacific Expert Group on Disaster-related Statistics and the Development Account project's 10th tranche.

The experts expressed support for the work of the UNSD on environment statistics and provided useful comments and recommendations to refine and take forward the work areas.

Updates on the Manual on the Basic Set of Environment Statistics of the FDES

The Manual on the Basic Set of Environment Statistics of the FDES complements it with detailed guidance on concepts and definitions of the statistics; relevant classifications and groupings; reference to international statistical recommendations, frameworks and standards; sources of global and regional environmental statistics and indicators; basic information on data collection to allow environmental statisticians to compile the data from line ministries into environment statistics; and suggestions on data dissemination and relevant indicators, including from the System of Environmental Accounts and the SDGs.

The methodology sheets on Mineral Resources covering Sub-component 2.1, Energy Resources covering Sub-component 2.2, and Water Resources covering Sub-component 2.6 of the FDES are available on the UNSD Environment Statistics website https://unstats.un.org/unsd/environment/FDES/Manual_BSES.htm. These provide countries with valuable guidance and references to support implementation of the FDES, and ultimately develop national statistical programmes of environment statistics and to enhance the international comparability of statistics.

The drafts of the methodology sheets on Land Cover and Land Use statistics, Forest statistics, Air Quality statistics and Environmental Protection Expenditure statistics were presented at the fourth meeting of the EGES (Prague, 3-5 May 2017). Extensive discussion was conducted in a dedicated session at the meeting and the comments received will be used to refine the draft chapters. Advanced drafts of the methodology sheets on Ecosystems and Biodiversity, Crops and Livestock, GHG Emissions, Waste, Human Settlements have been prepared and editing is well under way. Of these, Ecosystems and Biodiversity and Human Settlements have been circulated to relevant agencies for further comments. The methodology sheet on Natural Disasters is progressing and drafting will continue in line with the outcomes of the Open-ended Intergovernmental Expert Working Group on Indicators and Terminology Relating to Disaster Risk Reduction.

Update on translation of FDES supporting tools

UNSD is continually mindful of user needs of its outputs in languages other than English, and is grateful its outputs receive interest from users in both English and other languages. The Basic Set of Environment Statistics, a comprehensive, but not exhaustive, set of statistics designed to support countries developing national environment statistics programmes by helping them make decisions on priorities for statistical development, is now available in all six UN official languages (Arabic, Chinese, English, French, Russian, Spanish). The Environment Statistics Self-Assessment Tool (ESSAT) which assists countries in both developing their

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environment statistics programmes and collecting their own data on the environment, is also available in all official UN languages. Effort is being made to have both supporting tools translated into Portuguese.

UNSD is grateful to those institutions which have provided translations of these resources. The Basic Set of Environment Statistics is available in six languages at: https://unstats.un.org/unsd/environment/FDES/BasicSet.htm

The ESSAT is also available in six languages at: https://unstats.un.org/unsd/environment/FDES/essat.htm

Environment statistics and related compendia compiled applying the FDES 2013

Following the endorsement of the FDES 2013 by the United Nations Statistical Commission at its 44th session (2013) as the framework for strengthening environment statistics programmes in countries, many countries have compiled environment statistics compendia which apply the FDES 2013.

Environment statistics compendia and similar publications so far shared with UNSD are being made available on UNSD's website at https://unstats.un.org/unsd/environment/fdescompendia.html. UNSD welcomes further contributions of country compendia that apply the FDES 2013 and can be shared with the Environment Statistics Section (contact: envstats@un.org) where they may then be made available on UNSD's website. In the interest of providing context for each compendia being made available, a link to the source in addition to the PDF document should also be provided.

Compilation of environmentally-related questions in censuses/surveys and of specialized environmental surveys

UNSD continues to receive contributions of censuses and surveys from experts in the field of environment statistics from various countries around the world. The censuses and surveys are being made available for information and to help improve environment statistics collections, and analysis of environment statistics. Censuses and surveys available cover a variety of themes all relevant to environment statistics including agriculture, air and climate, energy, environment expenditure, fisheries, waste and water. UNSD is grateful for contributions received and this repository is growing over time.

UNSD welcomes further submissions of censuses and surveys from all countries in all official UN languages and other languages. Environmentally-related censuses and surveys, and specialized environmental surveys can be shared with the Environment Statistics Section (contact: envstats@un.org) where they may then be made available at http://unstats.un.org/unsd/environment/censusesandsurveys.html. This webpage will be updated with additional censuses and surveys periodically. Additional supporting documentation to complement these censuses and surveys, such as reporting instructions, field reports, quality reports, etc., are being sought from countries, and will also be made available on UNSD's website.

UNSD's work on the development of the global set of climate change statistics and indicators

(see also FOCUS article of the 39th issue of ENVSTATS: https://unstats.un.org/unsd/environment/envpdf/Issue39.pdf)

The Statistical Commission, at its 47th session in 2016, inter alia, requested UNSD to review the set of climate change-related statistics and indicators being developed by the United Nations Economic Commission for Europe (UNECE) and consider it as a basis for developing a global set of climate change statistics and indicators, applicable to countries at various stages of development (https://unstats.un.org/unsd/statcom/47th-session/documents/Report-on-the-47th-session-of-the-statistical-commission-E.pdf). UNECE was developing this set through the Task Force on a Set of Key Climate Change-related Statistics.

UNSD introduced this work of developing the global set of climate change statistics and indicators at the third meeting of the Expert Group on Environment Statistics (EGES) that was held in New York in April 2016 (https://unstats.un.org/unsd/environment/FDES/fdes_eges3.html). However, given that the UNECE's set of indicators was to be submitted to the 65th session of the Conference of European Statisticians (CES) plenary session in Geneva (19-21 June 2017) for endorsement (the set was approved, but as an initial set, subject to further refinement - see UNECE article under Regional News for the outcomes), UNSD had decided to wait for this

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endorsement before fully embarking on this work at the global level. In the meantime, and in preparation for the fourth meeting of the EGES that was held in May 2017 in Prague (https://unstats.un.org/unsd/environment/FDES/fdes_eges4.html), UNSD sent out a Pilot Survey on Climate Change-related Statistics and Indicators to test the UNECE set of climate change-related statistics and indicators with the EGES developing countries, and also with a few other countries. Responses to the Pilot Survey are still being received by UNSD.

Based on the responses to the survey, in consultation with countries and experts, and in coordination with the work that UNECE will undertake in relation to refining their set of indicators, UNSD will ultimately send out a list of indicators for global consultation. UNSD is also considering presenting a work plan outlining UNSD's activities and plans to the 49th session of the Statistical Commission in 2018.

Development Account Project on "Supporting Member States in Developing and Strengthening Environment Statistics and Integrated Environmental-Economic Accounting for Improved Monitoring of Sustainable Development"

The Environment Statistics Section of UNSD is currently finalizing the Development Account project "Supporting Member States in developing and strengthening environment statistics and integrated environmental-economic accounting for improved monitoring of sustainable development". This project includes two modules. The Environment Statistics Section is responsible for Module A, which focuses on strengthening environment statistics in the East African Community (EAC) Secretariat and its five member states, Burundi, Kenya, Rwanda, the United Republic of Tanzania and Uganda. Module B focuses on the implementation of selected environmental-economic accounts in two Asian countries and two EAC countries.

In March 2017 UNSD concluded in Burundi a series of national missions in the five EAC member states. These missions were all composed of two activities, two days (Monday and Friday) of bilateral consultations and a national workshop for the remaining three days. The bilateral consultations with the national statistical offices (NSOs) aimed to engage in detailed discussions with the counterparts in the NSOs about the main issues regarding environment statistics in the country. The bilateral discussions on the first day led to a better understanding of the main data gaps, which could then be discussed during the workshops. The bilateral discussions on the last day examined the way forward and identified steps to be taken to finalize the work plan and fill data gaps. The main goal of the national workshops was to bring the stakeholders together to increase awareness of the need for environment statistics in the country. For this purpose, the FDES 2013 and the Environment Statistics Self-Assessment Tool (ESSAT) were used extensively in the workshops. A draft national work plan common to all EAC member states was also discussed during the workshops. The audience of the workshops included the technical staff of the NSO, Ministry of Environment and other line ministries.

Following these national missions, UNSD organized a sub-regional workshop on Environment Statistics for the East African Community Region (Arusha, United Republic of Tanzania, 27-31 March 2017). The purpose of the workshop was to discuss the progress in the implementation of the FDES 2013, review national data availability for the environmentally-related SDG indicators and other international datasets, and develop a list of regional indicators. The countries reviewed a draft compendium of environment statistics comprised of international data and data already collected by EAC, compared them to national data, and assessed how the indicators could monitor the regional environmental policies. The compendium will be revised based on the results of group discussions and finalized during the closing sub-regional workshop scheduled to take place in Arusha, Tanzania from 23 to 27 October 2017. It was noted that environment statistics had gone a long way since the beginning of the project. Back in 2015, before the opening sub-regional workshop, there were only very few people in the NSOs working on environment statistics, but in two years the teams have been increased in terms of resources. This can be seen in particular in the production of environment statistics.

UNSD embarks on online training on the FDES 2013

(see article contributed by UN-ECA under Regional News for more details)

UNSD conducted an e-training on the Framework for the Development of Environment Statistics (FDES 2013) in English and French from 8 to 29 June 2017 to assist countries in the African region to increase their awareness of the importance of environment statistics and to provide training on the FDES. The e-training was delivered over seven sessions through WebEx and was managed by the African Centre for Statistics of the United Nations Economic Commission for Africa (ECA). This e-training forms part of a capacity building programme on environment statistics for Africa which will be supported by the Development Account Project 10th Tranche focusing on the monitoring of the Sustainable Development Goals.

UNSD Side Event on Promoting Official Statistics for Monitoring Environmentally-related SDG Indicators and Climate Change at the United Nations Statistical Commission

Three separate presentations were made (one by UNSD, one by the United Nations Economic Commission for Europe (UNECE) and another by UNSD on behalf of the United Republic of Tanzania). The presentations were well received by an audience of approximately 46 people, most of whom were National Statistical Office directors or UN agency colleagues. A question and answer session revealed the audience's keen interest in the content and support for the further development of environment statistics in their countries. Comments were made in praise of the regular collaboration UNSD undertakes with countries as part of its regular biennial Questionnaire on Environment Statistics.

Mr. Marcus Newbury of UNSD presented on environmentally-related SDG indicators, UNSD's environment statistics data collection and climate change statistics. This presentation illustrated the importance of official environment statistics' relevance to SDG indicators. Reference was made to the regular biennial UNSD/UNEP Questionnaire on Environment Statistics which entered its eighth round in 2016, and an emphasis placed upon data from that collection being critical for SDGs indicators within goals 6, 11 and 12. Dissemination of collected data, response rates, 2017 pilot questionnaires on electronic waste and water quality and climate change statistics were also mentioned.

Ms. Tiina Luige and Ms. Anu Peltola of UNECE together presented on promoting official statistics related to climate change and SDGs. This presentation showed UNECE's reaction to data needs of global policies, the Conference of European Statisticians (CES) Road Map on Statistics for SDGs, promotion of the value of official statistics, CES recommendations on climate change-related statistics, climate work strands at UNECE, and a set of key climate change-related indicators.

Ms. Reena Shah of UNSD, on behalf of Dr. Albina Chuwa of the United Republic of Tanzania, presented on the Importance of Promoting Official Statistics for Monitoring Environmentally-related SDG indicators and climate change in that country. This presentation outlined key environment statistics in Tanzania, the importance of environment statistics, national efforts in promoting official statistics, the institutional framework for environmental management in Tanzania, and challenges, developments and the way forward.

Information about this side event, including PDF versions of all presentations, is available at:
https://unstats.un.org/unsd/statcom/48th-session/side-events/20170307-1M-promoting-official-statistics-for-monitoring-environmentally-related-sdg-indicators-and-climate-change/

INTERNATIONAL NEWS:

FAO NEWS

(Contributed by Francesco N. Tubiello, Silvia Cerilli and Giulia Conchedda)

Statistical Capacity Development

Montevideo, Uruguay 20-24 February 2017. FAO experts joined forces with the World Bank to train 40 national participants from the Uruguay Ministries of Agriculture, Economy and the Central Bank on national accounts and environmental-economic analyses, within the larger context of Green Growth. FAO contributed with a one-day training on the System of Environmental Economic Accounting for Agriculture Forestry and Fisheries (SEEA AFF) (http://www.fao.org/economic/ess/ess-events/greengrowth/en/). Participants were encouraged to identify core environmental and economic national statistics relevant to establish accounts to investigate the interactions between economy and environment within the agricultural sectors. In the course of the training, they learned about established reporting processes between Uruguay and FAO on core environmental statistics (Fertilizers, Pesticides, Land Use) as well as the availability of analytical data and agri-environmental indicators in FAOSTAT relevant to national analysis, such as greenhouse gas emissions, temperature change and land cover data. Participants were also provided with basic information on National Accounts and how basic environmental statistics can be used to inform and extend such accounts to allow for assessing environmental consequences of economic activity.

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Arusha, United Republic of Tanzania, 27-31 March, 2017. FAO contributed to a workshop on environment statistics for the East African Community (EAC) organized by UNSD, the National Bureau of Statistics Tanzania and the EAC Secretariat (http://www.fao.org/economic/ess/ess-events/eac2017/en/). The workshop was attended by over 30 participants from five countries: Burundi, Kenya, Rwanda, Uganda and United Republic of Tanzania. Participants learned of the data collection, analysis and dissemination processes linked to FAOSTAT environmental statistics, including their use in analyses of greenhouse gas emissions for agriculture, forestry and land use, and to develop a set of agri-environmental indicators useful for supporting national analysis relevant to the SDG process.

FAO will attend the 23rd meeting of the London Group on Environmental Accounting in **San Jose, Costa Rica** (17-20 October 2017) to present a methodological paper on Air Emissions Accounts: "Mapping IPCC greenhouse gas emissions categories to ISIC A in the SEEA AFF". The paper provides guidance on how to link statistics provided by countries to report their anthropogenic greenhouse gas (GHG) emissions to the UN Framework Convention on Climate Change (UNFCCC) to national economic activities, a step needed to better quantify the socio-economic impacts of national mitigation commitments being provided under the Climate Paris Agreement. FAO will also contribute training on environmental statistics and the SEEA AFF for the back-to-back capacity development workshop organized at the same location by the World Bank for WAVES countries.

Climate Change Relevant Statistics

- For the third year in a row, the consolidated 2017 National Inventory Report of the European Union, covering greenhouse gas inventories of its 28 member countries, used the FAOSTAT emissions database as a reference for QA/QC for its agriculture emissions estimates. The use of the FAOSTAT emissions database as a tool in GHG inventory processes is a growing practice among many countries.
- In January 2017, FAO launched a new FAOSTAT domain on 'Emissions Intensities' (http://www.fao.org/economic/ess/environment/ghgintensities/en/). It provides data on greenhouse gas emissions per unit commodity (e.g., kg CO_2eq per kg of milk, meat, eggs, etc.), by country, over the period 1961–2014. Information on the emission content of products, in addition to information on absolute emissions, is needed to better identify linkages between proposed mitigation actions in agriculture and their linkages to food production.
- Finally, UNECE and FAO will host the annual meeting of the Task Force on a Set of Core Climate Change-related Statistics, at the Rome FAO Headquarters, 3-5 Oct 2017. The meeting will have a special focus on agriculture, forestry and other land use, as well as offer two additional side events focused on climate change and SDGs (2 Oct) and disaster statistics (6 Oct).

REGIONAL NEWS:

UN-ESCWA NEWS

(Contributed by Wafa Aboul Hosn, Statistics Division, UN ESCWA)

Third Meeting of the Arab Working Group on Sustainable Development Indicators
13-15 March 2017 Geneva Hotel, Amman, Jordan

ESCWA continued its cooperation with the League of Arab States and the United Nations Environment West Asia office (ROWA), on capacity building on the sustainable development indicators of priority to the Arab region and the way forward for the Sustainable Development Goals (SDGs). The Arab meeting on Environment and Sustainable Development Indicators held its third meeting in Amman, Jordan from 13 to 15 March 2017. Representatives from Arab Ministries of Environment and National Statistical Offices as well as Regional organizations such as ACSAD and CEDARE participated. The main objective was to make the links between the Arab sustainable development indicators of priority with the SDGs and set a regional agenda for follow-up.

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The group decided to focus on environment-related SDGs as the social-related SDGs are being discussed by the working group LAS-UNFPA-ESCWA. The issues discussed in the third meeting were as follows:

1. Regional context of sustainable development indicators
2. Summary of organizations and countries on indicators
3. Reporting and assessing progress towards sustainable development
4. Assess the impact of development policies and strategies
5. Challenges of measuring sustainable development - data issues
6. Knowledge platforms and data infrastructure
7. Recommendations and conclusions of the meeting

ESCWA presented the Environment Statistics Self-Assessment Tool (ESSAT) available in Arabic for developing environment statistics at the national level within the Framework for the Development of Environment Statistics (FDES 2013) (UNSD).

ESCWA also conducted the exercise to match the indicators of the 2030 Agenda with the original 44 Arab Indicators that included social, economic and environment indicators. Working groups during the meeting reviewed the list of indicators and added 18 SDG indicators that are of priority from the SDG-environment related list of indicators.

The proposal that was discussed by the group and resulted in the agreement on the list of indicators will be presented at the Council of Arab Ministers Responsible for the Environment (CAMRE) at its next session in November 2017.

UNECE NEWS

(Contributed by Tiina Luige, Michael Nagy, Gady Saiovici and Anu Peltola)

Conference of European Statisticians' Road Map on Statistics for Sustainable Development Goals

The Conference of European Statisticians (CES) approved in June 2017 the **First Edition of the *Road Map on Statistics for Sustainable Development Goals***[1]. The Road Map is developed by a Steering Group co-chaired by Switzerland and the United States. The Road Map provides guidance to national statistical offices on establishing national mechanisms for collaboration, assessing data gaps, developing national indicators, providing data on global SDG indicators, capacity building and communication. Each section contains recommendations to national statistical offices and actions for the Steering Group.

A number of countries are setting up National Reporting Platforms (NRPs) for providing data on SDG indicators. A UNECE Task Force (chaired by Poland) is preparing a guide and description of NRPs.

Climate Change-Related Statistics

The CES approved in June 2017 an ***Initial Set of Key Climate Change-related Statistics and Indicators using the System of Environmental-Economic Accounting***. The set includes internationally comparable climate change-related indicators, aligned with SDGs and the Sendai Framework for Disaster Risk Reduction. The indicators are derived largely from SEEA, FDES and other statistical frameworks. Sixteen countries have started pilot testing the set. The UNECE Task Force (led by Italy) will continue to refine the initial set of indicators based on the outcomes of the pilot testing, and to develop methodologies, data sources and guidance for its implementation.

The next **UNECE Expert Forum for producers and users of climate change-related statistics** will take place in Rome, Italy, on 3-5 October 2017, hosted by FAO and chaired by Norway. The meeting will share experience on developing official statistics for climate reporting, focusing this year on agriculture, forestry and land use. The meeting will also discuss implementing the newly endorsed initial set of climate change indicators, measurement of disasters and extreme events, share countries' success stories in improving official statistics for climate change analysis, and experience in developing national road maps for climate change related statistics.

[1] http://www.unece.org/fileadmin/DAM/stats/documents/ece/ces/2017/CES_2-Road_Map_on_Statistics_for_SDGs_final.pdf

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A UNECE Task Force (chaired by Italy) is working on **Measuring Extreme Events and Disasters** to clarify the role of official statistics in providing data related to extreme events and disasters, and identify practical steps how national statistical offices in coordination with national agencies responsible for disaster management can support disaster management and risk reduction. The work is undertaken in close collaboration with the ESCAP Working Group on Disaster-related Statistics in Asia and the Pacific. The Task Force is also contributing to developing a monitoring system for the 2030 Sendai Framework for Disaster Risk Reduction.

Waste statistics

The CES Bureau reviewed conceptual and methodological challenges in waste statistics in October 2016[2]. As a result, a UNECE Task Force (chaired by the Netherlands) was set up to develop a conceptual framework on waste statistics and to draft a glossary of the main terms and definitions used in this area. The framework should build upon existing concepts and practices and be consistent with major international policy and statistical frameworks. The Task Force has started work on first tasks: assessing the fitness for purpose of current waste statistics and defining scope of waste statistics. The final report is planned to be presented to the CES plenary session in 2019.

Implementing the System of Environmental-Economic Accounting in the UNECE region

The third *Joint OECD/UNECE Seminar on the Implementation of SEEA* will be held in Geneva on 21-22 February 2018. The seminar will discuss SEEA implementation and policy applications, inform about SEEA-related activities of international organisations in the region, and provide an overview on the current status of SEEA implementation (based on the global assessment currently carried out by UNSD).

The UNECE Statistical Division in close cooperation with UNSD and Statistics Netherlands is organizing a "blended learning" course on SEEA for countries of Eastern Europe, Caucasus and Central Asia, consisting of a combination of online learning, webinars and a final workshop. The online training and webinars will be held in autumn 2017, the workshop is planned to take place in January 2018.

Environment statistics and indicators

Under the joint auspices of CES and the UNECE Committee on Environmental Policy, the Task Force on Environmental Statistics and Indicators assists the countries of Eastern and South-Eastern Europe, the Caucasus and Central Asia in implementing environmental indicators.

The 13th meeting of the Task Force (Geneva, 29-30 June 2017) discussed the data quality issues related to the implementation of the Shared Environmental Information System (SEIS), the nexus energy – water – agriculture, and results of the UNSD pilot data collection on water quality. The meeting recommended revisions to biodiversity and energy indicators from the *Online Guidelines for the Application of Environmental Indicators*[3]. Some methodological issues related to selected SDG indicators (e.g. material footprint) were also considered.

The presentations and background documents can be found on the meeting website http://www.unece.org/index.php?id=43950#.

The next meeting of the Task Force will be held 2-3 October 2017 in Rome (back to back with the UNECE Expert Forum on Climate Change).

EUROSTAT NEWS

(Contributed by Arturo de la Fuente, Eurostat)

An overview of Eurostat activities on environmental statistics, environmental accounts and sustainable development indicators can be found at: http://ec.europa.eu/eurostat/web/environment/overview. The following is a summary of developments in the last six months.

Sustainable Development Goals (SDGs)

Eurostat, at the 47th United Nations Statistical Commission, coordinated a common position of the European Union countries on the report of the Inter-agency and Expert Group on SDG monitoring (IAEG-SDG), thus actively contributing to the approval of the report and of the included revised list of indicators for global SDG monitoring.

[2] https://www.unece.org/fileadmin/DAM/stats/publications/2017/Issue3_Waste.pdf
[3] https://www.unece.org/env/indicators.html

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Eurostat participated as a member to the Working Groups on SDMX and on Geo-spatial information, both reporting to the IAEG-SDGs.

Eurostat, as a member of the CES Steering Group, also contributed to the preparation of the CES roadmap on statistics for SDGs, which is expected to be approved in June 2017.

Environmental statistics

The results of the 2015 OECD/Eurostat Joint Questionnaire on municipal waste are online and explained in an article. The data collections on waste statistics (generation and treatment), packaging waste, waste electric and electronic equipment, end of life vehicles and batteries are being launched with a reporting deadline of June 2017. The 2016 data collection on inland waters, including regional information, is under validation before publication in the next months.

As regards forestry statistics, data on the production and trade in wood products are being collected for 2015-2016 with the Joint Forest Sector Questionnaire. Both physical and monetary forest accounting data are being collected for the reference year 2015 with the European Forest Accounts questionnaire. All data will be published by the end of November. (http://ec.europa.eu/eurostat/web/forestry/data/database).

SEEA environmental accounts

The results of the 2016 data collections on environmental taxes, economy-wide material flow accounts, air emission accounts, environmental goods and services sector accounts, environmental protection expenditure accounts and physical energy flow accounts have been released or are being validated. All these data collections are annual and the first three are mandatory for EU Member States. For the latter three, the first mandatory data reporting is due at the end of 2017.

Eurostat published the data results (see Eurostat online database), as well as articles (see Statistics Explained pages) and other material (see dedicated section on environmental statistics), as follows: 2014 results of air emission accounts and reconciliation with UNFCCC emission inventories, 2014 results for environmental protection expenditure accounts, 2014 results of environmental taxes, 2014 results of environmental goods and services accounts, 2015 results for material flow accounts (early estimates for 2016 due in July). 2014 results of physical energy flow accounts. Tests on environmental subsidies and other transfers continue.

Eurostat co-ordinates an experimental project on an integrated system of national capital and ecosystem series accounting (KIP INCA), launched in collaboration with other EU partners. The first phase of the project, on feasibility and design, was completed in June. The final report on this phase is available here. The second phase on implementation has started, with an estimated end time of 2020.

Eurostat also facilitated training courses on environmental statistics and SEEA for European compilers on the following subjects: EGSS, EPEA, environmental taxes and transfers, PEFA and water statistics and accounts. There were courses about SDMX too. Material from past courses is available here.

Progress in Implementation of the Framework for the Development of Environment Statistics (FDES 2013) in the COMESA Member states

(Contributed by the Common Market for Eastern and Southern Africa (COMESA))

Early this year, Seychelles embarked on its implementation programme for FDES 2013. A workshop, organized jointly by the NSO and the Ministry of Environment, proved to be useful and also successful for all parties involved in environment statistics development. The event got good coverage by the media, including the national TV station. The intervention of the COMESA representatives, including the consultant, and the heads of the NSO and the line Ministry were widely covered. It was recognized by the heads of the NSO and the line Ministry that there was an urgent need to have reliable and timely environment statistics to report to a wide array of international conventions. The data collections are presently on-going, after the assessments made during the national workshop using the ESSAT Tool.

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The COMESA has now reached its third year in supporting countries to implement and strengthens Environment statistics in its member's states. The implementation has resulted in the development of environment statistics and preparations of environment statistics publications in Zimbabwe, Zambia, Ethiopia and Madagascar. Zimbabwe and Madagascar have already published their Environment Statistics report, while those for Zambia and Ethiopia are in the pipeline. This programme on the implementation of the FDES 2013 is expected to move further, by providing technical support to other member states which are willing to embark on environment statistics development programmes.

Development Account Project – 10th Tranche supporting the Capacity Building Programme on the Framework for the Development of Environment Statistics in Africa

(Contributed by Xiaoning Gong, United Nations Economic Commission for Africa)

The African Centre for Statistics (ACS) of the United Nations Economic Commission for Africa (ECA), jointly with the United Nations Statistics Division (UNSD) and the United Nations Environment Programme (UN Environment), has launched a capacity building programme on the Framework for the Development of Environment Statistics (FDES) in Africa. The FDES 2013, endorsed by the 44th session of the UN Statistical Commission as the framework for strengthening environment statistics programmes in countries, is a multi-purpose conceptual and statistical framework for the development of environment statistics. The framework sets out the scope of environment statistics, and provides an organizing structure to guide the data collection and compilation at the national level.

Implementation of the FDES will help to strengthen the current state of environment statistics in Africa, where many countries' environment statistics systems are still at an early stage of development. In general, there is limited capacity to collect, analyze, compile, and disseminate environment statistics and environmental-economic accounts. This results in a lack of data on Africa regarding the state and quality of the environment, and the interaction of the environment with economic activities and society. A strong evidence base is necessary for adequate monitoring and measurement of progress towards environmental sustainability and sustainable development.

At the same time, the demand for environment statistics is high. Not only is environmental sustainability recognized as one of the three pillars that are critically linked to human well-being in the global sustainable development agenda but also the environmental issues are urgent and increasingly aggravated in Africa. These include natural disasters, drought and changes to vegetation linked to climate change which are pushing many more people to the brink of famine. Human-environment interactions, such as rapid population growth, puts pressure on the environment through urban pollution, deforestation, and loss of top soil and depletion of underground water.

The capacity building programme is an activity of the Development Account Project – 10th tranche, which is funding capacity development projects which support monitoring of the Sustainable Development Goals, including those related to the environment. The programme comprises three phases, over a two-year period, which will combine e-training and face-to-face training in the form of regional and national workshops. It will also provide in-depth technical assistance to develop environment statistics systems through national missions to pilot countries.

The programme will support African countries to develop environment statistics in their national statistical systems. The specific objectives of the three phases are:

(a) The e-training module: to increase the awareness of the important role of environment statistics and to provide the needed knowledge of the FDES. The training targeted a broad range of environmental stakeholders within the national statistical system;

(b) The regional workshop: to deepen the technical knowledge and skills in producing, compiling, and disseminating environment statistics based on the FDES and to increase the understanding of the process of designing national action plans for improving environment statistics; and

(c) The national workshops and technical assistance missions: to identify environment statistics and indicators that are most relevant to each of the pilot countries, including their linkage to the environmentally-related Sustainable Development Goal indicators; to finalize the national action plans in discussion with national stakeholders and to compile compendia of environment statistics and indicators.

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Phase 1: e-training module

The first phase of the programme, the e-training module, was organized and managed by the African Centre for Statistics with the training conducted by UNSD. It has recently been successfully completed. The e-training module targeted a broad range of environmental stakeholders within the national statistical system and was open to any individual who was interested in environment statistics and the FDES. It was conducted in both English and French on every Tuesday and Thursday from 6 to 29 June 2017 over seven sessions through WebEx. It aimed to increase the awareness of the important role of environment statistics and to provide the needed knowledge of the FDES.

Each session consisted of a live lecture by UNSD, followed by questions and answers (Q&A). At the end of each session, one or two papers or chapters of the FDES were recommended as a reading assignment and two to three review questions were proposed to the participants, who were invited to submit to ECA their answers to the review questions by the due date. To help participants review the sessions or to catch up on sessions they may have missed, the recording of the WebEx live sessions has been posted on the e-training website (http://ecastats.uneca.org/acsweb/FocusAreas/eLearning.aspx), together with the questions and answers for both English and French sessions. All other relevant files, including presentation files, can be found on the e-training website.

At the end of the e-training, an assessment session will be held to evaluate if the participants have acquired the technical skills and to contribute to identification of the pilot countries based on the technical readiness of the country task teams and data availability. More than 200 participants from the majority of the fifty-four African countries registered for the e-training. The successful training helped to achieve the goal of promoting and elevating environment statistics and environmental accounting in the Africa region.

The training will be followed by further regional and national capacity development workshops and in-country activities to be conducted by UNSD, the ACS of ECA and UN Environment, under the DA project, to support national efforts of National Statistical Offices and Ministries of the Environment and to strengthen environment statistics units, in order to enhance capacity to produce environment statistics and raise the status of the environment statistics domain.

CARICOM is producing its Fourth Regional Environment Statistics Report

(Contributed by Philomen Harrison and Faustina Wiggins, CARICOM Secretariat)

The Caribbean Community Secretariat is finalising the production of its fourth regional environment statistics report, THE CARICOM ENVIRONMENT IN FIGURES 2014, which is scheduled to be released during the third quarter 2017. The publication follows a series of capacity-building activities that have been undertaken in the Region with the support of the ***European Union (EU) under the Tenth European Development Fund (EDF) CARICOM Single Market and Economy (CSME) and Economic Integration Programme*** to improve the production and dissemination of core environment statistics and to promote the sustainability of the integration process.

The capacity-building activities were jointly organised by the CARICOM Secretariat and the National Statistical Offices (NSOs) of Barbados, Grenada, St. Vincent and the Grenadines, Montserrat, and St. Kitts and Nevis. The in-country activities included meetings with heads of stakeholder agencies and officers supplying data to *strengthen the inter-agency collaboration*, which has been one of the mechanisms identified to enable the collection of data in environment statistics. As a result, there was greater understanding of the data available for collection at various agencies and constraints to data collection which included lack of resources, training and information sharing in some agencies. Additionally, data were compiled to fill data gaps within the CARICOM Secretariat publication. There were some agencies that had a good working relationship with the NSO and in these cases data collection by the NSO was very efficient. On the final day of each in-country activity a meeting of stakeholders was held to sensitize them on the Core Indicators and Statistics for Environment Statistics, the indicators for the Sustainable Development Goals (SDGs) and to agree on the way forward with the aim of reducing the data gaps.

The CARICOM Secretariat also convened the **Second Meeting of the Technical Working Group (TWG) for Environment Statistics in March 2017**. In attendance were representatives from Antigua and Barbuda, Barbados, Grenada, Jamaica, Montserrat, St. Kitts and Nevis and Suriname. The TWG aims to improve Environment Statistics in the CARICOM region in the context of the core data set already identified for collection in CARICOM, the SDGs, the Small Island Developing States Accelerated Modalities of Action (SAMOA) Pathway and the Strategic Plan for the Caribbean Community 2015-2019. The key results of the meeting were the development of a work plan for 2017/2018 and a review of the Assessment Report on Environment Statistics based on data submitted by NSOs. There was also a review of the core SDG indicator (Tiers 1 and 2) in the area of the Environment..

ECLAC Activities in Latin America and the Caribbean

(Contributed by the Statistics Division, Economic Commission for Latin America and the Caribbean)

ECLAC launched its Regional Capacity Building Program to strengthen environment statistics and indicators in Latin American and Caribbean (LAC) countries. This program is supported by regular budget, specific projects and the German Cooperation (GIZ/BMZ).

The ECLAC environment statistics team assists countries with a course, a workshop and a high level meeting on the construction of environment SDG indicators. The course encompasses the main challenges for Latin American countries to build the environment SDG indicators of the 2030 Agenda. Basic statistical concepts are reviewed along with international statistical recommendations (FDES and ESSAT for instance) as useful tools for the countries of the region to build their environment statistics. ECLAC's methodology for the construction of environment indicators is implemented in the workshop using their national environment data sets. High level meetings take place with sectoral ministries to strengthen national networks and to further help to establish a better interinstitutional communication.

Activities in the first stage of the 10th Tranche UN Development Account Project "Regional sub-program to strengthen the statistical capacities of Central America, Dominican Republic and Cuba for the construction and maintenance of SDG environment indicators" continued their development, jointly supported by ECLAC's regular budget and the GIZ/BMZ program.

Recent activities have focused on technical assistance missions, including national training workshops and high level/advocacy meetings, that were delivered to Guatemala (27 February to 2 March 2017) http://www.cepal.org/es/cursos/construccion-sostenimiento-indicadores-ambientales-ods-como-elemento-clave-la-planificacion, El Salvador (20 to 23 March 2017) http://www.cepal.org/es/cursos/curso-taller-metodologia-construir-sostener-indicadores-ambientales-ods and the Dominican Republic (6 to 8 June 2017). In Guatemala and El Salvador, more than 50 technical representatives and practitioners from various institutions were trained in each country. As a result, eight new environment SDG indicators in each country were compiled and their respective methodological sheets describing the indicators were completed. In addition, an inter-institutional group of practitioners can share common concepts and methodological approaches to constructing, and in the future, updating relevant indicators. Complementarily, high level meetings for advocacy/sensitization purposes about the importance of environment statistics and the challenge of SDG environment indicators in the context of the 2030 Agenda were held with the participation of ECLAC senior staff and national authorities including the NSO, the Environmental Minister and other line Ministries. During the technical assistance mission to the Dominican Republic, the first National Statistical Conference was organized by the National Statistical Office, with the objective to sensitize and discuss Environment and Climate Change SDG Indicators and Statistics, with more than 100 high level participants from government, academia and the private sector. The half-day high level conference was opened by the Minister of Planning and Economy and by the Director of the NSO, and was structured with three main panels and keynote speakers, followed by a set of stakeholder comments and keynote presenters, including a senior representative from the Dominican Republic government, the UNDP higher authority and the representative from ECLAC.

ECLAC's environment statistics team is also technically supporting the INEGI-ECLAC-IDB Regional Public Goods project "Development and Strengthening of Official Environmental Statistics through the Creation of a Regional Framework in Latin America and the Caribbean". The activities of the project are progressing very well. A regional meeting was organized in Costa Rica from 10 to 12 May 2017 focusing on the regional capacity building strategy on environment statistics that was developed and discussed with participating countries (Bahamas, Belize, Colombia, Costa Rica, Dominican Republic, Ecuador, Jamaica, Mexico, Panama, Suriname and Venezuela) and partner agencies. Later, the strategy was reviewed between 1 and 2 June 2017 in a meeting held in ECLACs headquarters. Currently, the strategy is being finalized by INEGI with all the inputs received.

Furthermore, ECLAC and UNSD supported OLADE to perform an online course on Green economy indicators that took place between 7 and 30 June 2017(http://elearning.olade.org/course/info.php?id=212) .

With regard to environmental accounting activities, ECLAC is currently in the final stage of the implementation of the 9th Tranche UN Development Account (DA) Project, "Strengthening statistical capacities for building macroeconomic and sustainable development indicators in Latin America, the Caribbean and Asian-Pacific countries". The project, which is led by ECLAC and ESCAP in their respective regions, aims at the implementation of the SEEA 2012 Central Framework. LAC pilot countries (Brazil, Colombia, Curaçao, Jamaica, Paraguay and Uruguay) were evaluated with respect to their current state of or potential for environmental accounting in 2015. In the course of 2016 and 2017 countries have received tailored support corresponding to the specific needs in their respective phase of implementation. Recent activities included for instance a one week introductory training on water accounting in Curaçao and a detailed review of preliminary results of the national water accounts in Brazil. Moreover, ECLAC was able to expand its outreach to include non-pilot countries. The Dominican Republic had requested capacity building to

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start the development of an energy account. Together with an international expert from the Wuppertal Institute, as well as the support from the World Bank's WAVES program, this training was delivered in April 2017. More than 25 technical experts from a variety of different public institutions in the Dominican Republic could benefit from this intensive course. In addition, three public officials from Costa Rica, Colombia and Paraguay joined the activity and were able to deepen their knowledge in energy accounting while sharing experiences from their respective countries (http://www.cepal.org/es/cursos/curso-introductorio-cuentas-energia).

Furthermore, the second regional workshop on environmental accounting in the framework of the 9th Tranche DA project took place in Antigua, Guatemala, 16-18 May 2017. The event was organized jointly by ECLAC, the World Bank's WAVES project and UNSD. Under the title "Sustainable Development Agendas: How energy and emission accounting can contribute to policy design and decision making", the workshop provided a platform to share the latest knowledge and exchange ideas on how energy and emission accounting can inform current policy issues directly related to the energy sector such as increasing energy access, climate change or SDGs. In addition, the workshop allowed for an exchange of experiences on the implementation (technical elaboration and policy use) as well as a discussion on the way forward and possible South-South cooperation. Forty-five experts from 13 countries and various international organizations participated (http://www.cepal.org/en/events/lac-regional-workshop-environmental-accounting-sustainable-development-agendas-how-energy-and).

ECLAC also continues the collaboration with the World Bank's WAVES project in order to promote the implementation and use of environmental accounts in the LAC region. As part of this regional cooperation program, a series of webinars was started in January 2017 with three meetings to date. Using the WEBEX system, participants can login online to learn from their counterparts, listen to international experts and discuss between each other. Topics so far included inter-institutional arrangements, recommendations for a continuous implementation, as well as the link between environmental accounts and SDG indicators. Furthermore, an online platform is currently being developed in order to foster knowledge exchange and experiences between the members of the Community of Practice (Comunidad de Cuentas Ambientales).

ESCAP NEWS

(Contributed by ESCAP's Statistics Division, ESCAP Pacific Office and ESCAP-SIAP)

Ocean statistics

Recognizing the critical importance of oceans and the fragmentation of the relevant mandates, knowledge bases and data, the73rd Session of the Economic and Social Commission for Asia and the Pacific requested the ESCAP secretariat to strengthen oceans statistics in support of SDG14: "*Continue to support current regional partnerships and develop new regional partnerships, where appropriate, for enhancing data and statistical capacities for Goal 14 in line with the document entitled 'Advancing official statistics for the 2030 Agenda for Sustainable Development: a collective vision and framework for action by the Asia-Pacific statistical community', adopted by the Committee of Statistics at its fifth session*". The short-term objective is to collaborate with partners to develop a concept paper and training module reviewing the contribution of existing frameworks to address ocean issues. Member States were requested to volunteer to participate in national pilot projects to compile and standardize available data from national, sub-regional, regional and international sources.

Strategic planning for improving environment statistics

As part of a series of sub-regional assessment/training/work planning workshops on environment statistics, two additional workshops were conducted in February 2017 for South and South-West Asia and March 2017 for East and North-East Asia. Attended by government officials from national statistical offices, environment ministries and planning departments, the workshops provided a platform for exchanging experiences as well as strengthened capacity on basic approaches to and discussed strategic planning for improving environment statistics.

Technical assistance on FDES/SEEA implementation

ESCAP provided technical assistance to a number of countries in the region to strengthen environment statistics in accordance with FDES and SEEA;

- Advisory mission to Myanmar Central Statistics Organization in collaboration with the World Wildlife Fund to advise on inventorying forest data and work planning for establishing forest accounts, 9-10 February 2017;
- Training, work planning mission to BPS Indonesia to conduct overview training for the inter-departmental stakeholder working group and work planning for ecosystem accounts, energy, material flows, land and water accounts, 6-8 March 2017
- Assessment, training and work planning mission to Bangladesh Bureau of Statistics in collaboration with UNEP/UNDP Poverty Environment Initiative (PEI) to asses data availability, conduct training and work planning in support of a pilot project linking environment and poverty, 15-17 May 2017;

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- Technical workshop with Nepal Central Bureau of Statistics to validate land accounts and plan work for forest accounts, 31 May-2 June 2017;
- Technical assistance to Thailand National Statistical Office in support of the preparation of a Natural Resources and Environment Statistics Development Plan.

Special focus on the Pacific

During the first half of 2017, SEEA implementation and related activities have progressed in the Pacific, as follows:

- Technical assistance provided to the Vanuatu National Statistics Office to complete a national assessment on environment statistics for Vanuatu, and training provided on compilation of selected SEEA accounts. The national assessment including a work plan was released in February 2017;
- In collaboration with the UNWTO, technical assistance was provided to Fiji to prepare a case study on linking tourism satellite accounts with the SEEA to account for tourism-related environment use/supply. Assessment report was released in February 2017. ESCAP also provided technical assistance to Fiji Bureau of Statistics to finalize experimental energy, water and waste accounts in February 2017;
- Technical and capacity building support provided to the Federated States of Micronesia (FSM) Statistics Division to compile experimental energy accounts at national and state levels. In addition, technical support was provided to update and finalise the national environment statistics assessment for FSM;
- A workshop was organised by Global Development Network (GDN) in association with Wealth Accounting and the Valuation of Ecosystem Services Global Partnership (WAVES) and with input from ESCAP Pacific Office, in March 2017, to take stock of natural capital accounting efforts in the Pacific and discuss strategies for sustaining progress. ESCAP provided an update on work supported thus far in the Pacific and identified plans going forward. Following on from the workshop, an online platform of the Pacific Natural Capital Accounting Network - PANCAnet – has been established and can be found at www.pancanet.org. Users include researchers, policy makers, and development partners interested in using SEEA to inform progress and development in the Pacific region.

Upcoming activities June-December 2017

- Training mission to the Philippine Statistics Authority (PSA) and interdepartmental stakeholders on FDES in support of updating the Compendium of Philippine Environment Statistics, Manila, the Philippines, 13-15 June 2017;
- Study visit to the PSA on SEEA land and forest accounting for Nepal Central Bureau of Statistics, Manila, the Philippines, 16 June 2017;
- Inter-regional experience sharing workshop on SNA and SEEA implementation, Santiago, Chile, 10-12 July 2017;
- Based on national priorities identified in the earlier environment statistics assessment, technical support will be provided to Palau to compile SEEA water and energy accounts (June/July 2017);
- Assessment, training, work planning for water and waste accounts, Malé, the Maldives, 13-16 August 2017;
- Regional Expert Workshop on Land Accounting in Bangkok, 25-27 September 2017;
- Further technical assistance to prepare land accounts for Vanuatu, third quarter 2017;
- SEEA training in the upcoming SIAP Second Group Training Programme on Improving Capability in Producing Official Statistics for Monitoring the Post-2015 Sustainable Development Goals, August-December 2017;
- First course of e-learning programme on SEEA, last quarter 2017.

Environment Statistics in Brazil

(Contributed by Denise Kronemberger, Brazilian Institute of Geography and Statistics (IBGE))

The Brazilian Institute of Geography and Statistics (IBGE), through its Geosciences Directory, has been compiling environmental statistics to produce Sustainable Development Indicators (SDI) since 2002, using the 'Blue Book' from the United Nations as a reference. Information has been collected, not only from IBGE but also from other data sources, such as Ministries, National Water Agency (ANA), National Institute for Space Research (INPE), state environmental organizations, among others.

Also, IBGE has been taking part in some international initiatives which deal with environment statistics, such as the working group on environmental indicators from the Latin American and Caribbean Initiative for Sustainable Development (ILAC), London Group, UN Committee of Experts on Environmental-Economic Accounting (UNCEEA), Expert Group on Environment Statistics (EGES), Inter-agency and Expert Group on Sustainable Development Goal Indicators (IAEG-SDGs), IAEG-SDGs Working Group Geospatial Information and United Nations Expert Group on the Integration of Statistical and Geospatial Information (GGIM).

The implementation of the System of Environmental-Economic Accounting in Brazil, in particular Water Accounts, is being conducted since 2012 through an institutional arrangement among IBGE, Water National Agency (ANA) and the Secretary of Water Resources and Urban Environment (SRHU).

IBGE organized and hosted the Third National Meeting of Producers and Users of Social, Economic and Territorial Information, that was held in December 2016 in Rio de Janeiro, Brazil. This event focused on the discussion on the requisites for the construction of the National Official Information System, which proposes to congregate primary data producers and business registers in the Brazilian Public Administration in order to promote data integration, data documentation patterns and to enhance the production and coverage of new themes, in response to information demands identified in policy making as well as in the indicator framework of emergent global agendas, such as the Agenda 2030 and the International Conference on Population and Development (ICPD). As for the environmental information in the mentioned event, round tables were held that discussed the National Environmental Information System, statistics suggested in the Framework for the Development of Environment Statistics (FDES 2013), environmental health statistics, natural extreme events and disasters information, environmental management information, land cover/land use change, among others. A side event about statistics related to climate change was also hosted.

The construction of the National Environmental Information System is very important as part of the National Official Information System. The benefits include filling gaps of environmental information, improving data quality, developing standards-based environmental information as uniform metadata descriptions, developing standards for interoperability which can support multiple application use, acquiring data from multiple domains and providing better public access to official Brazilian environmental data, linking with national spatial data infrastructure.

The IBGE, through its Geosciences Directory (Natural Resources and Environmental Studies Coordination) is, at present, producing the first compendium of environment statistics to be published on IBGE's homepage in a user-friendly manner. The main objective is to systematize, organize and disseminate the country's environmental statistics according to the structure of the FDES 2013. Statistics are being compiled from IBGE surveys, from systematization of information on natural resources and from statistics produced by other institutions. The compendium will have a demonstrative effect on other producers of environmental information as to how Brazil can organize the collection and compilation of environment statistics from various subject areas and sources. It will contribute to the discussions around the development of an environment statistics plan and, therefore, to the National Environmental Information System.

Environmental Statistics in Burundi

(Contributed by Burundi Institute of Statistics and Economics Studies (ISTEEBU))

From 2008 to 2014 the Burundi Institute of Statistics and Economics Studies (ISTEEBU) produced agricultural statistics yearbooks which included some different aspects of environmental statistics. The Technical Committee of Statistic Information (CTIS) of Burundi organized its ninth workshop from 28 to 31 December 2015 to validate the 2014 edition of the Agricultural Statistics Yearbook. In consideration of the importance of environmental statistics for human wellbeing and the recommendations of a workshop on environmental statistics which was organized by the UNSD in collaboration with the East African Community (EAC) in Arusha in 2015 with objectives to build national capacities for the implementation of the FDES 2013, to allow statisticians and experts from ministries of environment, to identify gaps and deficiencies in environmental data, and contribute to the production of regular, accurate and reliable environmental statistics, CTIS recommended to separate the present yearbook in two publications: Environmental Statistics Yearbook and Agricultural Statistics Yearbook.

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The first edition of the Environmental Statistics Yearbook has been published on ISTEEBU's website (http://www.isteebu.bi/) at: http://www.isteebu.bi/images/annuaires/annuaire%20des%20statistiques%20%20environnementales%202015-vf-31.01.2017.pdf. By using the Framework for the Development of Environment Statistics (FDES 2013) and the Environment Statistics Self-Assessment Tool (ESSAT), Burundi has identified other indicators based on their relevance, priority and availability, which will be included in the second edition of the yearbook. In these two years, environmental statistics in Burundi has focused on (i) Human Settlements and Environmental Health organized by the Ministry of Health and Fight against AIDS, (ii) Environmental Conditions and Quality treated by Geographic Institute of Burundi (IGEBU), (iii) Residuals analyzed by Municipal Technical Services for the waste management division (SETEMU), (iv) Environmental Resources and their Use organized by Burundi Office of Mines and Quarries (OBM), (v) Environmental Protection, Management and Engagement covered by the Burundian Office for Protection of Environment (OBPE) and (vi) Extreme Events and Disasters managed by the National Platform of Risk Management and Disasters Prevention. The collection of the data is made by using the census and surveys, scientific research in collaboration with Burundi University, administrative data from governmental and non-governmental agencies, remote sensing and mapping, and meteorological stations.

Within the country, activities are undertaken to develop environmental statistics: in January 2017, ISTEEBU, in collaboration with all institutions working in the environmental sector, assessed the level of the country in terms of the development of environmental statistics. The result of that assessment was completed in the National Workshop on Environment Statistics (21 to 23 March 2017) organized in Bujumbura by UNSD. Burundi also participated in the regional Workshop on Environment Statistics in Arusha (27 to 31 March 2017) where presentations were made on, among as, the progress made at the national level in the implementation of the FDES 2013. ISTEEBU organized another national workshop from 12 to 16 June 2017, in Bujumbura, to validate the data of the 2016 edition of the Environmental Statistics Yearbook in accordance with the recommendations of the FDES. However, some activities are still needed. With the support of UNSD, ISTEEBU will elaborate a strategy before the end of this year for developing environmental statistics and to support ISTEEBU through an inter-agency committee focused on environmental statistics.

In conclusion, the FDES 2013 has allowed Burundi to identify environmental data sources. ISTEEBU can easily obtain data of good quality because of the involvement of different institutions and ministries. By compiling data with international standards, Burundi is confident that its contribution will be important for human wellbeing and sustainable development.

Cabo Verde's experience in the application of the FDES 2013

(Contributed by Ulisses Cruz, Instituto Nacional de Estatística de Cabo Verde)

Over the past few years, the National Institute of Statistics of Cabo Verde (INE), through the Division of Social and Environmental Statistics, has been collecting, processing and disseminating environment statistics from the statistical operations it carried out as well as from other institutions, thus responding to a considerable share of the users' requests. Moreover INE recently published the report "Survey on the Collection and Treatment of Urban Waste 2012 and 2013" on its website (http://ine.cv/publicacoes/inquerito-recolha-tratamento-residuos-urbanos-2012-2013/).

In Cabo Verde there are different institutions and ministries that produce and/or collect statistics related to environmental issues, but often these statistics are scattered, outdated, with limited accessibility or do not yet meet the requested requirements. In this regard, in February 2016, INE organized a two-day national seminar under the theme "Environment Statistics". The seminar was attended by representatives of almost all key entities producing environment statistics in Cabo Verde. One of the main objectives of the seminar was to present the draft "Integrated System of Environment Statistics (SIEA) - Methodological Document", prepared by INE, and based on the Framework for the Development of Environment Statistics (FDES 2013). During the seminar, INE described the FDES 2013 and the Environment Statistics Self-Assessment Tool (ESSAT) to the participants, explaining the purpose, importance, structure and use of these tools. Later the participants worked in groups using the ESSAT Part II (Statistical Assessment). At the end of the seminar a number of recommendations were made, of which it is important to note the following:

- Create a national working group on Environment Statistics;
- Use the ESSAT to assess the statistics produced by each key institution;
- Harmonize methodologies for collecting, processing, analysing and disseminating environmental data in accordance with the guidelines of the FDES 2013.

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After the national seminar, INE finalized the document "Integrated System of Environment Statistics (SIEA) - Methodological Document", which was then shared and validated by the key institutions in the sector. Of the 158 key statistics and indicators listed and proposed in this document: 99 are part of the Tier I statistics of the Basic Set of Environment Statistics included in the FDES 2013. The remaining 59 key indicators form part of the ECOWAS environmental indicators framework and the national strategic plans (in force at that time). Once all the environmental indicators of the new Strategic Plan for Sustainable Development (PEDS) will be approved, this list will be updated accordingly. The PEDS (for the 2017-2021 horizon) is in the final stage of preparation. With the support of UNDP, the Government of Cabo Verde is integrating the Sustainable Development Goals (SDGs) and the Samoa Pathway into this plan. The Vulnerability-Resilience Country Profile (VRCP) methodology introduced in Cabo Verde in 2015 in the context of the United Nations Development Account Project is considered a tool to promote this integration.

In May 2016, INE received a technical assistance mission under the framework of "Strengthening Capacities in the consolidation of production methods and dissemination of key statistical data and indicators on the environment". One of the objectives of the mission was to train INE and other key institutions on the production and dissemination of the main environment statistics according to the FDES 2013. In this context visits were made to all those key institutions, during which the consultant presented the FDES 2013 to the respective focal points. The main recommendations made by the consultant in her final mission report included the following:

- Create Working Groups for Environment Statistics: both a Technical Advisory Committee and a Technical Steering Committee;
- Publish a National Compendium of Environment Statistics;
- Implement the SIEA, which will facilitate the production and reporting of the relevant environmental indicators for the country.

The creation of the working groups and the publication of the compendium are planned for this year. After the establishment of the working groups, they will need to draw up a national work programme/plan for environment statistics.

Currently, as part of the United Nations Development Account Project on Statistics for the SDGs, INE is participating in a training and technical assistance programme on the FDES 2013. This programme consists of a sequence of three Phases: e-training, face-to-face seminar and technical assistance. The objective of the programme is to support African countries in the development of environment statistics in their national statistical systems.

Curaçao has issued its first FDES-based Compendium on Environmental Statistics

(Contributed by Chris Jager, Central Bureau of Statistics Curaçao)

Sustainable development is a key issue for the Caribbean island of Curaçao. Tourism, one of the island's most important economic sectors heavily depends on the environment, i.e., its natural assets and biodiversity. A good overview with respect to sustainability issues in Curaçao is provided by the National Report of Curaçao on Sustainable Development[4]. This report highlights the necessity of effective waste and water management, actions taken to prevent deterioration of coral reefs, and the prevention of habitat fragmentation to preserve the rich terrestrial biodiversity of Curaçao. In addition, the report states that the island faces a need to establish a reliable environmental database on environmental indicators.

The first issue of the Curaçao Environmental Statistics Compendium 2015 supports the objectives of the National Report and furthermore, in the near future it will be enhanced by the implementation of SEEA environmental accounts on water and energy. The Compendium is an annual report and the next issue 2016 is expected to be published in the second half of this year.

The National Statistical Office, CBS (Central Bureau of Statistics) has recently finished this first Environmental Statistics Compendium[5]. This was after a few years of preparation and in alignment with the CBS business plan and the Action Plan for Environmental Statistics and its essential goal for the collation and distribution of statistics to society and the general public. The

[4] See http://caribbean.cepal.org/content/national-report-cura%C3%A7ao-sustainable-development for access to the report.
[5] See http://www.cbs.cw/website/publications_231/rubriek/curacao-environmental-statistics-compendium-2015_232.html

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action plan for environmental statistics has focused on the methodology, planning and the Curaçao version of the Core Set of the FDES, the Framework for the Development of Environment Statistics of UNSD.

Like many countries, Curaçao is limited in its organizational, technical and financial capacity and has to deal with the challenges of a lack of cooperation and data gaps. Therefore, environment statistics require a proper framework to guide this development. It was the reason that the FDES, and especially the Core Set, were chosen to serve as a tool for the CBS in order to set up and enhance these statistics. In retrospect, it can be said that the FDES and the Core Set have served as an important and practical tool for establishing and developing our Compendium on Environmental Statistics.

There currently is one statistician working part-time on environmental statistics, who is also meant to start working on environmental accounting. CBS does not collect any environmental statistics itself with a specific survey; hence it heavily relies on administrative and existing data sources and organizations. The institute does, however, include environment related questions in some surveys and censuses. For reasons of coordination and inclusion an inter-institutional mechanism has been established for the development of the Environmental Statistics Compendium. The working group consists of: CBS (Secretary and Chairman), a biological institute, the Curaçao Business Council for Sustainable Development, the waste company, the Meteorological and the Environmental Service.

During a CARICOM workshop in April 2014 it became clear that it is necessary for Curaçao, as well as other Caribbean islands and countries, to make Tourism a 7th additional component of the FDES. This in accordance with the CARICOM indicators and the high social- and economical importance of tourism in Caribbean countries.

The compendium reflects the collation of existing data sources from CBS, administrative sources and governmental- and non-governmental entities. It is structured in seven sections, namely:

1. Environmental conditions and quality
2. Environmental resources and their use
3. Residuals
4. Extreme events and disasters
5. Human settlements and environmental health
6. Environmental protection and management
7. Tourism

In addition to data, the publication also contains maps of Curaçao with geological and vegetation land cover information.

Information about our environment is a work in progress and thus the availability of environmental information will increase in the near future. The dissemination of information and regular publication of this compendium will eventually enhance the necessary cooperation, quality and completeness of environmental statistics in Curaçao. Furthermore, the environmental statistics of the compendium safeguard that authorities and institutions can have reliable information for situation analyses and decision making.

New Zealand's Good Practice Guide for Environmental Reporting

(Contributed by Adam Tipper, Statistics New Zealand)

Stats NZ and the Ministry for the Environment have released the *Good Practice Guide for Environmental Reporting*. It explains, at a high level, the steps we undertake in producing an environmental report. It outlines our statistical thinking with reference to the relevant sections of the Environmental Reporting Act 2015 which provides the legislative framework for our reporting.

This guide covers both good practice for the production and dissemination of environmental reports, as well as data elements. It includes:

- a background to our national level reporting framework
- an overview of the different environmental reporting products we release
- the broad timeframes we work towards in producing an environmental report
- the measurement framework
- how we go about determining measures
- how we ensure the quality of environmental data
- key considerations in the analysis of environmental data
- the steps taken in the dissemination of reports, particularly relating to drawing conclusions and ensuring equal access to information.

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The role of international frameworks, such as the FDES and SEEA, are discussed in relation to selecting measures. Within each chapter, good practices are defined where appropriate. This guide is a living document and is released as a first edition as it will be updated periodically as we continue to develop national-level environmental reporting. The guide is available from: http://www.stats.govt.nz/browse_for_stats/environment/environmental-reporting-series/good-practice-guide.aspx

We welcome feedback on this guide. Comments and suggestions for future content can be sent to environmentalreporting@stats.govt.nz. The guide is intended for data providers, researchers, producers of official statistics, readers of environmental reports, and for the Parliamentary Commissioner for the Environment (the auditor of New Zealand's environmental reporting).

Environmental Statistics in Zimbabwe

(Contributed by Manasa Viriri, Zimbabwe National Statistics Agency)

Zimbabwe is making remarkable improvements in the production of national environmental statistics. In December 2016, the country produced a compendium on environment statistics using the Framework for the Development of Environment Statistics (FDES 2013) (http://www.zimstat.co.zw/sites/default/files/img/FDES_2013.pdf). The report was produced with the active participation of the national Environment Statistics Committee (ESC) members and financial support from Department for International Development (DFID) through the Common Market for Eastern and Southern Africa (COMESA) under the Regional Integration Support Mechanism (RISM) programme. The support was two-fold: it covered the FDES 2013 report production and capacity building components. The capacity building component was in the form of training in geo-spatial data acquisition techniques and procurement of hardware.

Zimbabwe has been responding to data requests by the United Nations Statistics Division (UNSD) through the biennial Questionnaire on Environment Statistics since 1999.The Zimbabwe National Statistics Agency (ZIMSTAT) and the Ministry of Environment, Water and Climate have been jointly coordinating the completion of the questionnaires. The UNSD/UNEP Questionnaire 2016 on Environment Statistics completion supported financially and technically by the United Nations Children's Fund (UNICEF) had a more comprehensive coverage where it included all the Urban Local Authorities in the country unlike previous rounds which were limited to major cities.The data obtained through the UNSD/UNEP Questionnaire 2016 on Environment Statistics are primarily used for reporting on progress towards attaining Sustainable Development Goals 6, 11 and 12, input into the global, regional and national environment outlook reports, as well as for United Nations databases and data portals.

UNICEF is interested in the data for its programming as it provides evidence on the state of the environment that children are living in and also highlights areas needing interventions to protect the environmental health of children. The data will contribute towards the environmental risk profiling and climate landscape analysis for children to be compiled by UNICEF in 2017.According to the World Health Organization, each year around three million children under the age of five die due to environment-related diseases.

The country found it essential to produce a report on the collected data to enhance information access by decision and policy makers. The report is divided into two sections covering waste and water components. During report writing reference was made to some of the findings of the Service Level Benchmarking (SLB), an exercise conducted by the Government of Zimbabwe, in which councils or water utilities evaluate their performance based on objective information in relation to their peers.

ZIMSTAT and the Ministry of Environment, Water and Climate enjoy cooperation of key stakeholder institutions that constitute the ESC, and who are data suppliers and users of environment statistics. The institutions would partner in the joint dissemination of the FDES 2013 and the UNSD/UNEP Questionnaire 2016 on Environment Statistics (http://www.zimstat.co.zw/sites/default/files/img/Environmental%20Report%202016_2.pdf) reports in the last week of June 2017.

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