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Environment Statistics Section
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FOCUS:

Global Consultation and related statistical capacity development for monitoring climate change

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Following last year's seventh Expert Group on Environment Statistics meeting, UNSD has been exploring novel ways of capacity development on climate change statistics amidst the pandemic. This included an assessment of existing and needed capacities in Caribbean Community Small Island Developing States (CARICOM SIDS) and African countries, to produce indicators related to climate vulnerability and adaptation, which were the areas identified as particularly important for SIDS, developing and least developed countries. The assessment was completed by two international consultants who gathered information from about 10 countries. The information helped to define priority indicators on vulnerability and adaptation in the above-mentioned regions. The consultants also helped these countries to better understand the work on the draft Global Set of Climate Change Statistics and Indicators and to engage in some related activities, e.g., a further review of the proposed indicators and attendance at information sessions on the Global Consultation which are explained below.

Overall, countries have been actively engaging in climate statistics discussions and activities during the pandemic and it is clear that countries are committed to complete the Global Consultation and to carry on similar activities beyond it. UNSD promotes such activities, in which National Statistical Offices (NSOs) are prepared to initiate data collection and dissemination of climate change statistics in a way complementary to the ongoing reporting to the United Nations Framework Convention on Climate Change (UNFCCC), as recommended by the United Nations Statistical Commission at its 49th session in 2018. Despite the difficulties NSOs may face in attempting to address a vast array of topics, the Global Consultation is proving to be useful as it encourages NSOs to coordinate and collect national responses from all the relevant specialized departments and agencies within the country. The work on conducting the Global Consultation is explorative and multidisciplinary in nature, rather broad and likely more comprehensive than any other cross-cutting statistical work.

In order to facilitate smooth communications between United Nations member states and UNSD for the purpose of this Global Consultation, UNSD offered six optional online information sessions in three official United Nations languages – English, French and Spanish (see presentations here). These information sessions were intended to help improve responses to the Global Consultation; to clarify stakeholders' questions; and to expand outreach to an increased number of stakeholders wishing to contribute.

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During these information sessions, UNSD introduced the process towards the development of the Global Set and the steps regarding the conduct of the Global Consultation, as well as offered a relatively open agenda for colleagues of United Nations member states to raise questions. The online sessions were well received and appreciated, with a total of more than 170 participants from about 50 countries from all the five United Nations regions taking part in these six sessions in June and July. United Nations regional economic commissions (ECE, ECLAC, ESCAP and ESCWA) and several international organizations (CARICOM, EEA, FAO, UNDRR, UNFCCCC, and World Bank) also took part in the discussions. Conversation with stakeholders has shown the importance of the NSO liaising with line ministries and of considering multiple data collection methods (traditional surveys, administrative data, remote sensing, mapping, etc.) for measuring climate change.

The first round of sessions were held on 14, 15 and 18 June and included presentations by UNSD, Suriname and Tanzania. The countries shared their experience in the process which illustrated some lessons from the Pilot Survey completed last year, as well as the ongoing efforts to complete the Global Consultation for which national discussions were held in both countries. The second round included three additional sessions, the first was held in Spanish (30 June), then French (7 July) and English (14 July), and were scheduled following keen interest expressed by countries at previous information sessions in June. Country presentations were made in the various languages by representatives of the NSOs of Suriname, Burundi, Togo, and Nepal. The presentation by Nepal illustrated how a wealth of information obtained through the climate change and waste surveys could be used to populate the draft Global Set. UNSD has compiled over 90 specialized environment statistics surveys and censuses from countries, include those from Nepal, which are available here and can be filtered by country, theme and year.

By expanding beyond English, the sessions realized a marked improvement in representation across multiple regions and countries at more varied stages of development which showcased different areas of interest in climate change among countries (e.g., spanning the important themes of mitigation, adaptation, vulnerability, etc.). Following country and international agency responses expected by early August, extensive discussion of the Global Consultation at the eighth meeting of the Expert Group on Environment Statistics (October 2021), UNSD, jointly with the UNFCCC Secretariat, plans to submit the final Global Set and the metadata to the fifty-third session of the Statistical Commission in March 2022 for adoption. Further information can be found here.

In addition to the information sessions, several more in-depth bilateral discussions between UNSD, countries, and international organizations are being held, and clarifications being provided to specific questions via email. These communications reveal key questions that both countries (developed and developing) and agencies (international and regional) are facing, and also what the main concerns and opportunities to produce climate change statistics beyond the Global Consultation are. For example, one of the key questions is whether the process on developing the Global Set would result in a multilateral reporting mechanism requiring mandatory data collection. UNSD clarified that the Global Set is designed to support countries in preparing their own sets of climate change statistics and indicators according to their individual concerns, priorities and resources. Therefore, it is completely voluntary for countries to apply or use this Global Set as they wish. Some major benefits to countries who apply the Global Set of Climate Change Statistics and Indicators will be a better link between statistics and indicators with policy, a coherent, internationally comparable analysis of phenomena related to climate change, and an increased focus on the role of the NSO with respect to climate change.

UNSD very much appreciates all the tremendous efforts and excellent responses from countries and agencies received to date and encourages all others to undertake the Global Consultation so that the Global Set can benefit from the widest possible consultation across countries and agencies. The Global Set will therefore serve as a comprehensive and broadly -consulted statistical framework with statistics, indicators and metadata for countries to prepare national sets of climate change statistics and indicators and support the reporting requirements of countries under the Enhanced Transparency Framework and the Global Stocktake of the Paris Agreement, as well as climate-related SDG indicators.

Persistent demands for data from the UNSD/UNEP Questionnaire on Environment Statistics

UNSD circulated its UNSD/UNEP Questionnaire 2020 on Environment Statistics in November 2020 with the aim to collect environmental data from non-OECD countries and non-European Union members. The results of this data collection effort are being added to the ever-expanding and evolving environment statistics database housed by UNSD. UNSD is now in the final stage of the validation process and the data received from each respondent country are being uploaded to UNSD's Country Files webpage on a rolling basis.

To date, 55 countries already returned the completed Questionnaire or sent relevant national data. The responses received indicate a slow but steady improvement in the quantity and quality of environmental information. Others are still in the process of compiling the requested information.

The ongoing data validation process, held in close consultation with the countries, provides an opportunity to improve data quality and strengthen collaboration between UNSD and the relevant institutions in the countries. The global availability of reliable, accurate, and relevant statistics on waste (especially municipal waste, e-waste and hazardous waste) and water (especially wastewater statistics) is gaining special importance.

Collaboration on water through regular teleconferences with international agencies, namely OECD, Eurostat, FAO, UN-Habitat and WHO, has led to a considerably greater usage of the data collected via the UNSD/UNEP Questionnaire 2020 on Environment Statistics. In the area of waste, UNSD has collaborated with UNEP, UN-Habitat and UNU.

The water and waste data collected and disseminated by UNSD has played important roles in various international data collaboration efforts and have contributed to the work of international agencies and academia, among other data users. Below are a few examples of the use of UNSD data:

- Global SDG database (https://unstats.un.org/sdgs/indicators/database/) for the following indicators:
  - Indicator 11.6.1 Proportion of municipal solid waste collected and managed in controlled facilities out of total municipal waste generated, by cities [Questionnaire table R5];
  - Indicator 12.4.2 (a) Hazardous waste generated per capita; and (b) proportion of hazardous waste treated, by type of treatment [Questionnaire table R2];
  - Indicator 12.5.1 National recycling rate, tons of material recycled [Questionnaire table R3 and R6 for electronic waste];
  - Indicator 6.3.1 Proportion of domestic and industrial wastewater flows safely treated [Questionnaire table W4];
  - and to a lesser degree Indicator 6.4.1 Change in water-use efficiency over time; Indicator 6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources, and 6.2.1 Proportion of population using (a) safely managed sanitation services and (b) a hand-washing facility with soap and water).
- Waste data for SDG 12 Hub (https://sdg12hub.org/) and SDG 12 progress report, hosted by UNEP on waste-related SDG indicators
- Wastewater data for SDG 6.3.1 progress report, led by UN-WATER and authored by WHO and UN-HABITAT
- Fresh groundwater and gross freshwater abstracted data, for World Water Development Report's 2022 in collaboration with UNECE
- United Nations University (for electronic waste) http://collections.unu.edu/view/UNU:6477
- Academia, such as The University of Leeds (Topic: Historical city-level waste data and marine litter)

With respect to the ongoing work on the Questionnaire and ensuring it maintains relevance to key stakeholders' demands, UNSD may consider adding a variable to help better measure food waste in the table on Composition of Municipal Waste. In this regard, consideration is being given to SDG Indicator: 12.3.1 (b) food waste index. UNSD continually hears the message from stakeholders at both international and national level that there is strong preference for data produced by countries rather than by independent or third parties outside of the country. To this end, the Questionnaire, its content, and the modification of its content per demand, continue to receive attention. Any modifications to the Questionnaire's content are made in a circumspect fashion, and always with consultation with experts, bearing in mind any possible increase in response burden upon countries while endeavouring to meet evolving demand. The Questionnaire continues to be sent to countries in Arabic, English, French, Russian and Spanish.

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Indicator tables compiled from the data from the 2020 Questionnaire collection round, complemented by data from OECD and Eurostat, are planned to be available by the end of the year through the UNSD Environmental Indicators webpage.

Collaboration on water questionnaires and wastewater data by International Agencies (UNSD, Eurostat, OECD, UN-HABITAT, WHO and FAO)

As an ongoing effort, Eurostat, OECD and UNSD have been collecting data on water from national statistical offices and/or ministries of environment in a harmonized manner starting with OECD work in 1979-80, and later in collaboration with Eurostat (1988), and UNSD (1999). In 2018, the Food and Agriculture Organization of the United Nations (FAO) also initiated a global data collection process through its Water and Agriculture Questionnaire. This FAO data collection has some overlap with regular data collection carried out by the OECD/Eurostat and the UNSD/UNEP joint questionnaires.

UNSD, OECD, Eurostat and FAO have conducted 27 teleconferences on water statistics, with the latest one being in June 2021. This series of teleconferences aim to harmonize definitions and terminologies, synchronize data collecting schedules, and maintain an open, efficient channel to discuss various technical issues related to water statistics. Agenda items of the teleconferences include: (1) comparison of country data; (2) comparison of metadata and terminology used in the questionnaires, particularly on how these may apply to the mandates of, for example, the Statistical Commission and the Inter-Agency and Expert Group (IAEG) on SDG Indicators, among others; (3) sharing of the questionnaires' country focal points; (4) written consultation with selected countries by multiple international agencies to clarify discrepancies in data; (5) possibility of the four agencies aligning dates for sending their respective questionnaires to countries; (6) frequency of data collection; and (7) regular information exchanges of meetings, workshops and capacity development activities.

In 2020, UNSD was approached by UN-HABITAT and WHO to collaborate on wastewater data collection and analyses, in particular towards the SDG Indicator 6.3.1 "Proportion of domestic and industrial wastewater flow safely treated." This work has enabled international agencies that are responsible for collecting and monitoring domestic (household) and industrial wastewater to work seamlessly together. In the first half of 2021, the collaboration mainly focuses on the writing of SDG 6.3.1 indicator progress report, which will be launched during the Stockholm Water Week in August 2021, along with all SDG water related indicators (there are 11 of them). The agencies are also in close communication with each other on the definitions, methodology, and analyses for the generation and treatment of domestic (household) and industrial wastewater data.

In the near future, UNSD plan to continuously enhance this indispensable collaboration, by further strengthen the overall methodology of water and wastewater data among agencies, reduce country reporting burden from the countries, improve data update frequencies for reporting to the global SDG database, and plan for future data advocacy activities to support countries' capacity on collecting and reporting water and wastewater data.

Capacity Building Workshop on Waste Statistics in West Asia, 15-17 February 2021

The Training Workshop on Waste Statistics in West Asia, organized by UN Environment Programme (UNEP) Regional Office for West Asia (https://www.unep.org/regions/west-asia), was held virtually on 15 to 17 February 2021. As the co-custodian agency for some of the SDG indicators with regards to the generation, collection and recycling of waste, UNSD participated in this UNEP capacity building event.

Participants from twelve member states attended this workshop: Bahrain, Iraq, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, State of Palestine, Syrian Arab Republic, United Arab Emirates, and Yemen. The workshop's main focuses were on the waste classification and management during COVID era, waste statistics for SDG reporting purposes, and tools for monitoring the circular economy.

UNSD presented its work on the UNSD/UNEP Questionnaire on Environment Statistics, and recognized the great progress West Asia region has made in recent years, including improving data availability and timeliness on management of municipal waste, city level data, and generation of waste by source.

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UNSD also updated the new electronic waste data collection tables, introduced methodology sheets of the Manual on the Basic Set of Environment Statistics of the FDES 2013, and demonstrated the joint questionnaire data's relevance and linkage to SDG indicators related to waste, including Indicator 11.6.1 "Proportion of urban solid waste regularly collected and with adequate final discharge out of total urban solid waste generated, by cities", Indicator 12.4.2 "Hazardous waste generated per capita and proportion of hazardous waste treated, by type of treatment", and Indicator 12.5.1 "National recycling rate, tons of material recycled".

Member states and organizations expressed interest and appreciation on the work of UNSD, especially on the efforts at updating the joint questionnaire to meet the recent demand changes on waste data, and on harmonizing waste data collection between international organizations.

Two-day Deep Dive Training on Waste Wise Cities Tool and application of the UNSD/ UNEP Questionnaire on Environment Statistics (virtual)

In February, upon the invitation of UN-HABITAT, the co-custodian with UNSD for SDG indicator 11.6.1, UNSD presented material demonstrating the strong relevance and benefit of countries aggregating waste data to the city and national level. Indicator 11.6.1 pertains to municipal solid waste generation and treatment and calls for close liaisons between the National Statistical Office and other key stakeholders, typically at the local, or municipal level of government (e.g. waste treatment plants, recycling or incineration plants, etc.). UNSD stressed the close collaboration it maintains with UN-HABITAT for work on this indicator, the developments made in metadata in recent years, and the relevance and application of the UNSD/UNEP Questionnaire on Environment Statistics (waste section) which collects city level data relevant to this indicator. Countries showed keen interest in understanding how their data plays a key part in informing SDG-related policies, understanding why it is in their interest to collaborate among institutions within-country, and how international organizations such as UNSD and UN-HABITAT are collaborating with one another to minimize reporting burden upon countries.

Webinar for the Arab region: Interagency and Experts Collaboration to Improve the Production and Dissemination of SDG Indicators from Official National Sources (Beirut, Lebanon with virtual participation; simultaneous interpretation)

In June, UNSD presented material demonstrating the value of countries' responses to the UNSD/UNEP Questionnaire on Environment Statistics (waste section) following the invitation of UNESCWA and UNEP. These country responses feed into the compilation of and reporting on SDG indicator 12.5.1 (national recycling rate), for which UNSD and UNEP are co-custodians. In order to meet SDG-related and other demands, and to maintain relevance, discussion on how variables collected via the Questionnaire (e.g., electronic waste, municipal waste) are modified or added was appreciated by countries. During discussion, countries demonstrated keen interest for the Questionnaire to maintain strong relevance not only to SDG indicator 12.5.1, but also to several other SDG indicators related to waste (especially food waste [12.3.1]), and for UNSD and collaborating international agencies to continually maintain engagement with countries for a streamlined compilation of SDG indicators from national to international level.

FAO Activities

(Contributed jointly by Giulia Conchedda, Nathan Wanner, Silvia Cerilli, Xueyao Pan and Francesco N Tubiello: FAO Statistics Division)

Data

- A significantly revised version of the FAOSTAT Emissions database was released in June 2021. It provides estimates of emissions from crop and livestock production, emissions and removals from land use, land use change and fossil fuel energy use, at the country, regional and global levels. Greenhouse gas (GHG) emissions due to agriculture are generated both within the farm gate by crop and livestock production activities, and through land use change processes at the conversion boundary between natural ecosystems and agricultural land. Together they contribute about 20 percent of total emissions from all human activities. The latest statistics from FAO include data for the 1990-2019 period, mapping relevant emissions within and across the farm-gate/land use production boundaries. A new mapping from FAO to IPCC categories is provided to facilitate comparison with national GHG inventories. A new feature of this dissemination is in fact the availability to download and visualize FAOSTAT Tier 1 estimates with reports to the UN Framework Convention on Climate Change. This product supports country work on Quality Assurance Quality Control (QAQC) processes aimed at improving their inventories, in line with the most recent IPCC guidelines and requests from the 2021 Meeting of UNFCCC Lead Reviewers. See: http://www.fao.org/3/cb5293en/cb5293en.pdf

- A new FAOSTAT agri-environmental dataset, on Soil Nutrient Budgets, was released in FAOSTAT in May 2021. The domain accesses nitrogen surpluses leading to potential environmental risks such as leaching and volatilization or deficiencies, which can limit yield potential. It covers all countries for the period 1961-2018. See: http://www.fao.org/food-agriculture-statistics/data-release/environment/en/

- New land-based temperature change data were released in FAOSTAT in March 2021. The new data, produced jointly with NASA, cover all countries over the period 1961-2020. See: http://www.fao.org/food-agriculture-statistics/data-release/environment/en/

Methodologies

- FAO published in May a new report on methods for Measuring Progress towards Sustainable Agriculture (PROSA). The document relies mainly on existing national statistics on food and agriculture, as disseminated in FAOSTAT and other relevant FAO datasets. It analyzes trends over time for modern, capital-intensive, land-intensive, and traditional food-systems typologies. The traffic-light methodology used in the paper allows for the identification of sustainability hotspots within each of the typologies. See: http://www.fao.org/3/cb5293en/cb5293en.pdf

Capacity Development

- FAO provided environmental-economic accounting assessments via the System of Environmental-Economic Accounting for Agriculture, Forestry and Fisheries, SEEA AFF to two Global Environment Facility (GEF) projects, respectively in Afghanistan, and Sudan. The Afghanistan project, for which the Ministry of Agriculture Irrigation and Livestock (MAIL) is the implementing authority, focuses on "Combating land degradation and biodiversity loss by promoting sustainable rangeland management and biodiversity conservation in Afghanistan" and the SEEA AFF accounts were used for baseline analysis on Land Use, Land Cover as well as Forestry products, including Non Wood Forestry Products (NWFPs). FAOSTAT data were integrated with national and geospatial information through the SEEA AFF and several SDGs indicators (including SDG 15.3.1, on Land Degradation) were derived.

- The Sudan project, on the other hand, aims to protect and restore selected areas of the Nile Riverine Forest, their Biodiversity Conservation and Livelihood Improvement. In this framework FAO provided two virtual natural capital trainings, in January and in March 2021. They were attended, among others, by the Forest National Corporation (FNC), the Ministry of Agriculture, and the University of Khartoum. The trainings focused on the SEEA AFF accounts and their tier 1 compilation through FAOSTAT, which enables the description and analysis of the relationship between the environment and the economic activities related to agriculture, forestry and fisheries. Particular attention was paid to forest ecosystem services, including carbon sequestration, as supportive of sustainable forest management and planning.

Green Climate Fund News

(Contributed by Linus Ikpyo Hong, Portfolio Analyst, GCF)

Green Climate Fund Strengthens its Capacity to Measure and Track Impact by Approving Integrated Results Management Framework

At its twenty-ninth meeting held between 28 June and 1 July 2021, the Board of the Green Climate Fund (GCF) adopted the Integrated Results Management Framework (IRMF) after lengthy and constructive negotiations between Board members to finalise the text. The framework will enable more consistent measurement and reporting of results from its investments and further enhance the ability of GCF to measure and report the impact of its investments at Fund level.

The framework's results architecture is designed to measure both quantifiable impacts of GCF investments such as greenhouse gas emission reduction as well as the GCF contribution to the paradigm shift towards low-emission and climate-resilient development pathways in the context of sustainable development. IRMF will also support the GCF to assess its contribution to the global efforts towards attaining the goals set by the international community to combat climate change under the objectives of the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement.

Accelerating the collection of wastewater statistics on the flows of wastewater generated and treated at utilities, cities, and national level, to better populate SDG indicator 6.3.1

(Contributed by Graham Alabaster, UN-Habitat, and Rick Johnston, WHO)

Sustainable Development Goal (SDG) target 6.3 seeks to halve the proportion of untreated wastewater discharged into water bodies, and is measured in part by indicator 6.3.1, "the proportion of domestic and industrial wastewater flows safely treated." In August 2021, the United Nations Human Settlements Programme (UN-Habitat) and the World Health Organization (WHO), will launch the Sustainable Development Goal 6.3.1 indicator report at the World Water Week in Stockholm. This publication presents a summary of available statistics on total wastewater flows generated and treated in 2015, as well as disaggregated analyses on flows from industrial sources in 2015 and households in 2020. Datasets have been extracted from two existing harmonized international frameworks (the United Nations Statistics Division (UNSD)/United Nations Environment Programme (UNEP) Questionnaire on Environment Statistics, and the Organisation for Economic Co-Operation and Development (OECD)/Eurostat Joint Questionnaire on Inland Waters) and from additional national institutions and ministries or statistical offices.

Among the 42 countries (representative of 18 per cent of the global population) reporting on both total wastewater generation and total wastewater treatment in 2015, only a third of total wastewater flows received at least some treatment. A similar proportion of industrial wastewater received some treatment, but only 14 countries (representing 4 per cent of the global population) reported on both generation and treatment of industrial wastewater.

Calculations of the volumes of household wastewater generated and safely treated showed that globally, 56 per cent of household wastewater flows were safely treated in 2020 (extrapolated from data from 128 countries representing 80 per cent of the global population). Wide disparities among the regional proportions of safely treated household wastewater were discovered (ranging from 25 per cent to 80 per cent by SDG region), indicating that progress remains uneven across the globe.

This report reveals a strong need of advocacy for improving national monitoring programmes that could address current wastewater data deficiencies, but also shows that municipal and national water utilities can produce important data that can be used for both national and global monitoring. It also calls for heightening collaboration between the local authorities responsible for providing or overseeing wastewater services, and National Statistical Offices (NSOs). One effective way to enhance communication is to make use of or establish a multi-stakeholder forum within a country that includes participation of NSOs and other relevant stakeholders. For these reasons, UN-Habitat aims to provide regional support and technical assistance to municipal and national water utilities, by identifying their needs and challenges; so as to improve their capacity to measure, monitor, report and use wastewater statistics for sustainable water resources management and policy decisions guided by the polluter pays principle.

In 2021, UN-Habitat organized a series of three webinars in Latin America, and four webinars in the Caribbean, in collaboration with the regional water associations and the development banks, to support municipal water utilities as

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relevant partners in the process of wastewater monitoring for the SDGs, and encourage them to report to NSOs. UN-Habitat is in parallel collecting wastewater statistics from cities and countries that are not yet reporting to international databases, to contribute to the momentum to increase the reporting of wastewater data worldwide. Likewise, WHO through its regional and country offices, is raising awareness about the harmonized international questionnaires, and the importance of using these existing mechanisms to collect data that can be used for both national purposes and for SDG reporting.

UNEP NEWS

Measuring Progress: Environment and the SDGs

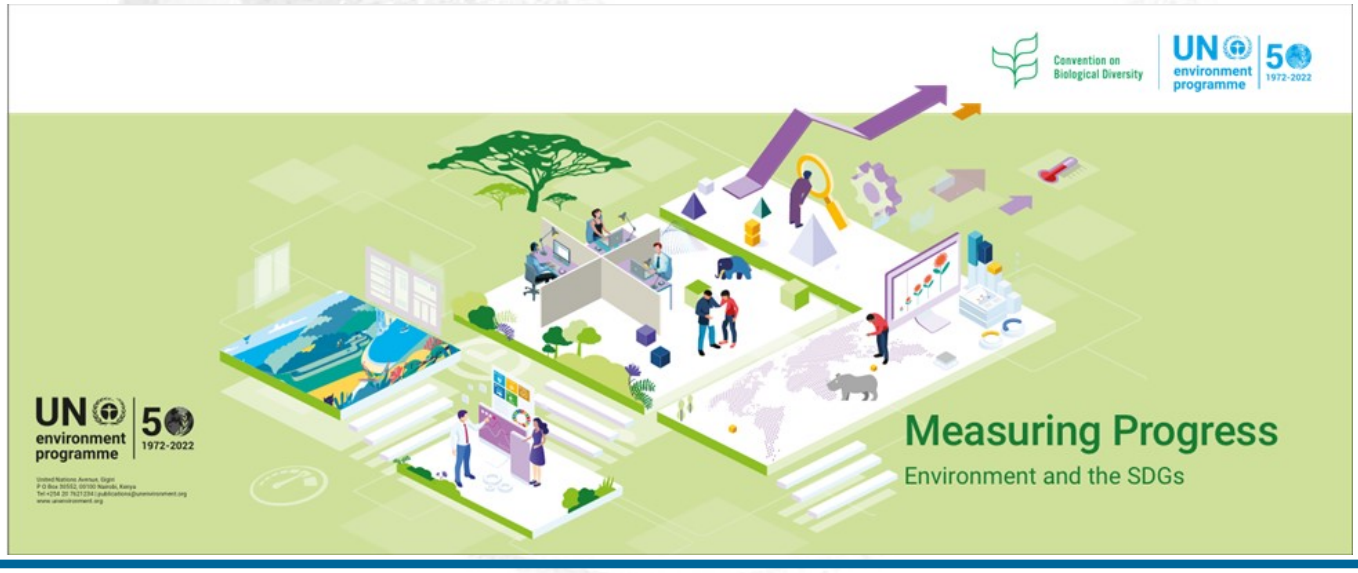
(Contributed by Therese El Gemayel, Programme Management Officer, UNEP)

UNEP, jointly with the Convention on Biological Diversity (CBD), launched the report 'Measuring Progress: Environment and the SDGs'. The report explores the potential and limitations of using a statistical correlation analysis between indicator pairs to improve the understanding of the interlinkages between SDG indicators. It also informs on progress being made for those SDG indicators UNEP identified as environment-related, based on data from the SDG Global Indicators Database.

The interlinked nature of the SDGs means that achieving one goal or target may contribute to achieving other goals or targets, or the pursuit of one objective may conflict with the achievement of another. The report uses an analytical approach, driven by data, to test the relationship between SDG indicators. On the other hand, the report flagged an increase of available data, but with the newly available data, an increase in downward trends among more indicators when compared with a similar progress report in 2019.

The report identified a gap in the diversity and use of environmental data and statistics to inform government policy and decision-making, particularly environmentally-related big data produced by remote sensing, *in situ* sensors and artificial intelligence technologies, as well as data collated through environmental-economic accounting activities. Environmental data capacities need to be strengthened if policymakers are to improve their understanding of the priority actions required to 'bend the curve' of continuing environmental deterioration. Capacity-building is needed in three areas: i) for collection of data using international-standard methodologies to ensure data comparability, ii) for data management to ensure open access to data, and iii) for data analysis where data are used to better understand what happened, why it happened, what may happen next and how to respond.

The report was launched on 22 May 2021 to coincide with the International Day on Biological Diversity, and can be accessed here.



Environmental SDG Indicators Online Course

(Contributed by Therese El Gemayel, , Programme Management Officer, UNEP)

The SDG and Environment Statistics Unit at UNEP launched the Environmental SDG Indicators Online Course in May 2021. The course was developed by UNEP, UNSIAP and UNITAR and is a self-paced course focusing on the environmental SDG indicators.

This course is presented in 10 modules and provides an overview of the importance of monitoring the environmental dimension of development, the linkage with existing statistical frameworks (FDES and SEEA), and how to use environment statistics in decision making. The modules also provide an overview of all 25 SDG indicators under UNEP custodianship.

Capacity Development Workshops on Selected Environmental SDG Indicators for the Arab Region in Collaboration with ESCWA

(Contributed by Dany Ghafari, Programme Management Officer, UNEP)

Resolution 70/1, Transforming our world: 2030 Agenda for Sustainable Development, was adopted by the United Nations General Assembly by consensus in September 2015. It highlights that collaboration between national statistical systems and the relevant international and regional organizations is necessary to strengthen national data systems and follow up and review the Sustainable Development Goals (SDGs) and targets. The resolution also points out the need to intensify the support for strengthening data collection and statistical capacity building.

Many countries in the Arab region are reporting on SDG indicators. However, several are facing considerable challenges in monitoring targets in many policy areas and reporting on progress on many of the SDG indicators remains limited in the region. The current COVID-19 pandemic highlights that proper monitoring and evaluation systems are needed to develop strategies and implement measures. The support of regional commissions is hereby of significant importance to assist Member States in adapting, implementing, and measuring progress towards the implementation of national development plans.

The Economic and Social Commission for Western Asia (ESCWA) assessed the availability of country data in the United Nations Statistics Division (UNSD) SDG Global database. Based on the results, ESCWA organized virtual capacity development workshops on selected indicators for Arab countries in collaboration with UNEP to improve the production and dissemination of SDG indicators from official national source. 16 out of the 25 environment-related SDG indicators for which UNEP is the custodian agency were selected for two series of webinars via Zoom. From 25 to 27 May 2021, SDG indicators 6.3.2, 14.1.1 (a) and (b), 14.2.1, 17.7.1 and 17.14.1 were examined. From 7 to 10 June 2021, SDG indicators 12.1.1, 8.4.1/12.2.1, 8.4.2/12.2.2, 12.3.1. (b), 12.5.1, 12.6.1, 12.7.1 and 12.c.1 were discussed.

The main objectives of the regional training were to enhance the understanding of metadata and the nature of data, to improve statistical capacities, to strengthen inter-institutional coordination on how to collect, measure and disseminate SDG indicators to increase data production, to enhance national data flow to policymakers, other users, and custodian agencies, and to share and discuss country challenges in measuring SDG indicators.

During the sessions and at the end of each presentation, enough time was given for interactive dialogues between participants and experts. Participants were also invited to share their national experiences in data collection. Finally, a training certificate was handed out to participants who successfully attended the ESCWA/UNEP workshops on SDG indicators.

National e-waste trainings and Regional E-waste Monitors from the SCYCLE team

(Contributed by Kees Baldé, United Nations University / United Nations Institute for Training and Research)

Waste electronic electrical equipment (WEEE), or e-waste is a waste stream that is fast growing and containing substantial valuable and hazardous materials. Due to political, societal and environmental importance, e-waste has a sub-indicator under SDG indicator 12.5.1 (national recycling rate). The amount of e-waste generated is 54 Mt in 2020, and is expected to double to 110 Mt in 2050. The rapid growth of global e-waste is driven by growing consumption, short product life cycles, and little repair. To date only 17% of e-waste is documented to be collected and treated environmentally sound causing severe health effects to workers, and the environment and losses of resources.

The SCYCLE team, co-hosted by United Nations University / United Nations Institute for Training and Research are active in tackling the e-waste problem through carrying out several activities on e-waste in the past year. SCYCLE does that in close collaboration with the Global E-waste Statistics Partnership (a partnership of SCYCLE with the International Telecommunication Union) and various other partners. Please find below a selection of the most relevant activities in the past 6 months, and upcoming activities.

Capacity building on e-waste statistics in Namibia, Botswana and Malawi supporting national policies

SCYCLE, in partnership with the International Telecommunication Union, the Uganda Bureau of Statistics and the National Bureau of Statistics Tanzania, has been leading three training workshops on e-waste data and statistics. Both Botswana and Namibia currently have an e-waste policy under approval phase, whereas Malawi is in a consultation process with stakeholders to start developing one. Within this context it is paramount to adopt a comprehensive approach and include data and quantification capacity to support the policy work. The workshops were held during April-May 2021 for three days each and were attended by all the main stakeholders in the countries (NSOs, MoE, Regulatory Authorities, MoIs, Ministries of Local Governments, municipalities, private sector, etc.), with a total of approximately 60 participants.

Harmonizing e-waste data for East Africa

In Eastern Africa, the East Africa Communications Organisation (EACO) has developed a Regional E-waste Management Strategy. The goal of the strategy is to achieve a sustainable e-waste management system in the EACO member states, and a harmonized monitoring framework for e-waste. The Global E-waste Statistics Partnership (GESP) – in collaboration with the EACO secretariat, will provide technical assistance to the six member states of EACO. The project has just kicked-off and comprises training for the six national statistical offices (NSOs) and relevant entities of the six EACO member states, development of harmonized surveys, data collection, and a publication presenting the regional study and use of statistical tools by the six NSOs.

E-waste statistics workshop for CIS plus Georgia, Turkmenistan and Ukraine

The Regional E-waste Monitor in the CIS plus Georgia, Turkmenistan and Ukraine has reached its conclusive phase and the project partners (UNU/UNITAR and UNEP with the support of UBA and ITU) organized a final online workshop for the official delegates of the countries who took part in the activities. The workshop was attended by around 30 participants, including professionals from NSOs, Ministries of Environment and other governmental agencies dealing with e-waste data, as well as the private sector. The regional and national findings of the study were presented and discussed, together with a final training day on e-waste statistics.

Various new projects and publications are in preparation or started their execution in 2021. Please find below a selection:

- **Self-paced online learning** publication in 2021 at www.globalewaste.org
- **Regional e-waste Monitor CIS**+ publication in Sept 2021
- **Regional e-waste Monitor for selected Latin American Countries** publication November 2021
- **Regional e-waste Monitor Arab States** publication December 2021
- **West Asian e-waste outlook 2020** - 2050 publication 2021
- **National E-waste Monitor for Lebanon** in 2022 (including training and management options, and statistics)

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- **National E-waste Monitor for Bahrain** (project in development, including statistics, national training and stakeholder discussions)
- **Regional E-waste Monitor for Western Balkans** (project in development)
- **Feasibility study on Global Battery Waste monitor**·

For more information, please contact Kees Baldé, balde@vie.unu.edu

More information can be found at:
Sustainable Cycles (SCYCLE) Programme

Convention on Biological Diversity

(Contributed by Jillian Campbell, Secretariat of the Convention on Biological Diversity)

The Secretariat of the Convention on Biological Diversity (CBD) has released the first official draft of the post-2020 global biodiversity framework, representing the result of activities undertaken over the last two years. The draft framework proposes 4 goals for 2050, and 21 targets and 10 'milestones' for 2030. Emphasis is placed on the need to transform society's relationship with biodiversity to ensure that, by 2050, the shared vision of 'Living in Harmony with Nature' is fulfilled. This will necessitate broad-based action, including engagement of actors beyond governments, partnerships with global, national and local organizations, identification of synergies with the 2030 Agenda for Sustainable Development and the work of the biodiversity-related multilateral environment agreements and Rio Conventions.

Implementation will also take a rights-based approach, recognizing the principle of intergenerational equity. The draft framework also aims to ensure that progress will be monitored in a transparent and accountable manner. It will undergo further negotiation during the third meeting of the Open-ended Working Group on the Post-2020 Global Biodiversity Framework to be held online later this summer. The outcomes of the third meeting will subsequently be submitted to the fifteenth meeting of the CBD Conference of the Parties (COP-15) to be held in Kunming, China, in October 2021, for its consideration.

The third meeting of the Open-ended working Group will also consider issues related to the development of the monitoring framework for the post-2020 global biodiversity framework. This will include a set of possible headline indicators for the goals and targets of the framework to monitor implementation nationally, as well as track progress globally. Headline indicators have been identified taking into account document CBD/SBSTTA/24/3/Add.1 and the views expressed during the twenty-fourth meeting of the SBSTTA, including the results of an in-session survey, as well as the first draft of the post-2020 global biodiversity framework. In this context, the CBD Executive Secretary has prepared document CBD/WG2020/3/3/Add.1 on proposed headline indicators for the consideration of the third meeting of the Open-ended working Group.

ECLAC Environmental Statistics Activities in Latin America and the Caribbean

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

Within the ECLAC´s Statistics Division, the Environmental, Climate Change and Disasters area support the regional needs on these topics. Some examples are shown:

ECLAC methodological guide for developing environment and sustainable development indicators
This Guide is intended to be a methodological tool for the production and dissemination of statistical information on environment and sustainable development in the countries of Latin America and the Caribbean, to produce, implement and maintain a system of environment or sustainable development indicators. The document is now undergoing the final stages of editorial review.

ECLAC is currently implementing a new project entitled "Caribbean Small Island Developing States (SIDS) relevant climate change and disasters indicators for evidence-based policies"
A three-year project funded by the 12th tranche of the United Nations Development Account (DA12 project) , which is being implemented during the period 2021-2023 by ECLAC's Statistics Division and ECLAC Sub-regional Headquarters for the Caribbean, in close collaboration with the United Nations Statistics Division and the CARICOM Secretariat, to improve the production and use of climate change and disaster indicators in Caribbean member-States. The objective of the project is to enhance the climate change and disaster risk reduction statistical and institutional capacities of targeted countries in the Caribbean to improve policy coherence in the implementation of the SDGs, the SAMOA Pathway, the Paris Agreement, and the Sendai Framework.

⇒ **DA12 project: SIDS relevant climate change and disasters indicators: the Caribbean situation, 09 February 2021**

ECLAC discussed the opportunities and challenges of the production of climate change and disaster indicators in selected countries of the Caribbean: users and producer's perspectives. Furthermore, the deep understanding of the regional assessment situation of climate change and disaster statistics were covered to improve links between statistical production and related policymaking.
https://comunidades.cepal.org/estadisticas-ambientales/es/grupos/evento/sids-relevant-climate-change-and-disasters-indicators-caribbean-situation

⇒ **DA12 project: Introduction to climate change and disaster statistics in the Caribbean, 09-11 March 2021**

ECLAC presented the stock taking of the regional and national situation, and the demand and supply of environment, climate change and disaster statistics. In addition, concepts, methods, classifications and international demand for climate change and disaster statistics production and indicators were addressed. A snapshot of the assessment of opportunities and challenges to climate change and disaster statistics production was presented by ECLAC.
https://comunidades.cepal.org/estadisticas-ambientales/es/grupos/evento/introduction-climate-change-and-disaster-statistics-caribbean

Regional Network of Environment Statistics Webinars: high-level webinar on the System of Environmental-Economic Accounting-Ecosystem Accounting (SEEA-EA) for countries in Latin America, 04 February 2021

The Webinar was co-organized by the UN-ECLAC Statistics Division and the UN Statistics Division (UNSD) and was attended by over 117 participants, including five heads of national statistical offices (NSOs), from 16 countries in Latin America. The webinar was very timely, as the SEEA-EA was submitted for adoption to the UN Statistical Commission at its session a month following the webinar. The webinar aimed to inform the high-level officials from mainly NSOs in Latin America about the SEEA-EA revision process, present the ecosystem accounting achievements in some countries in the region, and provide a platform for discussion on ecosystem accounting. It was also aimed to prepare the NSO management for the upcoming discussion at the Statistical Commission.
https://comunidades.cepal.org/estadisticas-ambientales/es/grupos/evento/sistema-de-contabilidad-ambiental-y-economica-contabilidad-de-ecosistemas-scae-ce

ECLAC remote support to Dominican Republic for production of environment, climate change and disaster indicators, from 10 May to 3 June 2021

Due to the Covid-19 pandemic, the ECLAC technical assistance mission to Dominican Republic was cancelled and instead delivered via a second-time online course and remote technical assistance on SDG environment, climate change and disaster indicators production to 89 participants from 15 governmental institutions. The training used a blended methodology combining self-paced modules from the online course with weekly live webinars with the trainers. The training was inaugurated live by the Minister of Environment, the Director of the National Institute of Statistics, the UNDP Country Representative in Dominican Republic, and the ECLAC Statistics Director.
https://comunidades.cepal.org/estadisticas-ambientales/es/grupos/noticia/asistencia-tecnica-en-indicadores-ambientales-ods-republica-dominicana

ECLAC Regular Data Collection on Environment Statistics: CEPALSTAT, SDG Gateway and Statistical Yearbook 2021

ECLAC's environment statistics team is carrying out the compilation and validation of environment statistics data series to update the CEPALSTAT database with the most recent data. It includes new environment series to better showcase the most relevant issues in the Latin American and Caribbean region, in particular exports of renewable and non-renewable natural resources, and share of primary exports in total exports.
https://statistics.cepal.org/portal/cepalstat/
https://agenda2030lac.org/es
https://statistics.cepal.org/yearbook/2020/electronica.html?statistic=1&lang=es

Planned activities:

- ⇒ DA12 project national workshop: Generating climate change and disasters indicators for policy decision-making in Suriname, 13-15 July 2021
- ⇒ Remote technical assistance for the construction and maintenance of a system of national environmental indicators: Bolivia, August 2021 (tbc)-
- ⇒ DA12 project: second national workshop for Antigua and Barbuda, September 2021 (tbc)
- ⇒ Side Event at the Statistical Conference of the Americas (SCA) and possible Side Events at other meetings or conferences in October/November 2021.

UNECE NEWS

(Contributed by Michael Nagy and Tiina Luige)

Sixth Joint OECD/UNECE Seminar on SEEA Implementation (online, 9-11 March 2021)

The sixth Joint OECD/UNECE Seminar on the Implementation of the System of Environmental-Economic Accounting (SEEA) took place as an online event from 9-11 March 2021. More than 170 participants representing 48 countries, 10 international organisations, academia and several NGOs were connected.

The overarching theme of the seminar was on storytelling with SEEA. It featured the following 5 sessions:

- Session 1: Opening and Introduction;
- Session 2: SEEA Ecosystem Accounts (SEEA-EA) and its relevance in policy and decision making;
- Session 3: Measuring circular economy with SEEA, and the role of waste accounts;
- Session 4: Using SEEA for policies on climate change and sustainable finance;
- Session 5: Conclusions and Recommendations: Storytelling with SEEA.

The seminar combined presentations with discussions between users and producers of SEEA. Some of the main conclusions were that:

a) There is no "one size fits all" when it comes to telling policy-relevant stories. The users are different, how to tell the story needs to be different.
b) The role of NSOs does not end with producing an accounting table. Visualisation and contextualisation are important.
c) High data quality and reliability is key, furthermore regularity in the production of the data (annual, quarterly, monthly, daily) is important – which was also shown with many of the examples (e.g. on quarterly emissions accounts).
d) The main problem on the institutional level seems to be availability of enough resources and/or the mandate to producing SEEA accounts in the required quality, and to visualise and contextualise the information.

The next joint OECD/UNECE event on SEEA implementation will be held on 24-25 March 2022 (to be confirmed).

All presentations, the summary of discussions and conclusions as well as the recordings of the seminar (available in both languages English and Russian) can be found at https://unece.org/statistics/events/joint-oecdunece-seminar-seea-implementation-online

First Expert Forum for Producers and Users of Disaster-related Statistics (online, 7, 8 and 10 June 2021)

The *First Expert Forum for Producers and Users of Disaster-related Statistics* was co-organised by UNECE's Task Force on Measuring Hazardous Events and Disasters and the newly established Inter-Agency and Expert Group (IAEG) on Disaster-related Statistics.

This Expert Forum contributed to forming a global community of practice of producers and users of disaster-related statistics, and laid the foundation for a series of annual Expert Fora. It is planned that each year the Forum will be organised by another UN Regional Commission. The Forum aimed to identify important areas of work to support implementation and better use of disaster-related statistics.

UNECE hosted the global online event with two identical sessions each day to accommodate for different time zones, the "morning" sessions with English-Russian interpretation, and the "afternoon" sessions in English. More than 300 experts representing NSOs, Disaster-risk management authorities, various other governmental agencies, academia, NGOs and international organisations from all around the world participated in this first meeting of its kind.

The meeting was opened by the Directors of Statistics of all five Regional Commissions and UNSD, as well as by a high -level representative of the United Nations Office for Disaster Risk Reduction (UNDRR). Keynote speaker Ambassador Wayne McCook, the former Chair of the "open-ended intergovernmental expert working group on indicators and terminology relating to disaster risk reduction" (OIEWG), reminded participants of the high expectations that policy makers have. The importance of NSOs and official statistics is mentioned in the report of the OIEWG which was adopted by the UN General Assembly in February 2017.

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The Expert Forum included four sessions with presentations and panel discussions:

1. Disaster risk reduction: The role of official statistics
2. Managing health and climate change-related hazards with official statistics
3. The geospatial dimension
4. Informing disaster-risk reduction policy with official statistics: Need for action

Participants identified important areas of work to improve disaster-related statistics. The IAEG will formulate a research agenda, taking these needed areas of work into account. Most participants believed that the following issues should be dealt with priority:

- Improving data quality (in particular timeliness)
- Filling of data gaps
- Review of existing statistical classifications

All presentations, recordings and further background information can be found at https://unece.org/info/events/event/354927

The next Expert Forum will be organised by ESCWA in 2022.

Conference of European Statisticians session on official statistics for climate action (25 June 2021)
The Conference of European Statisticians (CES) 2021 plenary session devoted one of its sessions to official statistics for climate action. The session included high-level discussion on the role of national statistical offices in providing statistics for climate action. It discussed how to strengthen the work on climate change-related statistics in NSOs and address large information needs in a coherent and sustainable way, and how to bring these statistics to the same level of as economic and social statistics in terms of timeliness, frequency, relevance and accessibility. The session also considered how to showcase the value of official statistics for fact-based decision making to increase the visibility of NSO work in climate change, increase engagement and create win-win partnerships with policymakers and research community. An important document for the session was the in-depth review of the role of statistical community in climate action (that the CES Bureau carried out in February 2020).

The papers and presentations for the session are available at: https://unece.org/info/events/event/348378

Conference of European Statisticians session on measuring circular economy (25 June 2021)
Another session of the CES 2021 plenary was devoted to measuring circular economy. Statistics Finland presented the results of the in-depth review of measuring circular economy and the ongoing work of the UNECE Task Force on measuring circular economy. Following the recommendations of the in-depth review and the CES Bureau, the Task Force drafts guidelines for measuring circular economy by end of 2022.

This work is closely aligned with work of other international organisations and their expert groups, in particular with related work of the United Nations Committee of Experts on Environmental-Economic Accounting (UNCEEA), the OECD informal Expert Group on a new generation of information for a Resource Efficient and Circular Economy, the work of Eurostat on the EU Monitoring Framework, the "Bellagio Process", UNEP methodological work on EW-MFA, the Platform for Accelerating the Circular Economy (PACE) and the International Organization for Standardization (ISO).

Upcoming events

18th meeting of the Joint Task Force on Environmental Statistics and Indicators (hybrid, 18-19 October 2021)
The UNECE Joint Task Force on Environmental Statistics and Indicators (JTFESI) will continue with its discussions of the review of the *UNECE Guidelines for the Application of Environmental Indicators*.

The proposed structure of the reviewed list of indicators follows the structure of the Framework for the Development of Environment Statistics (FDES). For more information see https://statswiki.unece.org/display/JTFEI/Revised+Guidelines+for+the+Application+of+Environmental+Indicators

Expert Forum for Producers and Users of Climate Change-related Statistics (online, 31 August – 3 September 2021)

The *UNECE Expert Fora for Producers and Users of Climate Change-Related Statistics* have been organized annually since 2014 to serve as a platform for collaboration, sharing ideas and experience, discussing concepts and measurement issues, and identifying areas for development of practical guidance. The Expert Fora provide a link between producers and users of climate information and follow up on the Conference of European Statisticians' *Recommendations on Climate Change-Related Statistics* endorsed in 2014 by more than 60 countries and international organizations.
The 2021 Expert Forum will aim to:

- Facilitate sharing of knowledge and experience on developing new change-related statistics and improving usefulness of the existing data.
- Support implementation of the CES Recommendations on Climate Change-Related Statistics (2014) and the CES Set of Core Climate Change-related Indicators and Statistics Using the System of Environmental-Economic Accounting (2020).
- Inform about related developments like Paris Agreement data needs, SDG indicators and the UNSD Global Set of Climate Change Statistics and Indicators.
- Show good practices in producing, disseminating and using climate change-related statistics.
- Identify priorities for future work.

The substantive sessions will focus on:

1. Measuring climate change vulnerability and adaptation
2. Carbon footprint and consumption-based emissions
3. Good practices in producing, disseminating and using climate change-related statistics

The concept note, registration link and more information can be found at https://unece.org/info/events/event/355070

EEA indicators to monitor the environmental dimension of European policies

(Contributed by Roberta Pignatelli, European Environment Agency)

In December 2020 a joint EEA/Eionet Strategy for 2021-2030 has been adopted[1], aimed at delivering data and knowledge to achieve Europe's environment and climate ambitions. The next decade will indeed be crucial to address unprecedented environmental and climate challenges, while stimulating a recovery from the economic and social impacts of the COVID-19 pandemic.

In Europe, the European Green Deal and the related stimulus measures for green recovery set long-term objectives, with concrete objectives and establishing new financial instruments. The Strategy aims to seize the remarkable opportunities offered by recent developments in public awareness and technology, thus ensuring that Europe's policy makers and public have the best available knowledge on Europe's environment to be able to make informed decisions. To bring the latest scientific knowledge to policy makers and the public, the EEA will also strengthen its collaboration with institutional partners and networks and the public.

In this evolving situation, the EEA indicators continue to constitute the building blocks of environmental knowledge, by maintaining the mechanisms in place that lead from data to policy monitoring, as well as by allowing the development of new methodologies (composite indices, dashboards, etc.) for monitoring current and future policies and strategies. The EEA participates in this work carried out by the European Commission, by contributing to the analysis of the environmental component of sustainable development.

[1] https://www.eea.europa.eu/about-us/eea-eionet-strategy-2021-2030-1

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Since the beginning of the year, twelve policy-relevant indicators have been produced by the EEA, mainly covering climate change mitigation and adaptation, energy, transport, biodiversity and water and marine environment, but also agriculture, air pollution, industry, land use, soil and the transition to sustainability. Three of these indicators are also included in the Eurostat-led EU SDG monitoring system, namely 'Abundance and distribution of selected species in Europe', 'Conservation status of species under the EU Habitats Directive' and 'CO_2 performance of new passenger cars in Europe' (the latter recently complemented by a new indicator on 'CO_2 performance emissions of new vans in Europe'). The other indicators are 'Extreme sea levels and coastal flooding', 'Share of energy consumption from renewable sources in Europe', 'Industrial pollutant releases to air in Europe', 'Greenhouse gas emission intensity of electricity generation in Europe', 'Industrial pollutant releases to water in Europe', 'Emissions and energy use in large combustion plants in Europe', 'Diversion of waste from landfill in Europe', and 'Soil moisture deficit'.

The latter indicator, recently developed, monitors the pressure of soil moisture deficits, thus warning of potential impacts on plant development and soil health and supporting the assessment of drought-resistant, resilient and vulnerable ecosystems. Over the period 2000-2019, soil moisture in the growing season was several times lower than the long-term average in EEA member countries plus the UK. The largest soil moisture deficits occurred in 2003, 2017 and 2019, affecting over 1.45 million km^2 in 2019. Soil moisture content was also low in 2012, 2015 and 2018, contributing to a drought pressure more and more frequent and intense.

The EEA is also developing four new indicators: one on air pollution (health impact of exposure to fine particulate matter) and three on water and the marine environment (water abstraction by sector, ecological status of surface waters and pesticides in rivers, and groundwater in Europe). Additional indicators on water, chemicals and health will be developed in the next years, to support the monitoring of the Zero Pollution Action Plan[2], adopted by the European Commission in May 2021, as a key deliverable of the European Green Deal. The same applies for other EU policies, where the need for new indicators and new monitoring frameworks is increasing.

The overall quality of EEA indicators is also being improved, by including as data sources more and more Copernicus-based data, as relevant. This is fundamental, in particular, for developing indicators on climate change adaptation, as well as to measure vulnerability and exposure of society to climate change. At the same time, efforts are being made to improve timeliness at least for some categories of indicators, with the aim of updating them every 6 months. Innovation is a key dimension in the new Strategy.

All EEA's published indicators are available in a dedicated web page[3].

Recent Eurostat activities

(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) and other policy monitoring frameworks

Eurostat has a dedicated website for SDG indicators. The latest Eurostat SDG communication package was published on 15 June 2021, including the full monitoring report on progress towards the SDGs in the EU context - edition 2021, the brochure with key findings as well as the digital publication 'SDGs & me'. The 2021 report includes a special chapter about Covid and another one about spillovers and footprints.

Eurostat supports the methodological development of several tier III indicators in the UN list of SDG indicators for global monitoring, closely cooperating with the relevant custodian agencies. Eurostat participates in the working groups of the Inter-agency and Expert Group on SDG indicators (IAEG-SDGs) on "Geo-spatial Information" and on "SDMX", and follows the work of the IAEG-SDGs as an observer.

[2] https://ec.europa.eu/environment/strategy/zero-pollution-action-plan_en
[3] https://www.eea.europa.eu/data-and-maps/indicators/#c0=30&c12-operator=or&b_start=0

Environmental statistics

The main entry points for Eurostat environmental statistics are the dedicated sections in its website for environment, waste statistics and climate change related statistics. Eurostat also maintains the European Commission monitoring framework for the circular economy in this dedicated website.

The results of the 2020 OECD/Eurostat Joint Questionnaire on municipal waste are published in this online article. The data collections on waste streams (packaging waste, waste electric and electronic equipment, end of life vehicles and batteries) were completed in September-October 2020 and the data are published here. The 2021 data collections have been launched. Also updated were the online articles on electrical and electronic equipment, waste packaging and batteries. The results of the 2018 data collection on waste statistics according to Regulation (EC) 2150/2002 are published here (data for 2016) and in the online articles here and here.

The results of the data collection on inland waters, including regional information, are published in this online article. The results of forestry statistics are available in this article. Data on the production and trade in wood products collected with the Joint Forest Sector Questionnaire were published. Both physical and monetary forest accounting data are published. An overview of data published on forestry and forests by Eurostat can be accessed on this link.

SEEA environmental accounts

Eurostat runs data collections of SEEA-based environmental accounts, and the results are published as follows: air emission accounts (2019 data), material flow accounts (2020 data), environmental taxes (2019 data), environmental sector (2018 data), environmental protection expenditure (2018 data) and physical energy flow accounts (2019 data). All these data collections are annual and mandatory for EU Member States. Eurostat also publishes air emission footprints and two datasets with material footprints (aggregate and detailed). Besides the articles linked above, and other articles accessible from them, Eurostat publishes the data results in the Eurostat online database, as well as other material (see dedicated section on environmental statistics).

Eurostat published the final report of the project integrated system of natural capital and ecosystem series accounting (KIP INCA) in collaboration with other EU partners. The report introduces ecosystem accounting and presents ecosystem extent accounts, initial ecosystem condition accounts and ecosystem services accounts for the European Union. The report shows practical examples of possible uses of ecosystem services accounts and existing policy applications. The full list of published INCA output can be found in the methodology section under 'Ecosystem accounts'.

Eurostat also facilitated training courses on environmental statistics and SEEA for European compilers. Material from past courses is available here. Because of the coronavirus lockdown and travel restrictions many training courses are being transformed into online courses. Recent and upcoming courses are: water statistics and accounts (7-9 June 2021), Monetary environmental accounts – 3 webinars (8, 15 & 22 June 2021) and 'classroom course' (online, 14-15 September 2021), ecosystem accounts (16-18 November 2021). The courses requested for 2022 are: physical environmental accounts, water statistics and accounts, ecosystem accounting, monetary environmental accounts, waste statistics.

Collaboration to advance the System of Environmental-Economic Accounting (SEEA) for Water and Waste Accounts in Bhutan, the Maldives and Mongolia

(Contributed by Statistics Division, ESCAP)

ESCAP collaborated with Bhutan, the Maldives and Mongolia to advance Water and Waste Accounts during 2020-2021.

Waste Accounts: Bhutan

Pilot Waste Accounts (physical supply and use tables (PSUT)) were compiled by the National Statistics Bureau of Bhutan for 2019, notwithstanding the data limitations and physical restrictions brought about by the pandemic. The waste accounts will provide basis to measure the performance of the Waste Management Program Strategy under Bhutan's 12th Five-Year Plan (2019-2023) and provide recommendations for improvement. The final report is available at this link: Bhutan Waste Accounts Report (2019)

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Water and Waste Accounts: Maldives

The National Bureau of Statistics (NBS) of the Maldives compiled Water Accounts for 2018 and 2019. The Water Accounts will be used to evaluate the national policies on water and sanitation of the country as well as to monitor progress in achieving the SDGs.

NBS also developed Waste accounts for 2018 and 2019. Some of the objectives of the Waste Accounts are to: develop a multi-purpose data system which serves user needs - government, service providers, non-governmental organizations, citizens; identify key indicators and proxy indicators on waste for evaluating effectiveness of national policy and planning, as well as progress on SDGs; and identify data gaps and propose activities that will help improve data collection and dissemination.

The final reports are available at this link: Maldives National Water Accounts 2018 & 2019 and Maldives National Waste Accounts 2018 & 2019

Water and Waste Accounts: Mongolia

Efforts of the National Statistics Office of Mongolia focused on the following: 1) development of the national compilation methodologies for the waste and water accounts in accordance with the SEEA Central Framework; 2) the generation of solid and hazardous waste for 2018 and 2019; and 3) trial results of the physical supply and use tables, water accounts for 2019 based on available data. The planned compilation of the Water Accounts (2019) and Waste Accounts (2018 and 2019) was hindered by travel restrictions and the strict lockdown enforcements in the country due to due to the pandemic, leaving no access to the government computer systems including those at the NSO and at various relevant Ministries.

The compilation of the water and waste accounts in the future will help Mongolia improve monitoring for Waste management, National Development Plan and measure key indicators for the Mongolia Sustainable Development Vision 2030 and the Sustainable Development Goals (SDGs). The report is available at this link: Mongolia: Developing water and waste accounts

SIAP continues to scale up capacity building activities with a focus on the SEEA

(Contributed by the Statistical Institute for Asia and the Pacific, ESCAP)

During the first half of 2021, the Statistical Institute for Asia and the Pacific, in collaboration with partners, conducted three facilitated e-learning courses on environmental statistics and accounts. Over 400 participants successfully completed the course "Compiling Climate Change Indicators: An Accounting Approach". The course provides details on using an integrated approach based on the System of Environmental-Economic Accounting (SEEA) to produce indicators relevant to climate change. Over 100 participants successfully completed each of the other two courses on the Disaster Related Statistics Framework and SEEA-Water. All courses are currently open to all as free, self-paced courses on the SIAP's e-learning platform (https://siap-elearning.org/).

During the second half of 2021 facilitated courses will be held on Solid Waste Accounts, Energy Statistics and Accounts, and SEEA Ecosystem Accounting based on the recently adopted international statistical standard by the United Nations Statistical Commission.

Environmental Statistics and Accounts in Bangladesh

(Contributed by Mr. Md. Rafiqul Islam, Joint Director, Bangladesh Bureau of Statistics)

Bangladesh had a long history of developing Environmental Statistics. The Bangladesh Bureau of Statistics (BBS) published its first Compendium of Environment Statistics in 1997. BBS published the Compendium of Environment Statistics in 2004, 2005, 2009 and 2017 following the Framework for the Development of Environment Statistics (FDES). BBS prepared and published the 'Bangladesh Environmental Statistics Framework (BESF) 2016-2030' under the guidance of UN-FDES, the System of Environmental Economic Accounting (SEEA), the Sendai Framework for Disaster Risk Reduction (SFDRR) and related frameworks. BBS has recently published the 'Compilation of Bangladesh Environment Statistics 2020' based on the BESF 2016-2030 and the FDES 2013. BBS also published 'Integrating Gender and Social Inclusion in Environment, Climate Change and Disaster-related Statistics 2020 (Methodological Guideline for Producers and Users).

For the first time in the history of Bangladesh, BBS has published a household based large sample survey result titled 'Bangladesh Disaster-related Statistics 2015: Climate Change and Natural Disaster Perspectives'. The results from this Survey have served as inputs to baseline information for SDGs and SFDRR. Bangladesh initiated the 'Disaster-related Statistics Framework (DRSF)' along with Fiji, Indonesia and the Philippines with the technical and advisory support of UN-ESCAP. Bangladesh has successfully completed the first pilot application of the DRSF under the leadership of BBS and involving the Ministry of Disaster Management and Relief, among others.

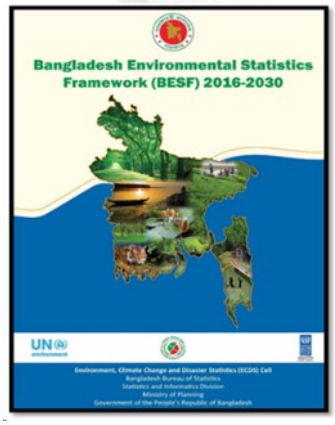
The Government of Bangladesh is now implementing the 'Strengthening Environment, Climate Change and Disaster Statistics (ECDS) project' with a 2019-2023 timeline under the leadership of BBS. BBS will conduct the important surveys, compilations and assessments, e.g., to: 1) conduct the climate change and natural disaster-related statistical survey to monitor the impacts of climate change and disastrous events; 2) develop Experimental Eco-system Accounts (EEA); 3) conduct Environmental Protection Expenditure and Waste Management Survey; 4) assess the damage and loss of agricultural production, equipment/machineries, land and soil, residence, infrastructure etc. due to climate change and natural disaster; 5) assess or measure the affected population with area, deaths and missing population due to climate change and natural disasters with multi-sectoral GIS integration; and 6) collect and compile data of the Compilation of Bangladesh Environmental Statistics.

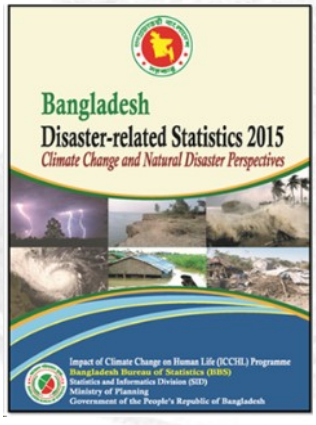
BBS has already conducted the 'Bangladesh Disaster-related Statistics 2020: Climate Change and Natural Disaster Perspectives" in June 2021 under the ECDS Project. BBS has also conducted the 'Pilot Survey on Sex, Age and Disability Disaggregated Data (SADDD) for Disaster Risk Reduction (DRR) and Climate Change Adaptation (CCA) 2021.

As regards the dissemination and use of environmental statistics, BBS has been involved in generating the Sustainable Development Indicators in many national, regional and international arenas/ projects:

Links:

1. https://www.sdg.gov.bd/resource/12#1
2. http://www.bbs.gov.bd/site/page/76c9d52f-0a19-4563-99aa-9f5737bbd0d7/-
3. http://www.bbs.gov.bd/site/page/76c9d52f-0a19-4563-99aa-9f5737bbd0d7/-
4. http://www.bbs.gov.bd/site/page/3a4a8daa-cb54-49e6-99f3-7a5b516796d4/Publications-in-bd





Climate Change Statistics in Burundi

(Contributed by ISTEEBU and Gerard Barutwanayo, Consultant)

Burundi is one of the world signatory countries of the Paris Agreement on Climate Change. To align with the articles of this Agreement, the country has set up the necessary tools for its implementation, for example, the national policy on climate change, the national strategy and action plan on climate change, and the National Determined Contribution (NDC) https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Burundi%20First/CPDN%20BURUNDI.pdf. Since 2019, Burundi has also published the 3rd National Communication on Climate Change. Http://extwprlegs1.fao.org/docs/pdf/Bur182109.pdf.

For informing the users and decision makers on the situation of environment, since 2017, the country is involved in the development of environment statistics after the recommendation of the Technical Committee for Statistical Information formulated at its 9th session held in 2015. With the support of UNSD, Burundi has published the first edition of the compendium on environment statistics in 2016 which takes into account the content of the Framework for the Development of Environment Statistics (FDES 2013). In order to promote the production of reliable environment statistics on a regular basis and respecting the international standards, in collaboration with UNSD, Burundi has implemented the National Strategy for the Development of Statistics (NSDS 2018-2022).
http://isteebu.bi/index.php/publications/annuaires-statistiques/statistiques-environnementales

As a country that has ratified the Paris Agreement, Burundi has participated in the Pilot Survey on Climate Change-related Statistics and Indicators organized by the UNSD in 2017. This survey allowed the country through the National Institute of Statistics (ISTEEBU) to identify if indicators on climate change are available or not.

As part of the on-going Global Consultation on the draft Global Set of Climate Change Statistics and Indicators, UNSD has been organizing several information sessions for countries: https://unstats.un.org/unsd/envstats/ClimateChangeglobalconsultation.cshtml. For contributing to this Global Consultation, Burundi organized a meeting on 29 June where the indicators and statistics were reviewed to determine their relevance and whether data were available and presented its experience and status on the Consultation at the information session on 7 July 2021 that was conducted in French. Burundi will organize in July 2021, a National Consultation in collaboration with UNSD providing technical assistance to fill the tools made available by UNSD. This consultation will help the country to establish a national indicator set in an internationally comparable way. The National Institute of Statistics of Burundi works closely with the stakeholders on climate change to achieve this target.

Environment Statistics and Environment Accounts in India

(Contributed by Ministry of Statistics & Programme Implementation, India)

Environmental concerns have been a part of Indian thought and social processes since time immemorial. These are reflected in the Constitution of the Republic of India as well. India has been historically collecting, compiling and disseminating statistics on environment related aspects. The National Statistical Office (NSO), India brought out the first issue of the 'Compendium of Environmental Statistics' in 1997. Since then, India has been regularly publishing the 'Compendium of Environmental Statistics', which provided a general introduction to the state of the environment, their changing character, and the impact of environmental degradation on the health of the people. The document also provided useful insights on the development of environment statistics in India along with information on Biodiversity, Atmosphere, Land/soil, Water and Human Settlements. The NSO, India also published two issues of the publication titled 'Statistics related to Climate Change' based on the Driving force-Pressure-State-Impact-Response (DPSIR) framework.

In 2018 the two publications, 'Compendium of Environmental Statistics' and the 'Statistics related to Climate Change' were merged and a new publication titled 'EnviStats India- Vol.-1, Environment Statistics' was conceptualized following the Framework for the Development of Environment Statistics (FDES)-2013 released by UNSD. The publication, covers not just the different facets of the environment, but also includes several social and economic statistics which have direct bearing on the environment. The first publication in 2018 included 84 of the 100 indicators of the core set, 44 Tier II indicators and 6 Tier III indicators. The constant endeavour towards improved coverage has enabled India in reporting on an increased number of indicators. The latest publication of the EnviStats India- Vol.1, Environment Statistics, 4th in the series, released in March 2021 covered 88 of the 100 indicators in the Core set and 111 and 23 of the Tier II and Tier III indicators respectively. In accordance with the FDES 2013, the tables of the publication 'EnviStats-India' have been

(Continued on page 22)

(Continued from page 21)
categorised into six chapters, each corresponding to one of the components of FDES 2013-Environment Conditions and Quality, Environmental Resources and their Use, Residuals, Extreme Events and Disasters, Environment Protection, Management and Engagement and Human Settlements and Environmental Health.The issue for the year 2021, is available at https://mospi.gov.in/web/mospi/reports-publications/-/reports/view/templateFour/22302?q=RPCAT.

Realizing the fact that the data related to the environment are sourced from multiple agencies and organizations, working in diverse areas, NSO, India has constituted an Inter-Ministerial Group on Environment Economic Accounting, to advice and guide on various issues and emerging challenges, particularly with respect to data gaps, methodological and conceptual issues etc.

Climate Change and its impact is the serious concern for the present times and compilation and dissemination of Environment related statistics are critical element in various endeavours for monitoring and checking environmental deterioration. The draft Global Set of Climate Change Statistics and Indicators compiled by UNSD is a useful material that would be helpful for the preparation of the climate change statistics depending on the country specific availability of the information. India aims to increase the scope of the coverage of the publication on Environment by adding the more indicators/statistics on Climate Change with the help of cooperation from national and international partners.

News from Ireland

(Contributed by Gerry Brady, Environment and Climate Division, Central Statistics Office Ireland)

The focus of our environment-related work during recent years has been on environmental accounts. This work was mainly in relation to compiling data for Eurostat Regulation and voluntary modules within the framework of the UN System of Environmental-Economic Accounting. More recently our work has diversified to respond to the social challenges posed by new policy needs such as climate change-related statistics, a Just Transition, the SDGs, and the European Green Deal.

Statistics on the Just Transition will inform social issues related to the transformation to a low carbon economy. For example, the changeover from diesel and petrol vehicles to electric and hybrid may impact more on people living in rural areas as they have fewer public transport options. Low income families may not be able to afford to change their diesel for an electric or hybrid-vehicle. Households without access to off-street parking at home will have fewer options around charging their electric vehicle. We will develop a broad range of indicators covering electric vehicle ownership, financial subsidies to incentivise the transition, the availability of a charge point network, and trends in electricity consumption and generation from renewable resources to monitor the evenness and rate of the transition.

Dwelling renovations to improve the energy efficiency of buildings and thus reduce the amount of heating required in Winter and cooling required in Summer is another aspect of moving to a low carbon economy. We are working towards combining household energy efficiency with socio-economic data from the Census to identify which types of households are in most need of an energy upgrade but least able to afford it.

Another pillar in the transition is the reduction of fossil fuel subsidies. We valued these at €2.4 billion in 2019 and published statistics using both the effective carbon rates and inventory methodologies. There is a broad consensus that there needs to be a sharp reduction in the level of fossil fuel subsidies and how this will be achieved is a concern of the Just Transition.

We have been working on a data rescue project with the Irish meteorological agency to rescue daily weather data for the period 1870 to 1959. The Phoenix Park daily data went back to 1829 and the station was recently awarded Centennial Observing Station status by the World Meteorological Organisation partly arising from the availability of the rescued data. The time series can be used to produce long-term trends in climate indicators such as storms, droughts, heatwaves, very wet days, etc.

Other new work areas of work include plant phenology (as an indicator of changes in the arrival of Spring and the length of the growing season), trends in electricity consumption by data centres, and an analysis of vehicle odometer readings by fuel type, location, age of vehicle, etc. Access to administrative microdata for statistical purposes is facilitating much of this work e.g. utility meter microdata on electricity, water, and gas consumption.

Our more recent work is moving in the direction of compiling statistics for a more inclusive set of environmental accounts that take environmental-social impacts into account. Our releases are available at https://www.cso.ie/en/statistics/

Development of Environmental Statistics in Nepal

(Contributed by Sushil Kumar Sharma, Central Bureau of Statistics, Nepal)

Nepal has been facing two types of environmental challenges; problems generated by the pressure on natural resources and the problems generated by climate change, for which the country is not responsible, but has to face the impacts that could be more severe in future. The Government of Nepal has been focused towards the environment, be that in the name of 'Climate Change' or 'Conservation' or 'the quality of life of the people' and committed to combating climate change and achieving the Sustainable Development Goals (SDGs). It has been realized that sustainable development depends much upon the management of the environment and hence, the expenditure on environmental management today is in fact, a reliable investment for the safe future.

From 1980 or so, the government of Nepal has taken initiatives to develop an information system on the natural environment to address the environmental issues from the line function of some agencies concerned with environmental aspects. The Central Bureau of Statistics (CBS) first published a Compendium on Environment Statistics in 1994, which provided valuable insights into the importance and usefulness of the subject matter. Its second and third series have been published in 1998 and 2015 with an attempt to analyse available data on various aspect of the environment of Nepal. However, a database on the environment was limited. Therefore, CBS has attempted to bring out the environment related statistics by compiling and disseminating its publication 'Environment Statistics of Nepal' since 2001 with an interval of 2/3 years. Up to now, nine series have been published. The latest publication is 'Environment Statistics of Nepal, 2019'. This is an update to the previous edition and has compiled data based on the classification of the United Nations Framework for the Development of Environment Statistics, 2013 (UN FDES, 2013).

CBS is collecting and compiling the environmental data through censuses and surveys conducted by CBS, surveys and research conducted by other government and non-government agencies and administrative records of government and non-government agencies. CBS had conducted National Climate Change Impact Survey in 2016, which was the milestone for the climate related data and provided a comprehensive picture of the climatic situation of the country presented the important instrument for policy integration and assisted in informed decision-making. CBS had conducted the Waste Management Baseline Survey in 2020, solid waste related baseline data and information was collected including the quantity and composition of municipal solid waste and other information about the state of solid waste management in different urban municipalities of Nepal and developed the SDG indicator related to solid waste. Both the climate change and waste surveys, as well as their results, are available on UNSD's website at: https://unstats.un.org/unsd/envstats/censuses/. Similarly, CBS is working on the SEEA also.

With regard to the Global Consultation on the draft Global Set of Climate Change Statistics and Indicators, Nepal has participated in the online information sessions organized by UNSD and made a presentation on its experience in the Global Consultation in the session on 14 July 2021: https://unstats.un.org/unsd/envstats/ClimateChange_globalconsultation.cshtml. A description of how a wealth of information obtained through the climate change and waste surveys could be used to populate the draft Global Set was elaborated. The plans of consultation with the national focal point on climate change and sharing the prefilled draft Consultation with the technical committee to discuss Part I and assess most relevant indicators and data availability in the draft Global Set contained in Part II (Excel) were also presented. The Global Set, once adopted by the Statistical Commission in 2022, will be very useful for Nepal in establishing a national set of climate change statistics and indicators.

The major challenges for the development of environment statistics in Nepal are: conducting new surveys related to environment issues in the context of limited or absences of statistical frames; focusing the stakeholder's attention towards the significance and utility of environment data; and adopting valid methodology in the production process of environment statistics and for the secondary source of environment statistics. Nepal is working towards firmly establishing environment statistics as official statistics, as per the user's requirements and as recommended by international guidelines, but due to its diverse nature and constraints in the collection and compilation, some challenges do remain. The quality of environment statistics can be insured only on the base of strong statistical infrastructure and the collaboration of the stakeholders in the country.

As regards the dissemination and use of environmental statistics, the environment statistics related publications are available on the following link:
https://cbs.gov.np/environment/ as well as on the UNSD link at: https://unstats.un.org/unsd/envstats/fdescompendia.cshtml

Environment Statistics in the Philippines: Global Initiatives and Efforts of the Philippines

(Contributed by: Vivian R. Ilarina, Virginia M. Bathan, Faith Lea B. Cabrera, Mylene M. Evangelista, Nichole P. Gabriel)

PSA conducts an Online Training on the United Nations Framework for the Development of Environment Statistics (FDES) 2013

The Philippine Statistics Authority (PSA) biennially publishes the Compendium of Philippine Environment Statistics (CPES), a compilation of statistical information collected from various government agencies that is useful in the formulation and evaluation of environmental and socio-economic programs and policies. The CPES is based on the conceptual and statistical guidelines of the United Nations Framework for the Development of Environment Statistics 2013 (FDES 2013). It is essential for the data partners to gain appreciation on the Framework's conceptual foundation, to strengthen inter-agency coordination, and to establish timelines of data provision in support of the regular and timely release of the CPES. With the mentioned objectives, an online training on the FDES 2013 with various agencies was conducted on 27 to 29 April 2021. Furthermore, this training served as a forum for discussion on how the environment statistics in the FDES fit into the monitoring framework of the Philippine Sustainable Development Goals (SDGs).

Compendium of Philippine Environment Statistics (CPES)

In the CPES 2010-2019 Edition, four components were already released in the PSA website, namely: 1) environment conditions and quality; 2) environment resources and their use; 4) extreme events and disasters; and 6) environmental protection. Upcoming releases of components 3) residuals and 5) human settlements and environmental health are scheduled before the end of the year to be followed by the release of the complete CPES publication.

Summary of environment statistics compiled in CPES: 2010-2019, based on FDES 2013

Component	Number of Statistics		
	Total	Tier 1	Tier 2
Environmental Conditions and Quality	42	25	17
Environmental Resources and Their Use	41	21	20
Residuals*	17	15	2
Extreme Events and Disasters	15	4	11
Human Settlements and Environmental Health*	10	7	3
Environmental Protection, Management and Engagement	3	3	0
Total	128	75	53

*Preliminary

Inter-agency Coordination for Climate Change and Disaster-related Statistics

The PSA also serves as Technical Secretariat to the Inter-Agency Committee on Environment and Natural Resources Statistics (IACENRS). One of the main functions of the IACENRS is to address evolving and emerging statistical requirements of stakeholders in the Philippine Statistical System (PSS). In 2019, a proposal was made to create a Technical Working Group (TWG) on Climate Change-related Statistics in support of the compilation of greenhouse gas inventories. The Committee agreed in December 2020 to establish a TWG that subsumes both climate change and disaster statistics given the complementary work in these two fields. In June 2021, the Climate Change Commission, together with the Office of Civil Defense and the PSA, presented the draft resolution establishing the TWG on Climate Change- and Disaster-related Statistics to the IACENRS. The TWG aims to serve as a forum for discussion of issues and concerns related to the compilation, processing, and dissemination of statistics and indicators related to climate change adaptation and mitigation (CCAM) and disaster risk reduction and management (DRRM).

The PSA participated in and provided input to the UNSD Pilot Survey on the Global Set of Climate Change Statistics and Indicators in June 2020, which aimed to develop a global set of climate change indicators tailored to all countries. The global set of climate change indicators will be a comprehensive, but not exhaustive, set of indicators and statistics designed to assist the country based on its concerns, priorities, and resources. The PSA is currently participating in the ongoing Global Consultation on the draft Global Set of Climate Change Statistics and Indicators, which will also be one of the initial tasks of the new TWG.

Environment and Climate Change Statistics in Suriname

(Contributed byAnjali De Abreu-Kisoensingh, General Bureau of Statistics Suriname (GBS))

Although COVID-19 made data collection more challenging than before, the General Bureau of Statistics (GBS) successfully launched its 9th Environment statistics publication using the Framework for the Development of Environment Statistics (FDES 2013), the Sustainable Development Goals (SDGs) and the CARICOM list as guidelines. Furthermore, the GBS has actively taken part in regional and international cooperation, such as participating in CARICOM's Technical Working Group on Environment Statistics (TWGES) and participating in the Expert Group on Environment Statistics (EGES).

Suriname has contributed to the development of the UNSD draft Global Set of Climate Change Statistics and Indicators and is also participating in the Global Consultation of the draft Global Set. Suriname made a presentation on its experience with the Global Consultation at three online UNSD-organized Information Sessions in June and July 2021: https://unstats.un.org/unsd/envstats/ClimateChange_globalconsultation.cshtml. Suriname looks forward to the adoption of the Global Set at the 53rd session of the Statistical Commission as this Set will serve member states in preparing national sets of climate change statistics and indicators according to their own concerns, priorities and resources.

In June 2021, Anjali Kisoensingh of the GBS chaired the CARICOM TWGES meeting, where all the 134 indicators from the Global Set were discussed and explained to the participating countries to help guide them in the UNSD Global Consultation of the draft Global Set of Climate Change Statics and Indicators. During 13-15 July 2021, ECLAC in collaboration with GBS, successfully organized a three-day DA12 project national online workshop: Generating climate change and disasters indicators for policy decision-making in Suriname", where more than 45 participants from all sectors were introduced to the draft Global Set on Climate Change Statistics and Indicators. The participants also selected the most relevant indicators, learned about calculating selected indicators and creating a metadata sheet. UNSD and CARICOM also participated in this national workshop, providing resource persons.

The environment statistics publication is an important tool used by the Surinamese government for Environment and Climate Change policy. The data from the 9th Environment Statistics compendium was also shared with the local consultants responsible for Suriname's Third National Communication. GBS is also planning to publish Suriname's first Climate Change Statistics report together with the 10th Environment Statistics publication in 2022.

As regards the dissemination and use of environment statistics, the 9th Environment Statistics compendium is available on the GBS website and on the UNSD's website:
https://statistics-suriname.org/wp-content/uploads/2021/03/Final-9th-environment-pub-2020.pdf
https://unstats.un.org/unsd/envstats/Compendia/Suriname9thEnvironment2020.pdf

Improvement of Environmental Data Ecosytems in Togo

(Contributed by Feyssal G. Moumouni, Ministry of Environment and Forestry Resources)

The data ecosystem is an environment in which a number of actors interact, produce, exchange and use data. It is a system of people, institutions and technology organized for the production, sharing and use of data. Such an ecosystem provides an environment for the creation, management and sharing of sustainable data.

For the development of a data ecosystem, the inclusion of all actors without exception is needed, where all actors have a leading role to play, the existence of a value or a benefit shared between the actors involved, a desire to share data on a legal basis, and promote the sharing of open data. But to set it up, it takes a responsible leader of the data ecosystem, no mixing of politics and technology, prioritizing national interest over any special interest, and simplifying data for public decision makers.

In this context, the Global Partnership for Sustainable Development Data (GPSDD) contributes to strengthening the pathways for the sustainable production of environmental data in Togo by:

- strengthening, in the short term, of the multi-stakeholder governance mechanism to examine priority environmental policy issues and the data required to support these policy priorities;
- examining data gaps on environmental issues and help facilitate capacity development to address these gaps; and
- filling gaps, leveraging approaches that use the administrative data system and build capacities to use new technologies (Earth observation / satellite data and available open data platforms) to fill data gaps environmental.

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To this end, a two-day multi-stakeholder launch workshop was organized by GPSDD and the Ministry of Environment and Forestry Resources (MERF) of Togo in December 2020, the objectives of which were to:

i. identify the national priority needs and challenges that concern the environment and understand what data is and is not available (missing data at national level on the environment);
ii. identify and examine gaps and challenges in environmental data for monitoring sustainable development goals;
iii. examine possible solutions and identify data resources, infrastructure and training that can facilitate adoption and sustainable use; and
iv. develop a roadmap to improve the environmental data ecosystems necessary for decision-making and monitoring of the SDGs.

One of the main requests from stakeholders at the workshop was for the GPSDD to support the recruitment of a national consultant to quickly conduct a SDG data gaps assessment, establish an analysis of indicators related to the SDGs, environment and climate change in Togo (Sustainable Development Goals, National Development Plan, Strategic Investment Framework for the Management of the Environment and Natural Resources, Nationally Determined Contribution) and refine the roadmap.

In order to effectively support an ecosystem of environmental data, the Government through the MERF and with the support of the GPSDD, commissioned the study on the inventory of environmental data in connection with the National Development Plan (PND), the Sustainable Development Goals (SDGs), the Strategic Investment Framework for the Management of the Environment and Natural Resources (CSIGERN), and the Nationally Determined Contribution (CDN). It was precisely about:

- evaluating the availability of and accessibility to data, current data sources, frequency of data production and data production agencies;
- carrying out an analysis of agency stakeholders (government, civil society, research / universities, development partners) who are responsible for producing data on the environment and climate change;
- analyzing the organizational arrangements and existing institutional frameworks focused on the production of environmental data in Togo; and
- listing and describing the barriers to data collection that were identified during the process, including through contacting agencies and making recommendations.

Therefore, the results of the work on all indicators of the environment sector in Togo are currently available with recommendations that will be implemented in the coming months.

FORTHCOMING EVENTS

Eighth meeting of the Expert Group on Environment Statistics (12-14, 19-21 October 2021)

53rd Session of the Statistical Commission (1-4 March 2022)

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