



envstats

News and Notes

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

FOCUS:

Environment Statistics during the Global COVID-19 Pandemic

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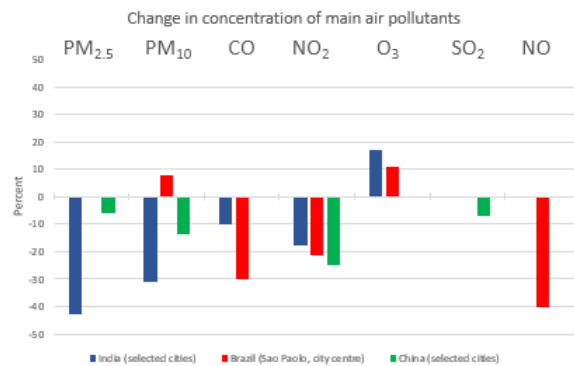
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As the global COVID-19 pandemic has abruptly affected every aspect of our lives and livelihoods, alike climate change but in a gradual manner, the need for timely and official statistics has become increasingly evident. Such data needs range from understanding the spread of the contagion and most vulnerable groups, quantifying lost jobs, affected supply chains and other losses, to assessing environmental impacts, both positive and negative. The [United Nations Statistics Division](#) (UNSD) has stepped up its efforts, in collaboration with key UN partners, to support national statistical offices (NSOs) in managing the information needs for COVID-19 pandemic.

The United Nations Secretary General, on Earth Day (22 April 2020) proposed [six climate-related actions](#) to shape the recovery among which to create ‘new jobs and businesses through a clean, green transition’. In his words “the climate emergency, just like the COVID19 pandemic, does not respect national boundaries”.

International and large-area assessments of environmental impacts such as improved air quality and temporarily decreased greenhouse gas (GHG) emissions were first communicated by the European Space Agency in China and Europe and by the National Aeronautics and Space Administration and the National Oceanic and Atmospheric Administration for the United States and elsewhere. Yet, according to the United Nations Environment Programme (UNEP), the

‘[Record global carbon dioxide concentrations despite COVID-19 crisis](#)’ were reached in April 2020. Latest scientific literature also provided evidence on improved air quality in major cities since the onset of the pandemic, including Beijing (China¹), Delhi (India²) and Sao Paulo (in Brazil³) as referenced below. However, the assertion of a quick increase of air pollution following the reopening was also communicated, in some countries, for example in [China in April and May](#). Among the most sizeable negative impacts of the global pandemic are the rapid increase in the amount of medical and plastic waste generated in many countries.



¹ Bao, R. and A. Zhang (2020). Does lockdown reduce air pollution? Evidence from 44 cities in northern China. *Science of the Total Environment* 731.

² Sharma, S., M. Zhang, Anshika, J. Gao, H. Zhang and S. H. Kota (2020). Effect of restricted emissions during COVID-19 on air quality in India. *Science of the Total Environment* 728.

³ Nakada, L. Y. K. and R. C. Urban (2020). COVID-19 pandemic: Impacts on the air quality during the partial lockdown in São Paulo state, Brazil. *Science of the Total Environment* 730.

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Also available on <http://unstats.unsd/ENVIRONMENT/newsletters.htm>

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Environmental impacts of the pandemic were also communicated on [biodiversity](#) with some positive observations at first, including bans on wildlife trade and consumption, reduced pressure from traveling/tourism etc., but increasingly alarming discussions followed as the duration of the pandemic prolonged. The [World Wildlife Crime Report](#) explains that while demand for some wildlife products such as ivory declined, demand for other products including tropical hardwood timber has risen significantly over the past two decades. Natural capital, especially [tropical forests](#) are under increasing risks in areas where policy focus is shifting away from environmental regulations.

While the specialized international agencies including UNEP, the United Nations Framework Convention on Climate Change (UNFCCC), the World Meteorological Organization and the International Union for the Conservation of Nature plead for actions and policy shift towards pluralism and environmental protections which need to firmly stand on the three pillars of sustainability, the environmental one is lagging behind in official statistics especially in terms of timeliness. Examples of environmental impacts of the pandemic are scarce in official statistics publications even though many related activities (led by NSOs) take place. How are green recoveries to be guided without consistent evidence of the environmental changes?

Multiple [pledges and initiatives](#) related to the environmental aspects of the pandemic are discussed daily. Societies in many places have voiced desire for a cleaner environment, in particular [measures for preventing air pollution, for example in Europe](#). Key statistics to monitor on a regular basis amidst a pandemic include: 1. Air quality and air emissions (including GHGs); 2. Waste management (including medical and plastic waste); 3. Water and sanitation; 4. Transmission of vector-, water- and air-borne disease; 5. Impacts on natural capital including forests, and other habitats and their biodiversity. Another important topic to monitor sustainable recovery is the 'number of new [green jobs](#)'.

Given the increased need to monitor the environment, not only due to the pandemic, although interestingly enough, there are a lot of direct and indirect impacts on the environment, the importance of reliable and timely nationally produced environmental data and statistics is gaining urgency. It is worth noting the opportune value of the Framework for the Development of Environment Statistics ([FDES 2013](#)) that the Statistical Commission, at its 44th session in [2013](#) endorsed as the framework for strengthening environment statistics programmes in countries. The FDES is a flexible, multi-purpose conceptual and statistical framework, that marks out the scope of environment statistics and provides an organizing structure to guide the collection and compilation of environment statistics at the national level. Countries are increasingly applying the FDES 2013 as the structure for their national [compendia](#), yearbooks and reports on environment statistics and climate change statistics.

Given the close interrelationship between environment statistics and climate change statistics, the Statistical Commission in [2016](#) also recommended that countries use the FDES 2013 to guide the development of climate change statistics and indicators. Related to the importance of monitoring climate change, UNSD, in collaboration with UNFCCC to promote the policy and statistics interface, as well as the [Expert Group on Environment Statistics](#) (EGES), also stepped up its efforts towards the development of the [Global Set of Climate Change Statistics and Indicators](#), as mandated by the Statistical Commission in [2016](#) and [2018](#), with particular attention to the needs of the least developed and developing countries. [see more under *UNSD news: UNSD's work on the development of the global set of climate change statistics and indicators*]

UNSD, in collaboration with the EGES, has led the drafting of relevant methodology sheets as part of the [Manual on the Basic Set of Environment Statistics](#) on 'Greenhouse Gases', 'Extreme Events and Disaster Statistics', 'Environmental Health' and 'Wastewater' which are part of components 3, 4 and 5 of the FDES. The first two sheets will soon be published online, while the latter two need further work and will be circulated to the EGES for comments. [see more under *UNSD news: Updates on the Manual on the Basic Set of Environment Statistics of the FDES*]

In the area of disaster statistics, in addition to the methodology sheet mentioned in the para. above, existing guidance on disaster preparedness include the [UNECE Conference of European Statisticians' Recommendations on the Role of Official Statistics in Measuring Hazardous Events and Disasters](#) and the Asia-Pacific [Disaster-related Statistics Framework](#). The UN Statistical Commission, at its 50th Session in 2018, included the topic of disaster-related statistics as a new separate item on the agenda. A [report](#) of the Secretary-General on disaster-related statistics was prepared by UNSD in collaboration with the Economic and Social Commission for Asia and the Pacific, the Economic Commission for Europe and the United Nations Office for Disaster Risk Reduction. The Statistical Commission, in its [report](#), inter alia, noted the growing relevance of and greater focus on statistics related to both hazardous events and disasters, acknowledged the already considerable coordination and cooperation in that regard, and emphasized the need for further capacity-building and training on this important topic.

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The global availability of reliable, accurate, and relevant water and wastewater statistics is gaining special importance during this global pandemic. Much interest has been paid to the SARS-CoV-2 virus and other pathogens' viability in freshwater, tap water and wastewater under various environmental conditions.^{4,5,6} Water and wastewater data will play a vital role in monitoring viral pandemics in the coming years, and they call for enhanced data availability, quality, capacity and international collaboration. UNSD, in collaboration with key international partner agencies (OECD, Eurostat and FAO), has been promoting the dialogue to harmonize definitions and terminologies through regular teleconferences. [see more under *UNSD news: Collaboration on water questionnaires by international agencies*]

To conclude on a positive note, despite the ongoing COVID-19 pandemic, it is commendable to observe that countries and international organizations continue to strive to achieve progress in the monitoring of the environment and climate change. This can be seen from some of the articles included in this issue of ENVSTATS, for example, for the Caribbean Community (CARICOM) Secretariat soon to be publishing its first report on climate change statistics [see more under *Regional news: Methodology of the First CARICOM Regional Climate Change Statistics Publication*] or Grenada, Namibia and The Gambia producing their first ever environment statistics compendia, Suriname producing its ninth environment statistics compendium, Tanzania publishing its first National Climate Change Statistics Report, as well as The Netherlands publishing quarterly GHG emissions illustrating a sharp decline during the pandemic. [see more in respective articles under *National news*]. In addition, the NSO (Instituto Nacional de Estatística) of Cabo Verde voluntarily translated the [Environment Statistics Self-Assessment Tool \(ESSAT\)](#) Introduction and Part I: Institutional Dimension of Environment Statistics, into Portuguese, which will be of great benefit to the lusophone countries.

UNSD has been assisting some of these countries mentioned in the above paragraph, as well as continues to work with others and international/regional organizations upon request, in the areas of climate change statistics and environment statistics. In addition to the activities already mentioned, UNSD is also working towards implementing the 2020 data collection round later this year, which will include revisions to the UNSD/UNEP Questionnaire on Environment Statistics to incorporate more variables needed for the compilation of several SDG Goal 6, 11 and 12 indicators. [see more under *UNSD news: Plans for the UNSD/UNEP Questionnaire 2020 on Environment Statistics (waste and water sections; and Collaboration on water questionnaires by international agencies (UNSD, Eurostat, OECD and FAO)*]

UNSD NEWS:

UNSD's Work on the Development of the Global Set of Climate Change Statistics and Indicators

As mandated by the Statistical Commission in [2016](#) and [2018](#) that UNSD develop a **Global Set of Climate Change Statistics and Indicators**, in collaboration with UNFCCC to promote the policy and statistics interface, efforts have been stepped up and the work is well underway. This Global Set will benefit both countries and UNFCCC (among other international and regional organizations) to monitor the drivers of climate change and its impacts, assess mitigation and adaptation measures, as well as evaluate vulnerability. The overall objective of UNSD is to develop a Global Set of Climate Change Statistics and Indicators tailored for all countries while ensuring that the needs of countries with less developed statistical systems are taken into account. The Global Set will contain a thematically comprehensive list of indicators and statistics accompanied by short metadata (including definitions, input variables, aggregations, measurement categories and data references).

⁴ Willemijn Lodder, Ana Maria de Roda Husman, SARS-CoV-2 in wastewater: potential health risk, but also data source, *The Lancet*, 2020, Vol 5 Issue 6, 533-534. DOI: [https://doi.org/10.1016/S2468-1253\(20\)30087-X](https://doi.org/10.1016/S2468-1253(20)30087-X)

⁵ Smriti Mallapaty, How sewage could reveal true scale of coronavirus outbreak, *Nature*, 2020, <http://igims.org/Datafiles/cms/COVID%2017.pdf>

⁶ Anila Venugopal, et al, Novel wastewater surveillance strategy for early detection of coronavirus disease 2019 hotspots, *Current Opinion in Environmental Science & Health*, 2020, 17:8-13, <https://www.sciencedirect.com/science/article/pii/S2468584420300362>

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A draft set was prepared by UNSD, based on a bottom-up approach, which started with a systematic review of climate-change related reports (including the communications to UNFCCC) and studies from about 130 countries with representative regional coverage, and followed by a selection of the most commonly repeated statistics and indicators. The draft set has been organized according to the five areas of the Inter-governmental Panel on Climate Change (IPCC) framework (drivers, impacts, vulnerability, mitigation and adaptation) to promote linkage to both science and policy. This IPCC framework provides the backbone to the section 5.3 (Climate Change) in chapter five of the [Framework for the Development of Environment Statistics](#) (FDES 2013) which organizes climate change statistics according to the IPCC framework. It is also worth reiterating that the Statistical Commission in [2016](#) also recommended that countries use the FDES 2013 to guide the development of climate change statistics and indicators, given the close interrelationship between environment statistics and climate change statistics.

This initial draft containing 133 indicators/statistics was reviewed by members of the Expert Group on Environment Statistics (EGES) from December 2019 to January 2020 who provided feedback on the basis of which the draft was revised for the launch of a Pilot Survey to a wider set of countries and international/regional organizations in February 2020. The final number of statistics and indicators will be decided after the results of the ongoing Pilot Survey and the planned Global Consultation (late 2020 or early 2021) have been analyzed, but the set of indicators will be comprehensive and applicable to countries at various stages of development, as mandated by the Statistical Commission.

It should be noted that given the request from the Statistical Commission in 2018 for UNSD and UNFCCC to strengthen the link between statistics and policy, the relevant articles of the Paris Agreement are mentioned for each indicator in the draft set thereby clearly demonstrating this linkage. In addition, international frameworks and agreements such as the Sustainable Development Goals, the FDES 2013, the Paris Agreement, the Sendai Framework, as well as the Economic Commission for Europe set of climate change-related statistics and indicators, have been considered to promote consistency and harmonize the wording of the indicators to the extent possible.

The Pilot Survey was launched on 23 February 2020 with a main objective to test and assess the relevance, soundness and measurability of the proposed indicators in two ways: (1) by inviting the national statistical offices (NSOs) and/or ministries of environment from forty-two countries to assess their preparedness to compile the suggested indicators in collaboration with relevant partners according to their national priorities as well as the development stage of the country; (2) in addition, thirty international/regional organizations were invited to assess the indicators from a thematic and methodological point of view to ensure that the selected indicators are relevant, correctly named, and supported by definitions, references and data. Initially, given the importance of climate change monitoring and the interest it has generated among partners, responses and feedback arrived quickly from several organizations and countries. However, the COVID-19 pandemic has delayed the process, especially in developing countries. Despite this delay, the prolonged duration of this work proved beneficial since potentially new indicators may be worthwhile considering to promote more accurate monitoring of climate change.

A special follow-up process with the countries (and organizations) who could not respond on time was initiated to better understand what the main impediments were given the impacts of the COVID-19 pandemic. For the countries, UNSD enquired whether the countries could work remotely, examine the proposed indicators internally, and since many of the indicators require data and information from agencies and departments outside the scope of existing official statistics, whether the relevant partner institutions were identified and contacted, and finally - if feedback was obtained. In light of the time needs and alternative means for these consultations at national level, countries were asked to indicate how long it would take to complete the Pilot Survey.

Pilot survey outcomes: fourteen key international/regional organizations responded with thematic validation on most of the proposed indicators and statistics. Fifteen countries responded including seven developed countries, out of which three (who could consult stakeholders prior to lock-down) assessed all the proposed indicators. Eight developing countries also responded, of which one assessed all indicators, five partially, while another two only provided references to data available at the NSO. Another 12 developing countries (including four least developed and four Small Island Developing States) initiated the survey but could not complete it to date. The main impediment is the difficulty to collect responses from national experts and partners who the NSO could not meet during lock-down and where remote, virtual exchanges of data and information could not be done due to lack of resources and capacity. Another difficulty is to address indicators which are outside the national statistical system, which include about a third of the proposed indicators. Those indicators require further work including desk research and consultations with experts to develop proper definitions and calculation methods in the next period.

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UNSD reached out to the countries that responded and reviewed the information provided seeking clarification and additional supporting information as necessary. Bilateral consultations have also been taking place with selected organizations on specific thematic areas and this will continue once additional responses have been received and enough analysis of the various themes (such as biodiversity, disasters, etc.) has taken place and deemed useful for more in-depth discussion.

While further responses were awaited from, in particular from the developing countries, UNSD set up a small group of (developing) countries that were faced with the most challenges due to the pandemic as well as with the completion of the survey in general, along with the Chair of the EGES, to examine in detail the structure of the draft Global Set and provide inputs towards a product for the planned Global Consultation later in 2020 or early 2021. The group held six virtual meetings during May, June and July, and discussed a structure linking the proposed indicators and underlying basic statistics, accompanied by short metadata, which should satisfy the needs of both developed and developing countries. The group also provided feedback and advice to UNSD to better understand the needs of the least developed and developing countries in particular and the way NSOs interact with their national counterparts. The group also provided suggestions to UNSD on how to organize and review the feedback received to date. The processes of revising the structure of the draft set is ongoing and a revised version will be prepared for discussion at the virtual seventh meeting of the EGES planned for November 2020.

The main conclusion is that the development of the Global Set of Climate Change Statistics and Indicators, despite the global pandemic, is of utmost importance for countries and organizations. It is also clear that most of the proposed indicators are applicable, although some need further methodological work. Despite the applicability of the indicators and the interest that the developing countries have clearly demonstrated towards this work, these countries, in particular, face enormous resource challenges and should be offered adequate support, with extended time and guidance to be able to embark on such comprehensive and interdisciplinary statistical work. Another conclusion is that the Global Set should be promoted by NSOs to facilitate the communication of comprehensive coverage of statistics and indicators to multiple stakeholders, especially those with narrow specialization, both in the context of national consultations and further work on international level.

51st Session of the Statistical Commission (3-6 March 2020) - Secretary-General's Report on Environment Statistics and Background Report

UNSD prepared the [Report of the Secretary-General on Environment Statistics](#) for the 51st session of the Statistical Commission that was held in New York from 3 to 6 March 2020. The Report provides a summary of activities carried out by UNSD during the biennium 2018–2019, including on: progress made on the increasingly widespread implementation of the Framework for the Development of Environment Statistics (FDES 2013); developments in methodological work (including the FDES toolkit and climate change statistics); the fifth and sixth meetings of the Expert Group on Environment Statistics; training and capacity-building provided to regions, subregions and countries; and coordination. It also lays out the work plan for the biennium 2020–2021. Since the work programme includes global collection, compilation and dissemination of environment statistics and indicators, the report also provides a summary of the results of the international collections of environment statistics carried out by UNSD from 1999 to 2018, as well as conclusions with relevance to future work (especially in relation to the environmentally-related Sustainable Development Goals).

A [Background Document to the Report of the Secretary-General](#) contains more detailed information on the data collection and dissemination activities. It also contains an Inventory of Regular, International Primary Environmental Data Collection, Reporting and Dissemination from Countries undertaken by the United Nations, its specialized agencies, intergovernmental organizations and conventions (https://unstats.un.org/unsd/envstats/Inventory_datacollection_dissemination), as well as an inventory on capacity development activities in environment statistics carried out by UNSD and by other international and regional organizations.

These two documents are available on the UNSD website at <https://unstats.un.org/unsd/statcom/51st-session/documents/>. The Report of the Secretary-General on Environment Statistics (E/CN.3/2020/33) is available in all UN working languages and the Background Report is available in English only.

Side Event: Environment Statistics and Climate Change Statistics – the Nexus (New York, 3 March 2020)

UNSD organized a [Side Event “Environment Statistics and Climate Change Statistics – the Nexus”](#) on the margins of the 51st session of the Statistical Commission. During the event, UNSD shared progress on the development of the Global Set of Climate Change Statistics and Indicators, and the main findings of the Report of the Secretary-General on Environment Statistics in terms of data collection and capacity development.

UNFCCC described the practices and challenges in linking climate change policies to data, its adaptation and implications, as well as stressed the importance of bringing together the national statistical office and climate reporting authority in the countries.

Grenada shared some unique issues in the development of environment statistics and climate change statistics, and experiences in collaboration in the case of a Small Island Developing State.

Slovenia discussed the national system on collecting environment and climate change related data, the statistical advisory committees and memorandum of understanding framework to foster close collaboration in the country, as well as described the recent Statistical Day with a focus on climate change statistics in which UNFCCC and UNSD made a joint presentation.

Given that UNSD is in the process of preparing for a global consultation on the Global Set of Climate Change Statistics and Indicators, the development of the Global Set and improvement of data quality and availability calls for a closer collaboration between UNSD and other international organizations, and between member states' statistical offices, line ministries and other stakeholders. This Side Event provided useful examples of how international organizations and countries have already worked collaboratively and demonstrated positive results in bringing together national statistical offices and other relevant institutions.

Plans for the UNSD/UNEP Questionnaire 2020 on Environment Statistics (waste and water sections)

The UNSD/UNEP Questionnaire 2020 on Environment Statistics will be in its tenth round of UNSD's biennial environment statistics data collection mandated by the Statistical Commission. It will be sent to more than 160 countries and territories, excluding OECD and European Union members (for which comparable data are collected as part of the OECD/Eurostat Joint Questionnaire on the State of the Environment).

As described in the next article, substantive in-depth teleconferences and email dialogues were held among UNSD, OECD, Eurostat and FAO to improve the harmonization of the concepts and definitions related to water resources, abstraction and use, as well as to enhance data quality. This collaboration resulted in, inter alia, some changes in the previous 2018 data collection round in the water section of the Questionnaire, specifically, in introducing further breakdowns of the International Standard Industrial Classification of All Economic Activities (ISIC) rev. 4 to meet Sustainable Development Goal (SDG) policy demand. The re-introduction of, “water returned without use” and the addition of, “net abstractions” are being considered for the 2020 data collection to harmonize the UNSD/UNEP Questionnaire 2020 on Environment Statistics with OECD/Eurostat's and FAO questionnaires.

Likewise, substantive changes were implemented in the previous data collection round in the waste section of the Questionnaire, namely, the table on **E-Waste Generation and Collection** was added. Feedback from some member states encouraged UNSD to add breakdowns of e-waste generated and e-waste collected in the current 2020 data collection round.

These include:

- Amounts going to –
 - Large equipment,
 - Screens, monitors, and equipment containing screens
 - Temperature exchange equipment (Cooling and Freezing Equipment)
 - Small E-waste

(Small E-waste is further subdivided into)

- of which: Lamps
- of which: Small Equipment
- of which: Small IT and telecommunication equipment

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The above-mentioned variables are planned to be included in both the breakdowns for “*Total E-waste generated*” as well as “*Total E-waste collected*”.

Elsewhere in the Questionnaire, in the table on **Composition of Municipal Waste**, the variable, “*Biodegradable waste*” is planned to be added.

This variable will be further subdivided into:

- of which: food waste
- of which: garden waste

UNSD is in the process of modifying these revisions to the Questionnaire and expects to send it to both National Statistical Offices and Ministries of Environment before the end of the year. In this regard, an announcement letter will first be sent to the heads of the respondent organizations which are encouraged to nominate a single national focal point to receive the 2020 Questionnaire. Following from the prior rounds, the 2020 Questionnaire will consist of two sections: waste and water. Each section of the Questionnaire will include a list of relevant definitions and comprehensive guidance to assist respondents with filling the tables.

Selected water and waste statistics with relatively good quality and geographic coverage compiled from the previous Questionnaire round, complemented by data from OECD and Eurostat, were published by UNSD through the [UNSD Environmental Indicators](#) webpage. The complete and validated data, as well as footnotes received from each respondent country was uploaded to the [Country Files](#) webpage. UNSD appreciates countries’ continuing support on the improvement of timely and reliable global environment statistics.

More details on the results of past data collections and plans for the UNSD/UNEP Questionnaire can be found in the [Secretary-General’s Report on Environment Statistics](#) and [Background Report](#).

Collaboration on Water Questionnaires by International Agencies (UNSD, Eurostat, OECD and FAO)

As mentioned in the FOCUS article on the cover page of this newsletter, the global availability of reliable, accurate, and relevant water and wastewater statistics is gaining special importance during this global coronavirus pandemic. Water and wastewater data will play a vital role in monitoring viral pandemics in the coming years, and they call for enhanced data availability, quality, capacity and international collaboration.

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). With respect to geographical scope, the international organisations involved apply a layered approach: Eurostat deals with Member States of the European Union (EU) and the European Free Trade Association (EFTA) as well as the respective candidate countries and OECD works with all its Member States not contacted by Eurostat. Data treatment and validation for European countries is done “jointly” by Eurostat and the OECD according to an agreed process and timeline. UNSD sends the UNSD/UNEP_Questionnaire to the rest of the world (approx. 165 countries).

In April 2018, the Food and Agriculture Organization of the United Nations (FAO) initiated a global data collection process through its Water and Agriculture Questionnaire 2018 to populate its AQUASTAT database and support the calculation of two water-related SDG indicators (6.4.1 “Change in water-use efficiency over time” and 6.4.2 “Level of water stress: freshwater withdrawal as a proportion of available freshwater resources”) for which it is the custodian agency. This new 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 therefore decided to engage in a regular series of teleconferences to harmonize definitions and terminologies, synchronize data collecting schedules, and maintain an open, efficient channel to discuss various technical issues related to water statistics.

Since August 2018, UNSD has organized, in collaboration with the three other international agencies, 18 teleconferences with the latest one being in July 2020. 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

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respective questionnaires to countries; (6) frequency of data collection; and (7) regular information exchanges of meetings, workshops and capacity development activities.

Most recently, the international agencies have put focus on aligning the lists of water indicators in their questionnaires and harmonizing their definitions. Key indicators under discussion covered the areas of freshwater resources, water consumption and/or uses, water losses in various stages, wastewater generation and treatment, among others. This ongoing work strives to ensure that no matter which agency the countries receive the questionnaire from, the list of variables will be well-defined and internationally comparable.

All agenda items regularly discussed among the four agencies aim at harmonizing data collections, minimizing respondent burdens and eliminating duplications. These teleconferences have proved to be highly successful in prompting the international agencies to collaborate closer together at their respective expert group meetings and workshops, as well as in aligning their 2020 round of questionnaires more closely, all of which enable a unified message being communicated to UN member states with respect to water statistics.

In 2020, UNSD was approached by UN-HABITAT 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.” UNSD’s water database currently is the global leading source for nationally provided data on household (domestic) and industrial wastewater. Such data, however, are nonetheless still relatively sparse on a global scale. UNSD and UN-HABITAT are currently analysing current trends and patterns of non-domestic wastewater, wastewater generation and treatment, as well as exploring means to improve the data availability for developing countries. These data comparisons are also being initiated between UN-HABITAT and OECD/Eurostat for the developed countries. It is expected that over time better use of the wastewater data collected via the UNSD/UNEP and OECD/Eurostat questionnaires can be made to populate the SDG Indicator 6.3.1 “Proportion of domestic and industrial wastewater flow safely treated.”

Updates on the Translations of the FDES 2013 and the Environment Statistics Self-Assessment Tool (ESSAT)

UNSD is pleased to inform that some developments have taken place with regard to translated versions of the FDES and the ESSAT being made available recently.

Based on a preliminary translated version of the FDES into Spanish by the National Institute of Statistics and Geography (INEGI) of Mexico, the Economic Commission for Latin America and the Caribbean (ECLAC) revised, updated and finalized this translation into Spanish. The Russian Federal State Statistics Service (ROSSTAT) translated the FDES into Russian. Both these documents are available [here](#) on the UNSD website. UNSD is very grateful to INEGI, ECLAC and ROSSTAT for their kind contribution in undertaking these translations.

The Instituto Nacional de Estatística of Cabo Verde (INECV) translated the Environment Statistics Self-Assessment Tool (ESSAT) Introduction and Part I: Institutional Dimension of Environment Statistics, into Portuguese, which will be of great benefit to the lusophone countries. UNSD is very grateful to INECV for their kind contribution in undertaking these translations which are available [here](#) on the UNSD website.

In addition to the ESSAT Part II and the FDES 2013 that have already been translated into Portuguese by ECLAC-Brazil and Instituto Brasileiro de Geografia e Estatística (IBGE), this completes the package of the most current official UNSD documents in environment statistics being made available in Portuguese.

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

UNSD continued to coordinate the drafting of several methodology sheets as part of the development of the [Manual on the Basic Set of Environment Statistics](#) of the FDES 2013. A new one, addressing sub-component 5.2 ‘Environmental Health’ was initiated in July 2019 with inputs provided by Suriname and Jamaica which was then elaborated further by UNSD and reviewed by WHO. The COVID-19 pandemic rendered the subject as one of the most urgent and priority fields of environment statistics. Zoonotic transmissions (from wildlife) leading to air-borne diseases are addressed, with incidence, prevalence and mortality included as Tier 1 statistics in the FDES, while the associated economic losses are included as Tier 3. The topic includes also water-related, vector-borne and diseases resulting from exposure to toxic and nuclear substances and excessive ultraviolet radiation. Multiple sources of information were reviewed and yet more need attention as they are becoming available.

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While major focus was placed on environmental health, other draft methodology sheets were also further developed to final versions to be published soon, including on Greenhouse gases and Natural extreme events and disasters. The methodology sheet on [Marine water quality](#) was published online on the UNSD website. An initial draft was also prepared on wastewater. During the COVID-19 pandemic, countries are dedicating more attention and resources on tracking the generation, treatment, and content of wastewater. The quality and quantity of the wastewater is directly linked to the entire water ecosystem and to the safety supply of drinking water, and to SDG 6 on the availability and sustainable management of water and sanitation for all. UNSD is also in close, regular communication with partner institutions and experts, for instance UN-HABITAT, FAO, OECD, and Eurostat, on the definitions and data qualities of wastewater statistics. This methodology sheet reflected comments from members of the Expert Group on Environment Statistics in 2019, and which is planned to be shared for further comments in 2020.

Development Account 10th Tranche Programme for Statistics and Data

The second missions in The Gambia and Namibia were conducted respectively in August and December 2019, under the Programme on Statistics and Data of the 10th Tranche of the United Nations Development Account (DA 10th Tranche). Besides the review and discussion of data sources for national statistics, the missions yielded key highlights on the needs for environmental statistics in both countries. One example is the eminent need of timely statistics on the impacts of droughts and the pandemic on vulnerable communities for which the adequate supply of national and international help is a matter of life. Following these missions UNSD continued to maintain a close engagement with their newly appointed environmental statisticians, providing support to complete their first National compendia on environment statistics and their National Action Plans. Partnerships between the NSOs and environmental institutions in these countries were further strengthened in the process.

Furthermore, both countries carried out consultations with relevant national counterparts on climate change statistics in response to UNSD's invitation to take part in the Pilot Survey on the Global Set of Climate Change Statistics and Indicators. The latter was introduced and reviewed during the stakeholder workshops held as part of the second missions. Despite all these efforts, the lock-downs and restrictions amidst the global pandemic hindered the planned completion of the Pilot Surveys, yet further efforts were put in place to assess to what extent the proposed global indicators apply in their national contexts. The close communication uncovered lessons from the unique experiences of the NSOs in Namibia and The Gambia engaging with national partners when work had to continue from home and physical meetings with partners could no longer take place. In summary, both countries stepped up their efforts and capacity in the field of environment and climate change statistics which are ongoing during the pandemic outbreak.

Environment Statistics Compendia and Surveys

Following endorsement of the FDES 2013 by the United Nations Statistical Commission at its 44th session (2013) as the framework for strengthening environment statistics programmes in countries, many countries have compiled environment statistics compendia which apply the FDES 2013. There are about 40 compendia and similar publications from 24 countries that apply the FDES so far shared with UNSD which are available on UNSD's website at <https://unstats.un.org/unsd/envstats/fdescompendia.cshhtml> in Arabic, English, French, Portuguese and Spanish. It is planned to expand this website to include all environment statistics compendia, as well as specialized reports, such as on e-waste and climate change statistics, that countries are starting to produce.

UNSD has compiled over 90 specialized environment statistics surveys and censuses from countries which are available on the website (<https://unstats.un.org/unsd/envstats/censuses/>) and can be filtered by country, theme and year. Languages in which surveys are available include Arabic, English, French, Portuguese and Spanish.

UNSD welcomes further contributions of both country compendia that apply the FDES 2013, other environment statistics compendia and specialized reports, as well as surveys or censuses on environment statistics. They can be shared with the Environment Statistics Section (contact: envstats@un.org) where they may then be made available on UNSD's website.

Final Lessons Learned from the Workshop with regard to Data Collection under Multilateral Environmental Agreements and SDGs Reporting (Republic of Moldova, 10 July 2020)

Continuing UNSD's collaboration with the Basel Convention Regional Centre, Slovakia, UNSD remotely attended this meeting servicing the Republic of Moldova. This capacity development exercise emphasized the encouragement of inter-institutional collaboration within country including the development of a centralized database for environment statistics. UNSD presented on the importance of its data collections being relevant and responsive to evolving demands of the SDG Agenda, and demonstrated forthcoming changes in its data collection on issues such as electronic waste, food waste, and municipal waste to contribute to Goal 11 and Goal 12 SDG indicators. It is important that the Basel Convention and UNSD liaise closely with one another as both collect data from UN member states concerning hazardous waste via their respective mandates. Dialogue with the Republic of Moldova and international organizations revealed the member state's eagerness to work with international organizations and to collaborate well at national level for reporting environment statistics for SDG indicators and multilateral environmental agreements, and to be responsive to the changing content anticipated in the UNSD/UNEP Questionnaire 2020 on Environment Statistics.

INTERNATIONAL NEWS:

OECD NEWS

(Contributed by Myriam Linster, Miguel Cardenas, Ivan Hascic, Alex Mackie, Mark Mateo, Sarah Miet, Mauro Migotto)

OECD work on information, indicators and reporting related to environment and sustainable development is steered by the OECD *Working Party on Environmental Information* (WPEI), that also provides a forum for helping countries improve their environmental information systems. The WPEI brings together delegates from OECD member, accession and partner countries (environment ministries and agencies, statistical offices), and international organisations, and is chaired by Viveka Palm (Statistics Sweden). The aim is to provide core sets of objective and reliable *data and indicators on the environment and sustainable development* to support international and national policy work, to advance the development of *accounts and integrated datasets*, and to support the development and use of *new information and monitoring tools*.

Environmental data quality, indicators and the implementation of the SEEA are high on the WPEI agenda, as well as the use of indicators in decision making, and the communication and dissemination of environmental information. The **2020 meeting** will take place on 24-26 November (exact dates to be confirmed).

Producing harmonised environmental data and indicators for international work

Environmental data – A regular data collection

Environmental data are collected since 1980 from OECD members, accession and partner countries in line with the pressure-state-response model via the OECD questionnaire on the state of the environment and from other international sources. They are complemented with data derived from new data sources, including earth observation. The data collection via *questionnaire* is closely coordinated with the UNSD/UN Environment Questionnaire on Environment Statistics, and done jointly with Eurostat for common European Union Member States. This ensures a global country coverage for waste and water.

Environmental indicators – A new interactive web platform

The OECD *“Environment at a glance”* platform for environmental indicators has been released in November 2019. This new format provides real-time interactive online access to the latest comparable OECD country data on the environment building on the OECD Core Set of Environmental Indicators – a tool to monitor environmental performance in countries and to track the course towards sustainable development. Users can play with the data and graphics, download and share them, and consult and download thematic web-books. The indicators provide key messages on major environmental trends in areas such as climate change, biodiversity, water resources, air quality, circular economy and ocean resources. They are accompanied by a short Environment at a Glance 2020 report that presents a digest of the key messages stemming from the indicators (<http://www.oecd.org/environment/environment-at-a-glance/>).

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INTERNATIONAL NEWS:

(Continued from page 10)

Databases

Main datasets are available on the OECD statistical platform (<http://dx.doi.org/10.1787/env-data-en>); some are accessible via the OECD iLibrary https://www.oecd-ilibrary.org/environment/data/oecd-environment-statistics_env-data-en. They include the OECD set of green growth indicators (see also <http://oe.cd/ggi>); and data and indicators on air and greenhouse gas emissions, people's exposure to air pollution, welfare costs of air pollution, waste generation and treatment, water resources and management, biodiversity, protected areas, land cover and land cover change, material resources, innovation, tax revenue, fossil fuel subsidies, trade, etc.

New in 2020, the [Sustainable Ocean Economy database](#) brings together OECD data related to the ocean economy. It includes new indicators such as marine ecosystem health, the well-being and resilience of coastal communities, economic opportunities from sustainable use of ocean resources, and data on taxes, subsidies and finance directed at ocean sustainability. It is accompanied by a dedicated [OECD Environment at a Glance theme on the Ocean](#).

A further database is in development: The Geography of Well-being database includes indicators on environmental inequalities at the local level. It is an outcome of the OECD geospatial data cube combining environmental and socio-economic data. The database will facilitate analyses of the interface of green growth and inclusive growth, and help countries address the distributional aspects of policies.

Improving the quality of international data on the environment

The OECD continues working with countries to consolidate and improve the quality of the data collected through its questionnaire, and harmonise them across countries and regions. Particular attention is given to data related to waste and water management, to policy instruments for the environment, and material footprints. Gender-specific data receive increasing interest as a tool to encourage the integration of gender issues in environment policies (<https://www.oecd.org/env/indicators-modelling-outlooks/gender-and-environmental-statistics.htm>).

Data on waste and the circular economy

The OECD questionnaire section on waste has been reviewed to better respond to demands for information on waste streams that are of emerging policy interest (e.g., plastics) and for calculating SDG indicators on waste (11.6.1, 12.5.1, 12.4.2). Joint work with international partners (UNSD, Eurostat, Basel Convention Secretariat) is used to maintain a harmonised monitoring and coordinated data collection processes at global level.

To inform resource efficiency and circular economy policies, work has been initiated to develop metrics and indicators that reflect the life-cycle of materials and products, and the environmental, economic and social dimensions of a circular economy. A small expert group has been set-up to identify information needs and indicators, and provide guidance on how best to mobilise and combine relevant data, including through accounting. Work on circular economy metrics and indicators will continue over 2021-22.

Data on water

The questionnaire section on water is being reviewed to better support OECD policy work on water and cover the variables associated with SDG indicators. The review, in collaboration with international partners, also includes a re-assessment of the questionnaire's coherence with the SEEA and the identification of variables that could be used to compile international water accounts. A list of proposed modifications to better align with the SEEA will be presented at the next OECD WPEI meeting.

Joint work with Eurostat and close coordination with UNSD provide a global country coverage. To maintain an effective international co-operation, discussions on global data collections on water were initiated in 2018 between the OECD, Eurostat and UNSD, and the FAO that added a global data collection on water to populate its Aquastat database and calculate SDG indicators for which it is the custodian. The objective is to reach an agreement on a consolidated and harmonised questionnaire and a coordinated data collection process (collected once, used multiple times), so as to avoid double reporting by countries. Work on the harmonisation of the terms and definitions is progressing well; progress on the consolidation of the questionnaires is slower.

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Data on policy instruments for the environment

Data on policy instruments for the environment are collected via a dedicated interface of the *OECD PINE database* and a network of 200 country experts, including in government agencies (Ministries of Finance and Environment, NSOs), research institutes and international organisations. More than 110 countries currently provide data to the OECD PINE database; the country coverage increases every year. The database contains detailed information on over 3,600 policy instruments, including environmentally related taxes, fees and charges, subsidies, and other instruments. The instruments are tagged into 13 environmental domains: air pollution, biodiversity, climate change, energy efficiency, land contamination, land management, natural resources, noise, ocean, ozone layer, transport, waste management and water pollution. The “ocean” tag was added this year as part of the OECD Sustainable Ocean Economy database.

As part of the 2020 Comprehensive Review of the global indicator framework to monitor progress on the SDGs, an indicator to monitor target 15.a1 and proposed by the OECD on the basis of information available in the OECD Policy Instruments for Environment (PINE) database was added to the global list. It measures *revenue generated and finance mobilised from biodiversity-relevant economic instruments*.

PINE data are available at <http://oe.cd/pine>; data on environmentally related tax revenue can be visualised at <http://oe.cd/env-taxes> and downloaded from <https://stats.oecd.org/Index.aspx?DataSetCode=ERTR>.

Data on demand-based material flows (material footprints)

Work to develop an internationally harmonised methodology for estimating demand-based material flows (material footprints; SDG indicator 8.4.1/12.2.1) using an input-output (I-O) based approach continues with the refinement of the calculation method. Final results will complement UN Environment’s Global MFA Manual.

Linking environmental and economic statistics and implementing the SEEA

To support environment-economy policy integration, the OECD encourages the development of environmental-economic accounts. It is actively engaged in the work of the UNCEEA and works with Eurostat, the FAO, UN Environment and UNSD to establish global SEEA-related databases (energy, air emissions, material flows, land cover, water). Together with UNECE, it organises seminars on the implementation of the SEEA. The fifth OECD-UNECE seminar was held in February 2020 in Geneva. Recent efforts concern environmental protection expenditure and tax revenue accounts, and the further development of air emission accounts.

OECD – Environmental Protection Expenditure Accounts

The OECD data collection on environmental protection expenditure has been aligned with the SEEA and Eurostat’s Environmental Protection Expenditure Accounts (EPEA). The first data collection using the SEEA framework was launched in October 2019. It was addressed to non-EU OECD members and interested partners, complementing the Eurostat data collection. The response rate was low.

Current efforts focus on better covering climate and biodiversity related expenditure, and establishing links with countries’ green budgeting initiatives and the OECD [Paris Collaborative on Green Budgeting](#).

OECD – Environmentally Related Tax Revenue accounts

The OECD prepared methodological guidelines to compile environmentally- related tax revenue (ERTR) accounts in line with the SEEA, building on and expanding work by Eurostat. The guidelines were tested with pilot countries (Australia, the Russian Federation and Costa Rica) and the support of Estonia, and are being finalised after consultation with the London Group on Environmental Accounting. A first data collection addressed to non-EU OECD members and interested partners was carried out end of 2019, complementing the data collection by Eurostat. First results will be published in the OECD statistical portal end of 2020.

OECD – Air emission accounts

The OECD developed a methodology, endorsed by the UNCEEA, for producing air emission accounts estimates based on greenhouse gas emission inventories (UNFCCC) and production statistics from national accounts. Work continues to develop statistics on CO₂ emissions from air transport, a key flow needed to adjust emission statistics, compiled on a territory basis, with the residence principle of national accounting. A similar approach for maritime transport is being investigated.

Monitoring and reforming government support measures for fossil fuels

The OECD Fossil Fuel Support Intelligence Unit supports efforts to reform fossil fuel subsidies by regularly updating its *Inventory of Support Measures for Fossil Fuels* (SDG indicator 12.c1). The Inventory covers 44 OECD and G20 economies and close to 1,200 individual government policies that benefit the production and consumption of fossil fuels. It includes data on government support by type of fossil fuel and by aggregated sectors.

The latest update with data up to 2019 was released on the World Environment Day, 6 June 2020. The data show a 38% rise in support for the *production of fossil fuels* in 2019, with a total support from 44 economies of USD 178 billion. Support to oil remained the largest with 74% of total support estimate, followed by natural gas (12%), electricity (8%) and coal (7%). The combined OECD-IEA government support for the *consumption and production* of fossil fuels for 77 economies was estimated at USD 478 billion in 2019, marking a decline from 2018 pulled by lower oil prices. In addition, on the occasion of the World Oceans Day on 8 June 2020, new data on ocean-related fossil-fuel support was published.

Data and related visualisations are available at: <https://www.oecd.org/fossil-fuels/data/> ; <https://www.oecd.org/ocean/data/> [Ocean-related fossil-fuel support]

REGIONAL NEWS:

Methodology of the First CARICOM Regional Climate Change Statistics Publication

(Contributed by Faustina Wiggins and Philomen Harrison, Regional Statistics Programme, Caribbean Community (CARICOM) Secretariat)

The Caribbean Community (CARICOM) Secretariat has advanced its preparation of the first CARICOM regional Climate Change Statistics report with data up to 2020. The report will contain quantitative data, graphs and qualitative data that aims to present the situation on climate change in the region. This report employed the methodology of the UNSD Framework for the Development of Environment Statistics (FDES) since it addresses climate change as a cross-cutting issue and current environment statistics is compiled and presented using this framework. The FDES enabled the classification of statistics and indicators in their respective components that can inform about the sequence of events on climate change within the CARICOM Region. While the report as prepared follows the three major areas - *climate process drivers*, *climate change evidence*, and *mitigation and adaptation*, efforts will be made to rearrange the indicators in accordance with the recommended refinements - Drivers, Impacts, Adaptation, Mitigation and Vulnerability. It is recognised that data on these major areas of climate change could inform national policy in areas such as disaster management, water and sanitation management and greenhouse gas emissions.

In the compilation of data for this report, a number of issues and challenges emerged which needed to be addressed for successful completion. At the onset, the existing data from the CARICOM environment statistics databases that are organised under twelve themes and compiled from member countries and regional sources as well as waste and water data from the UNSD were used to populate tables for this report. However, the data which emerged from this process were found to be limited and therefore additional data were extracted from other regional and international sources to fill data gaps. In the case of *climate change mitigation* there is only one table with data. Additional challenges were found with respect to the data obtained for the themes waste and water where totals for several categories were not adding up due to lack of data for sub-categories. Specifically, in the table *Management of Hazardous Waste*, some countries reported data on waste generated during the year, but no values were found in the subcategories *stock at the beginning of the year*. The approach used in this report was to assume that all stock of hazardous waste generated during the year was discarded by the end of the year.

The CARICOM Secretariat hopes that the publication of this report will encourage member countries and regional institutions to support the collection, compilation and dissemination of climate change statistics which is critical for analysing the causes and impacts to the vulnerable countries in the region and useful for international climate change-related reporting requirements. The publication is scheduled to be released in early August 2020.

ECLAC Activities in Latin America and the Caribbean

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

ECLAC support to Uruguay and Honduras for environment and climate change indicators production

As part of the 10th Tranche UN Development Account (DA) project and the ECLAC-German Cooperation programme, ECLAC organized two national capacity-building workshops on SDG environment, climate change and disaster indicators production. In Uruguay, in February 2020, the [workshop](#) targeted 50 participants from a wide range of Ministries, including the Ministry of Agriculture, the National Emergency System, the National Statistical Institute and the Ministry of Environment. It allowed for the inter-institutional and innovative construction of nine climate change and disaster indicators, for instance, related to drought impacts on agriculture productivity or climate change-induced disease impact on human health.

In March 2020, in collaboration with the Ministry of Environment and the National Statistical Office of Honduras, ECLAC delivered a [national capacity-building workshop on SDG environment indicators](#). As a result of a deep inter-institutional work with more than 50 participants, eight new environment indicators were calculated with national data and included fully-fleshed metadata. The new environment indicators are related to forests, energy, waste, waste water, water management and biodiversity.

In the second half of 2020, ECLAC support to Uruguay and Honduras will continue remotely and with two in-person workshops to build new SDG environment indicators.

Regional Network of Environment Statistics Webinars: SDG 7 indicators and Environment Indicators Systems

Within the framework of the [Regional Network of Environment Statistics](#), which gathers now more than 180 practitioners from all 20 Latin American countries, ECLAC continued its series of webinars. The tenth webinar on [Production of SDG 6 indicators related to water access and quality](#), which took place in April 2020, was inaugurated by the Director of the Statistics Division, Mr. Rolando Ocampo. The webinar showcased experiences from Brazil and El Salvador. More than 160 officers from National Statistical Offices, Water Authorities, Central Banks and Environment Ministries from 17 Latin American countries attended the online event, which is available online.

Covid-19 lock-down measures impacts on air quality study in six Latin American cities

Since April 2020, ECLAC is compiling air quality data (PM_{2.5}, SO₂ and NO₂) in Latin American cities to assess the impact of the Covid-19 measures, especially the ones affecting mobility and economic activities. Six cities are part of the first phase of the study: Bogota (Colombia), Lima (Peru), Mexico City (Mexico), Quito (Ecuador), Santiago (Chile) and Sao Paulo (Brazil).

ECLAC Regular Data Collection on Environment Statistics: CEPALSTAT, SDG Gateway and Statistical Yearbook 2020

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 (http://estadisticas.cepal.org/cepalstat/WEB_CEPALSTAT/Portada.asp?idioma=i). It includes new environment series to better showcase the most relevant issues in the Latin American and Caribbean region, in particular water intensity and efficiency.

ECLAC launched the [SDG Gateway](#), which includes all the SDG environment statistics available at the global level.

ESCWA News

(Contributed by Wafa Aboul Hosn, Chief Economic Statistics, United Nations Economic and Social Commission for Western Asia)

As part of the DA Programme on Data and Statistics, Pillar 2 on Environment, ESCWA continued the implementation of several activities in 2020 on SDGs and Environment-Related Indicators as well as providing Arabic Translation to important guidelines and training material.

Upcoming Regional Workshop on the Integration of Big Data and Geospatial Information for the Compilation of SDG Indicators in Arab Countries

Amman, Jordan, September 2020

The regional workshop aims to:

- discuss priority issues and challenges with regard to the use of administrative records and non-traditional data sources or innovative data sources, including Big Data, for timely decision-making and service delivery at the local level;
- discuss issues and challenges with regard to the integration of geospatial information and statistics for effective and efficient implementation of SDGs; and
- share best practices in use of technology and innovative approaches, including the area of geospatial information systems, to enhance the production of data and statistics, specifically the SDGs indicators.

As a part of the coming workshop on integration of Administrative Registers, Big Data and Geospatial Information for the Compilation of SDG Indicators in Arab Countries, ESCWA developed an online [questionnaire \(in Arabic\)](#) and in [English](#) that was addressed to Arab NSOs. The analysis will constitute the basis for discussions and recommendations.

Upcoming Expert Group Meeting on “Resource Efficiency in the Arab Region, Monitoring Progress of SDG 12 and Building Back Better after COVID-19”.

UN House, Beirut, (tentative) 6-8 October 2020

Since 2008, the United Nations Economic and Social Commission for Western Asia (UNESCWA) has been collaborating with the League of Arab States (LAS) and UN Environment (UNE) to support regional work on sustainable consumption and production (SCP). ESCWA produced two reports in this area: The “*Guiding Framework for the Environmental Dimension of the SDGs for the Arab Region*”.⁷ The report on “*Progress on sustainable consumption and production in the Arab region: comprehensive baseline assessment of regional, sub-regional and national progress and challenges for achieving SCP and the SDGs*”.⁸ From the statistical side, there has not been standalone work on SCP statistics and indicators in the Arab Region, but ESCWA and partners provided statistical capacity building along the overall environmental dimension of the SDG indicators in the context of three related frameworks:

- 1) The international standard on the System of Environmental Economic Accounting, Central framework (SEEA-CF)⁹; The sub-accounts on material flow (MFA) and energy and water accounts have a direct link to SCP. ESCWA provided the [Arabic version of the E-learning course on the System of Environmental-Economic Accounting 2012 - Central Framework \(SEEA CF\)](#)
- 2) The implementation of the Framework for the Development of Environment Statistics (FDES 2013 which was endorsed by the United Nations Statistical Commission at its forty-fourth session in 2013 as the framework for strengthening environment statistics programmes in countries.¹⁰ The FDES is presently being translated into Arabic.

⁷ https://www.unescwa.org/sites/www.unescwa.org/files/events/files/guiding_framework_final.pdf

⁸ https://www.unescwa.org/sites/www.unescwa.org/files/page_attachments/technical_paper_10- scp.pdf

⁹ [Regional Workshop on Integrated Environmental and Economic Accounting Systems to Support Sustainable Development Goals \(SDGs\) in the Arab Region 26 to 29 March 2018, Amman, Jordan](#)

¹⁰ [Workshop on Environment Statistics and Information for Sustainable Development in the Arab Region \(UNSD UNESCWA UNEP and EEA\) 11-16 NOVEMBER 2018 Beirut, Lebanon](#)

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- 3) The Implementation of the Framework for the Environmental Dimension of the 2030 Agenda in the Arab Region- Statistical Component in cooperation with UNSD, UN Environment and LAS¹¹ which included selected SDG 12 indicators among the agreed list of Environment related indicators.
- 4) New metadata for SDG12 indicators was updated by the custodian agency UN Environment, and clearer guidelines for measurement are available for countries. Finally, there has been an increasing interest from the Global Footprint organization to cooperate with ESCWA on the Arab Region footprint.

Environment and Energy statistics Databases and Dashboards for Arab Countries-Arabic/English



ESCWA's [Data Portal](#) is a fully-fledged data dissemination and visualization platform, offering the user a mix of Arab-region-specific datasets covering main Economic, Social, and SDGs databases and dashboards. The platform offers the registered user for free the ability to connect directly to ESCWA's databases, customize and visualize the datasets to great details, as well as create and share custom dashboards and reports. The data on Environment was mostly compiled from the ESCWA Compendium of Environment Statistics of Arab countries, also from the UNSD/UNEP Questionnaire on Environment Statistics and from official publications on environment statistics from the countries.

UNECE News

(Contributed by Malgorzata Cwiek and Michael Nagy)

Fifth Joint OECD/UNECE Seminar on SEEA Implementation was held from 13-14 February 2020 in Geneva (Switzerland)

Seventy-four participants, representing 33 countries and six international organisations, attended the fifth joint OECD/UNECE Seminar on SEEA Implementation. Participants discussed how the SEEA can contribute to measuring the circular economy and the challenges related to measuring the environmental goods and services sector.

One session was dedicated to the SEEA Experimental Ecosystem Accounting (SEEA-EEA), where countries and international organisations used the opportunity to present their practical experiences from the perspectives of producing SEEA-EEA and using them in policy making. At the meeting a small informal group was set up to prepare an *in-depth review of measuring circular economy* which the Bureau of the Conference of European Statisticians (CES) will discuss in October 2020.

The seminar also featured a poster session with posters from three countries and two research institutes, presenting case examples on SEEA implementation and policy applications. All presentations, posters and the report of the meeting are available at: <http://www.unece.org/index.php?id=52557>

Conference of European Statisticians endorsed the Updated Set of Core Climate Change-related Indicators and Statistics

On 22 June 2020, the Conference of European Statisticians (CES) endorsed the *Updated CES Set of Core Climate Change-Related Indicators and Statistics* and its implementation guidelines. This set of indicators and statistics was developed by a CES Task Force (chaired by Italy) with experts from NSOs, international organisations and research institutes, taking into account the most important climate change-related phenomena in CES member countries.

The set refers to the extent possible to the SEEA-CF and SEEA-EEA, and is closely linked with the set of global climate change statistics and indicators which is currently being developed by UNSD and its Expert Group on Environment Statistics. The main purpose of the CES indicator set is to provide the foundation for the development of internationally comparable national sets of climate change-related indicators. These sets of indicators could serve multiple purposes:

- a) Paint a picture of the most relevant climate change-related issues;
- b) Address the most relevant current policy questions; and
- c) Help to meet upcoming information needs.

The National Statistical Offices (NSOs) who are already engaged in activities to support climate action have found the CES indicator set and the accompanying metadata sheets very useful. The CES set complements other important climate change indicator sets such as statistics and indicators reported to the United Nations Framework Convention on Climate Change (UNFCCC) and the Sustainable Development Goals indicators.

The set of indicators and statistics, including indicator metadata, as well as the implementation guidelines, can be found at <http://www.unece.org/index.php?id=53381> (note that these are not final documents, as some editorial changes are still needed).

CES Task Force on Measuring Hazardous Events and Disasters (HED) supported NSOs in their efforts to contribute to managing the COVID-19 pandemic

The CES Task Force HED, involving experts from six countries¹², eight international organisations¹³, and one university¹⁴, initiated the following to provide platforms for NSO experts to share their experience in contributing to managing the COVID-19 disaster and measuring its impacts:

- 1) Establishment of the UNECE platform “COVID-19 and official statistics”. This platform offers a space for national statistical offices and international organizations to share experiences and developments to safeguard statistical production and to address the information needs to manage the pandemic. National examples and lessons learned can be found at <https://statswiki.unece.org/display/COV/Support+for+managing+the+crisis>
- 2) Virtual discussion “How are national statistical offices contributing to managing the COVID-19 disaster?” on 10 June 2020. More than 150 participants from all around the world attended this virtual discussion, with panelists from Austria, Canada, Italy, Mexico, Netherlands and the United Kingdom. The recording of the meeting, presentations and other background documents are available at <http://www.unece.org/index.php?id=53889>

The CES Task Force has noted the demand for further similar activities and is considering to organise another webinar in the near future.

Furthermore, the experiences gained by NSOs in contributing to managing the COVID-19 disaster will also feed into the further work of the Task Force, such as the drafting of practical implementation guidelines for the [CES Recommendations on Measuring Hazardous Events and Disasters](#).

¹² Germany, Indonesia, Italy (chair), Mexico, New Zealand, Turkey

¹³ FAO, UNDRR, WMO, ECLAC, ESCAP, ESA, OECD, UNECE

¹⁴ Universidad de Extremadura

Next UNECE Expert Forum for Producers and Users of Climate Change-related Statistics on 28 September - 2 October 2020

The main objective of the annual Expert Forum is to provide a platform for users and producers of climate change-related statistics to collaborate, share experience, discuss concepts and measurement issues, and identify areas for development of practical guidance.

The next Expert Forum is planned to be held as a series of virtual meetings between 28 September and 2 October 2020. The topics for the 2020 Expert Forum include:

- a) Role of the statistical community in climate action
- b) Measuring climate change adaptation
- c) Measuring inclusive wealth with climate change-related statistics

More information about the meeting will be available at: <http://www.unece.org/index.php?id=53848>.

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 6 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 in June 2019, including the full [monitoring report on progress towards the SDGs in the EU context - edition 2019](#), [the brochure with key findings as well as the new digital publication 'SDGs & me'](#). The list of SDG indicators for the upcoming 2020 report is available [here](#). The 2020 report is scheduled for mid June.

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.

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 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 2019 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 and their data published [here](#). Also updated were the online articles on [electrical and electronic equipment](#), [waste packaging](#) and [batteries](#).

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](#).

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*(Continued from page 18)***SEEA environmental accounts**

Eurostat runs data collections of SEEA-based environmental accounts, and the results are published as follows: [air emission accounts](#) (2018 data), [material flow accounts](#) (2018 data), [environmental taxes](#) (2018 data), [environmental sector](#) (2016 data), [environmental protection expenditure](#) (2018 data) and physical energy flow accounts (2018 data; article in preparation). 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 co-ordinates an experimental project on an integrated system of national capital and ecosystem series accounting (KIP INCA) in collaboration with other EU partners. The second phase (on implementation) is scheduled to end in 2020. The final report on the first phase of the project (on feasibility and design) is available [here](#). 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 crisis, the 2020 course are being moved online or postponed or cancelled. The latest situation is as follows: Physical energy flow accounts (probably online in second half 2020, new dates to be announced), Introduction to experimental ecosystem extent and services accounting based on SEEA-EEA (probably online in second half 2020, new dates to be announced), Monetary environmental accounts (online as scheduled). The course on water statistics is cancelled.

ESCAP News*(Contributed by ESCAP Statistics Division, ESCAP Pacific Office and SIAP)***ESCAP calls for action on ocean data**

The theme of the 2020 session of the Economic and Social Commission for Asia and the Pacific (ESCAP) was *Promoting economic, social and environmental cooperation on oceans for sustainable development*. The study prepared for the session, *Changing Sails: Accelerating Regional Actions for Sustainable Oceans in Asia and the Pacific* highlighted the lack of data and statistics on the oceans, calling for enhanced harmonization of ocean data, development of global standards for ocean accounting and investments in national statistical systems.

The Commission resolved to “*Strengthening cooperation to promote the conservation and sustainable use of the oceans, seas and marine resources for sustainable development in Asia and the Pacific.*” In the resolution, countries request ESCAP to continue to strengthen and facilitate national capacities for measurement and accounting of progress towards the sustainable development of the oceans, including through engagement with the Global Ocean Accounts Partnership.

References:

- Theme study: <https://www.unescap.org/publications/changing-sails-accelerating-regional-action-sustainable-oceans-asia-and-pacific>
- Launch of the theme study: <https://www.unescap.org/events/virtual-regional-launch-changing-sails>
- Commission resolution on ocean action: https://www.unescap.org/commission/76/document/RES_76_1_ENG.pdf
- Global Ocean Accounts Partnership: www.oceanaccounts.org

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Piloting ocean accounts, extension of work in Samoa

During its 49th session, the United Nations Statistical Commission requested that ocean statistics be integrated into the work of the revision of the SEEA-Experimental Ecosystem Accounting and noted the interest of ESCAP and UN Environment to take the lead in this work. Since then, ESCAP through the Global Ocean Accounts Partnership¹⁵ (GOAP) has produced a preliminary consultation draft of the Technical Guidance on Ocean Accounting for Sustainable Development¹⁶. Using an accounting approach, the Guidance describes a statistical framework for compiling ocean-related data, statistics and indicators in a consistent, comparable and coherent manner to enable decision-making about oceans.

To test and apply these methodologies, ESCAP engaged five member States, namely China, Malaysia, Samoa, Thailand and Viet Nam, in conducting ocean accounts pilot studies in 2019¹⁷. The pilot study in Samoa supported the need for integrated statistics with emphasis on sustainable development of the tourism industry by improving the understanding of the economic contribution of tourism as well as issues related to its resource use starting with water and electricity.

To further improve the applications of ocean accounts for national ocean policy and governance, the Government of Samoa in collaboration with the Department of Agriculture, Water and the Environment (AWE), Australia and ESCAP is pursuing an extension of the pilot study. The extension focuses on issues related to land-based pollution to the ocean starting with solid waste taking into consideration the preliminary SEEA accounts for solid waste piloted by the Samoa's Bureau of Statistics. It can be linked with the initial pilot study by disaggregating, for instance, waste generation by tourist/local.

A final report is expected by December 2020.

Visualizing ocean accounts

The need for greater awareness and understanding of the value of ocean accounts was highlighted at the Global Dialogue on Ocean Accounting held in Sydney in November 2019. In response, ESCAP is developing story maps integrating geospatial and statistical data on the ocean utilizing a SEEA-compliant integrating framework. The story maps will be an addition to the earlier developed Pacific Ocean Accounting Portal:

https://www.unescap.org/sites/default/files/Pacific_Ocean_Account_Portal_GOAP_12-15Nov2019.pdf

This project is scheduled to be completed in November 2020.

Compilation of SDGs indicators on the environment in Asia and the Pacific

ESCAP's Statistical Institute for Asia and the Pacific, SIAP, continues to support countries in building capacity in environment statistics and accounts. Currently the institute is focused on delivering remote trainings including e-learning courses and webinars. Recently over 500 participants successfully completed an introductory course on the System of Environmental Economic Accounting (SEEA).

During the 3rd quarter of 2020, the institute will organize a facilitated e-learning course on energy statistics and accounts. The institute plans to develop e-learning courses in priority areas including disaster-related statistics and ocean accounts. Webinars which are organized using web-based platform extend reach to all participants of the course located in different parts of the world and give opportunity to the participants to directly interact with the facilitator of the course. The Institute is also reaching out to partner agencies such as UN Environment to collaborate in the development and delivery of e-learning courses on environment related SDGs.

¹⁵ <https://www.oceanaccounts.org/>

¹⁶ http://communities.unescap.org/system/files/technical_guidance_v0.8_final_draft_0.pdf

¹⁷ <http://communities.unescap.org/node/1163/view>

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<http://unstats/unsd/ENVIRONMENT/newsletters.htm>

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Ongoing activities

Technical assistance on SEEA implementation

- Samoa: Ocean accounts
- Malaysia: Ocean accounts
- Viet Nam: Ocean accounts
- Fiji: Land accounts
- Mongolia: Waste, water and air emission accounts
- Bhutan: Waste accounts
- Maldives: Water and waste accounts

e-Learning

- Development of e-Learning course on disaster-related statistics

Promotion materials

- Ocean accounts visualization

Upcoming activities

- First meeting of the Technical Working Group on Disaster-related Statistics in Asia and the Pacific (September 2020)
- Training on integrated use of geospatial and statistical data (geo-statistics) for land information and management, Uzbekistan (tbd)
- Training on GIS and land accounts, Tajikistan (tbd)

COUNTRY NEWS

Grenada's Activities and Plans in the Area of Environment Statistics

(Contributed by Halim Brizan, Central Statistical Office, Grenada)

Grenada, like most CARICOM Small Island Developing States (SIDS), are faced with increasing environmental challenges including the loss of biodiversity, impacts of natural disasters, waste management and the impacts of climate change. This is quite evident from the devastating impacts of Hurricane Ivan and Emily in 2004 and 2005 respectively. With these heightened risks and grappling with the effects of this current COVID19 global pandemic, there is no doubt that the environment and climate change have become critical areas of focus as they impact our lives in so many ways.

The strategic focus of Grenada's National Sustainable Development Plan 2020-2035 is grounded in three sustainable development pillars; the society, the economy, and the environment. This is therefore translated into these three National Goals, two of which weigh heavily on climate resilience and environment sustainability. The government of Grenada is aware that ensuring sustainable development, sound policy decisions must be made using timely and reliable information. The government also recognises the dire need to improve the monitoring and measurement of progress towards environmental sustainability. In light of this understanding and the increasing demand for data on the environment and climate change to inform the development agenda the Central Statistical Office has embarked on a few initiatives in collaboration with the CARICOM Secretariat and UNSD.

Immediately after hosting the Workshop on Environment Statistics and Climate Change Statistics organized by UNSD in collaboration with the CARICOM Secretariat in November 2019 (<https://unstats.un.org/unsd/envstats/meetings/2019-Caricom%20Region/CaricomRegion.cshtml>), Grenada brought all local stakeholders together for a three-day National Workshop on Environment Statistics and Climate Change Statistics (<https://unstats.un.org/unsd/envstats/meetings/2019-Grenada/Grenada.cshtml>). The main goal of this workshop was to increase visibility of environment statistics through the Framework for the Development of Environment Statistics (FDES 2013) and build technical capacity in this subject area in the country, by bringing the stakeholders together to assess work undertaken by Grenada in recent years and to provide hands-on training on priority topics such as climate change, hazardous events and disasters, water, waste, land,

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environmental health, biodiversity and forest statistics. These topics were discussed in the context of reporting obligations under the corresponding Multilateral Environmental Agreements (MEAs), the environmentally-related Sustainable Development Goals (SDGs) and national policies including 'Blue Growth' for which there is a strong need to develop marine/ocean statistics. In addition to training sessions the workshop participants adopted a set of recommendations for the way forward, which includes setting up an Inter-agency Committee and a Technical Subcommittee on Environment and Climate Change Statistics; implementation of the FDES 2013 and the Environment Statistics Self-Assessment Tool (ESSAT); and participation in the Global Consultation on Climate Change Statistics and Indicators, among other recommendations.

Grenada had the pleasure of presenting at the Side Event "Environment Statistics and Climate Change Statistics – the Nexus" at the 51st session of the Statistical Commission (New York, 3-7 March 2020) (<https://unstats.un.org/unsd/statcom/51st-session/side-events/20200303-2L-Environment/>). The presentation focused on Grenada's experience with the development of environment statistics as a Small Island Developing State in the CARICOM region.

Grenada is now in the process of finalizing its first Compendium for Environment Statistics which will be published within the next two months. It was recommended at the workshop that a Compendium for Environment Statistics be produced by the Central Statistical Office in line with FDES every two years following the first publication.

The Central Statistical Office is in the process of formalising the technical subcommittee and the Inter-agency Committee for Environment and Climate Change Statistics. Given the importance of monitoring climate change, Grenada looks forward to participating in the planned UNSD Global Consultation on Climate Change Statistics and Indicators.

Environment Statistics in Namibia

(Contributed by Saara Niitenge, Namibia Statistics Agency)

The work on environment statistics in Namibia kicked-off in 2017 following an invitation to African countries including Namibia to take part in a capacity building programme on environment statistics in Africa, jointly initiated and conducted by UNECA, UNSD and UN Environment. The Programme began with an e-learning course, covering the Framework for the Development of Environment Statistics (FDES 2013). The FDES which provides a comprehensive framework, setting out the scope of environment statistics also serves as a guide for data collection and compilation of environment statistics at national level, as recommended by the United Nations Statistical Commission, at its 44th session in March 2013.

As part of the Programme UNSD supported the Namibia Statistics Agency (NSA) to organize two national workshops that were held with stakeholders (mainly environmental data producers) from different Ministries, Departments and Agencies (MDAs). Office visits to several MDAs were also conducted by UNSD and the NSA to assess the state of environment statistics using the Environment Statistics Self-Assessment Tool (ESSAT). Results from the assessment revealed that data is available, but scattered across different ministries with no common dissemination platform. Consequently, UNSD assisted by funding a national consultant who was tasked to draft a national action plan and an environment statistics compendium which are currently being finalized. This was helpful in further assessing the state of environment statistics in the country and mapping out the way forward.

Namibia is the first African country to incorporate environmental protection into its constitution. The NSA serves as the central statistical authority and official national data provider and has been producing, analysing and disseminating information obtained from surveys, censuses and administrative records since its establishment through the Statistics Act No.9 of 2011. Moreover, the agency is mandated to develop and coordinate the National Statistics System and National Spatial Data Infrastructure for Namibia. Subsequent to the appointment of a focal person, the NSA is now fully involved in the coordination of national environment statistics, while working closely with the Ministry of Environment, Tourism and Forestry. Although the two institutions have signed a Memorandum of Understanding, there is still need to strengthen their collaborative relationship. Topics for prioritisation include land use, water, waste, biodiversity and climate change statistics which will ensure that the country meets its national reporting obligations to several Multilateral Environmental Agreements and the environmentally-related Sustainable Development Goals. The NSA is currently coordinating Namibia's participation in the UNSD Pilot Survey on Climate Change Statistics and Indicators, which is still an ongoing process.

Despite challenges in financial and human resources, efforts in archiving a wide range of public environmental data have also been made at private sector level, by means of an Environmental Information Service (<http://www.the-eis.com/>) - the biggest environmental library in the country. These constraints can be addressed by increasing awareness on the subject to different stakeholders, lobbying for high-level support and further capacitating data producers to ensure successful establishment and continuity of environment statistics in Namibia.

Nutrient Budgets, Quarterly CO₂ Emissions, and Climate Change Indicators

(Contributed by Arthur Denneman, Statistics Netherlands)

The Netherlands is the second largest exporter of agricultural products. To prevent losses to the environment an efficient use of feed and fertilizers is needed. Statistics Netherlands therefore compiles nutrient budgets for input and output flows (nitrogen and phosphorus) for three system boundaries: (1) soil surface balance, (2) animal husbandry balance, and (3) agricultural sector balance. The third one is a combination of the other two, in which circular flows are omitted, i.e., applied manure to soil is counterbalanced by harvested maize/grass for livestock.

In 2016 an [expert panel](#) was set up to validate and improve the Dutch nutrient budgets.

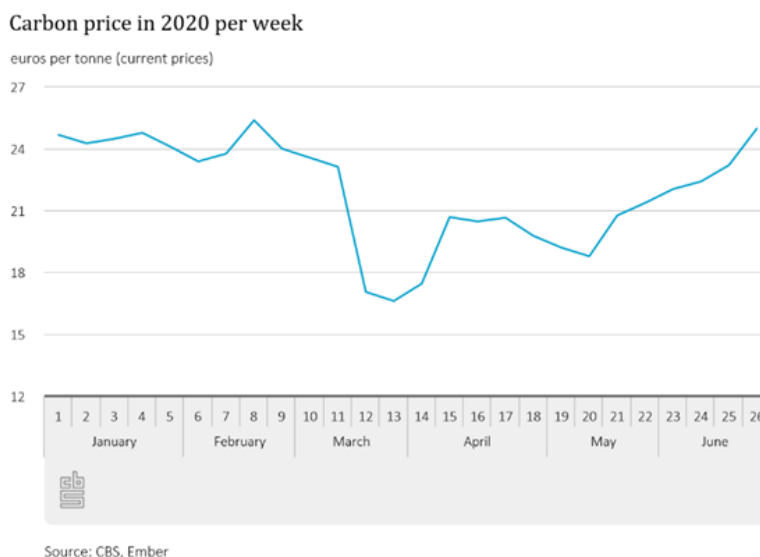
The [agricultural losses to the environment](#) decreased sharply the past 30 years. The nitrogen surplus declined by 53 percent (period 1990-2019), while the phosphorus surplus even fell by 86 percent. However, the Netherlands still has the highest nitrogen surplus of the European Union. The nitrogen losses to the air affects the ecological quality of the Dutch ecosystem. In 2018 the [critical loads for nitrogen deposition](#) exceeded 71 percent of its terrestrial area.

In May 2020 Statistics Netherlands disseminated a news release on [greenhouse gas emissions](#). In 2019 the emissions declined by 3 percent year-on-year. With respect to 1990 it is 18 percent lower. In the [Urgenda climate case](#) of 24 June 2015, a Dutch court ruled that by 2020 emissions must be reduced by at least 25 percent relative to 1990. Normally it would be hard to reach this goal (it would require a sudden 7 percent drop), but on 11 March the World Health Organization declared the novel coronavirus outbreak a global pandemic. In response to an anticipated global recession the [European carbon price](#) fell from 24 euros per tonne at the beginning of January to less than 17 euros per tonne in the second half of March. The carbon price recovered to 24 euros per tonne at the end of June.

Our news release on [CO₂ emissions of 1st quarter of 2020](#) showed a 9 percent year-on-year decline. This decrease was mainly due to energy companies using less coal and more natural gas in their production process. The substitution of coal by gas was one of the government measures taken to reach the Urgenda 25 percent goal. The impact of the coronavirus crisis was also noticeable in the CO₂ emissions. Emissions by the aviation sector dropped by 11 percent. Currently, such [transport emissions](#) fall outside the scope of our climate targets.

There is a strong need to develop a global set of indicators to monitor climate change in all its aspects. Two initiatives can be distinguished: a bottom-up approach by [UNSD](#), to be applicable to countries at various stages of development, and the indicator set from [UNECE](#), which seems more suitable for countries with a mature statistical system. Statistics Netherlands is involved in both initiatives, e.g., recently as a participant of the Pilot Survey on the UNSD indicator set.

The UNSD indicator set is structured according to five IPCC areas: drivers, impacts, vulnerability, adaptation and mitigation. The bottom-up approach resulted in a wide scope and a high number of items (indicators and statistics) accompanied by metadata. The next step, going upward, should be to set priorities and to find (inter)national expert networks and resources to do the work. This is not an easy step, since not only is the statistical community involved, but also other agencies, research institutes and universities. How do we get all stakeholders on board?



Environmental and Climate Change Statistics in Slovenia

(Contributed by Mojca Žitnik and Mojca Suvorov, Statistical Office of the Republic of Slovenia)

The Statistical Office of the Republic of Slovenia (SURS) is the main producer and coordinator of national statistics in Slovenia. SURS is “register oriented“, which is reflected also in the Slovene National Statistics Act; SURS has full legal cover to use for statistical purposes free of charge all available administrative data of the public and private sectors.

The environmental statistics produced by SURS is relatively young. It was established and harmonised with EU methodologies in 2001. The environment-related statistics, which are the basis for the compilation of various indicator sets, among them Climate Change Indicators, comprise waste, water, energy, transport and agricultural statistics, environmental expenditures and environmental investments statistics. SURS regularly produces sets of environment-related indicators, for example SDG Indicators, Green Growth Indicators and develops Circular Economy Indicators and Climate Change Indicators. In accordance with SEEA requirements, SURS regularly produces the physical and monetary environmental accounts (Air Emission Accounts, Material Flow Accounts, Environmental Taxes Accounts, Physical Energy Flow Accounts, Environmental Goods and Service Accounts, and Environmental Protection Expenditures Accounts). The Water Accounts and the Forest Accounts are still in the development phase.

For the compilation of the whole set of environmental statistics, indicators and accounts, SURS is not using only data collected by itself but also many additional administrative data from various ministries and agencies. The access to data is agreed and signed in the memoranda of understanding.

The statistical data are disseminated and available to the users free of charge. They are used by journalists, the general public, students and policy makers for the preparation of various articles, studies, national strategies, plans and programs. They are also used for international reporting.

When developing new sets of indicators, SURS often cooperates with national and international organisations and institutions. Recently, SURS has participated in the UNSD Pilot Survey on Climate Change Statistics and Indicators. Participating in the pilot survey was quite challenging although the number of indicators in the set showed that detailed and thorough work was done for its preparation. Some of the indicators were very clear and easy to comment. For others, especially those that are out of the scope of official statistics or with less well-defined methodology, it was more complicated to find and provide relevant information. Generally, SURS finds the exercise as a necessary and useful step on the way to producing a good comprehensive set of Climate Change Indicators at the international level and looks forward to participating in the forthcoming UNSD Global Consultation on Climate Change Statistics and Indicators.

For SURS it is important to have good relations and to communicate with the data providers and data users. One of the channels is the annual meeting called Statistical Day, which in 2020, was dedicated to climate change data. The event was attended by almost 400 participants. It was very successful and well covered in the media. For SURS the event was useful to hear some examples of good cooperation and use of SURS’s data and the proposals for improvements. Above all, the event was a great opportunity to network and to bring together the climate and statistical communities.

Links:

SURS home page <https://www.stat.si/StatWeb/en>

Environmental Statistics <https://www.stat.si/StatWeb/en/Field/Index/13>

SDG <https://www.stat.si/Pages/en/goals>

Statistical Day 2020 <https://www.stat.si/StatWeb/en/SitefinityContentType/ShowEvent/76dd8343-1fc6-6ee6-b81a-ff0000af5e57>

Environmental Statistics in Suriname

(Contributed by Anjali De Abreu-Kisoensingh, General Bureau of Statistics, Suriname)

Since 2002 the General Bureau of Statistics (GBS) of Suriname has published eight environment statistics compendia, and the ninth is planned to be published by the end of 2020. The environment statistics publication is an important tool that is used by ministries and other organizations responsible for policy making in Suriname. This year’s compendium is planned to be published by the end of 2020 and will also contain some environmentally-related SDGs. Like the previous years the UNDP is providing financial resources for a workshop and the launch of the environment statistics compendium. Most stakeholders provided the requested data to the GBS and the draft publication is at the preparation stage ready to be validated. The workshop was planned to be held in June, but due to COVID-19, having a big workshop with approximately 100 persons is just not possible. Therefore, the GBS plans to have separate smaller working group sessions where various institutions linked to a topic such as Climate Change, Biodiversity & Forest, Agriculture & Fisheries etc. will validate the data. There are no confirmed dates yet when these working group sessions will take place.

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Suriname has actively taken part in regional (CARICOM) and international co-operation (UNSD, IDB, IEA) activities, including contributing to the revision of the Framework for the Development of Environment Statistics (FDES 2013) and participating in the Expert Group on Environment Statistics (EGES). This year Suriname is also contributing to the UNSD Pilot Survey on Climate Change Statistics and Indicators, which is still an ongoing process. Since February 2020 Suriname responded and has also made revisions to the Pilot Survey, which is a complex but very important instrument, especially for contributing to the climate change policy in Suriname, as well as to the monitoring of SDG 13: Take urgent action to combat climate change and its impacts. The experience with the environment statistics compendia, various environment workshops in Suriname and abroad, as well as the good relationship between the GBS and the stakeholders and the clarification and feedback received from UNSD staff made it possible to respond to this Pilot Survey. Suriname looks forward to participating in the forthcoming UNSD Global Consultation on Climate Change Statistics and Indicators and the GBS is also planning to produce a publication devoted to climate change statistics and indicators next year.

All environment statistics compendia are presented on the General Bureau of Statistics website:

<https://statistics-suriname.org/en/environment-statistics-2/>

Tanzania Puts Production of Climate Change Data at the Top of the Statistical Agenda

(Contributed by Ruth Minja, National Bureau of Statistics, Tanzania)

Climate change being a global challenge has also had ramifications on social and economic subsystems in Tanzania. Some of the most prominent disruptions being: frequently occurring floods and droughts; reduced crop productivity in some parts of the country; and drying up of water resources. These challenges may potentially impede national development efforts.

In response to the climate change challenges, a number of programs are being implemented in Tanzania, with the overall objective of mitigating climate change process drivers; and enhancing national and local adaptive capacities. In order to track progress of such programs, availability of climate change data is critical.

However, as it is for other developing countries, Tanzania has had data challenges on climate change. This was also echoed in the Data Gap Assessment (DGA) which was conducted to set the foundations for compilation of climate change statistics in Tanzania. The DGA took stock of the production of environment statistics in Tanzania, and established that, despite commendable national efforts in the production of environment statistics, there were still acute data gaps in climate change data to inform plans and programs on climate change. Such data were important for following-up implementation of national programs and also Multilateral Environmental Agreements (MEAs) relevant to climate change such as: - the Kyoto Protocol to the United Nations Framework Convention on Climate Change 1997; the Montreal Protocol on Substances that Deplete Ozone Layer, 1987; and the Paris Agreement for Climate Change, 2016.

In order to bridge the data gaps on climate change statistics, the National Bureau of Statistics in Tanzania has embarked on the production of climate change statistics, with the National Climate Change Statistics Report, 2019 (NCCSR, 2019) being the first publication in this endeavor. Publication of the NCCSR has been a pioneering effort, not only in Tanzania, but in the whole of the East Africa Community.

The process behind production of climate change data was collaborative, with GIZ, GPSSD and UNEP providing technical assistance and finances for the project. The National Climate Change Statistics Report, 2019 will be uploaded to NBS website at www.nbs.go.tz around the end of July 2020.

In a parallel development on climate change, Tanzania has recently completed the UNSD Pilot Survey on Climate Change Statistics and Indicators. These are set of indicators that describe climate change in a broader perspective including drivers, impacts, vulnerability, mitigations and adaptation. The main observations from the Pilot Survey include:- more than half (57%) of the draft list of indicators are not available in the country due to various reasons, mostly lack of expertise and financial resources in computation of the indicator. These constraints at the national level can hamper data collection for these indicators during the actual data collection phase. Tanzania has benefited from participating in this Pilot Survey as it has assisted in engaging the various stakeholders involved in climate change monitoring and policy at the national level and is providing comments to UNSD on the Pilot Survey. Tanzania is also planning to participate in the planned UNSD Global Consultation on the Global Set of Climate Change Statistics and Indicators later this year.

As the way forward, NBS in collaboration with the key environment stakeholders in the National Statistics System is planning to conduct the following activities by end of December 2020:-

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- Finalize preparations for data collection tools for the Basic Set of Environment Statistics according to the FDES 2013 as preparatory activities to update the National Environment Statistics Report, 2017; and
- Convene a working session with the National Technical Working Group on Environment to critically review the Global Set of Climate Change Indicators and provide more comments to UNSD for further refinement of the list.

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Environment Statistics in The Gambia

(Contributed by Masanneh Landing Ceesay and Muhammed I. Jaiteh, Gambia Bureau of Statistics)

The field of Environment Statistics in The Gambia is quite young and evolving. The commencement of this field in the country came into play upon The Gambia being invited to partake in an Environment Statistics capacity building programme in 2017 which was cooperatively initiated by UNECA, UNSD and UNEP. The capacity building programme focused on the Framework for the Development of Environment Statistics (FDES 2013) in three phases: e-learning training module, face-to-face seminar, and national workshops and technical assistance for selected pilot countries. The FDES 2013 outlines the structure of environment statistics as recommended by the United Nations Statistical Commission.

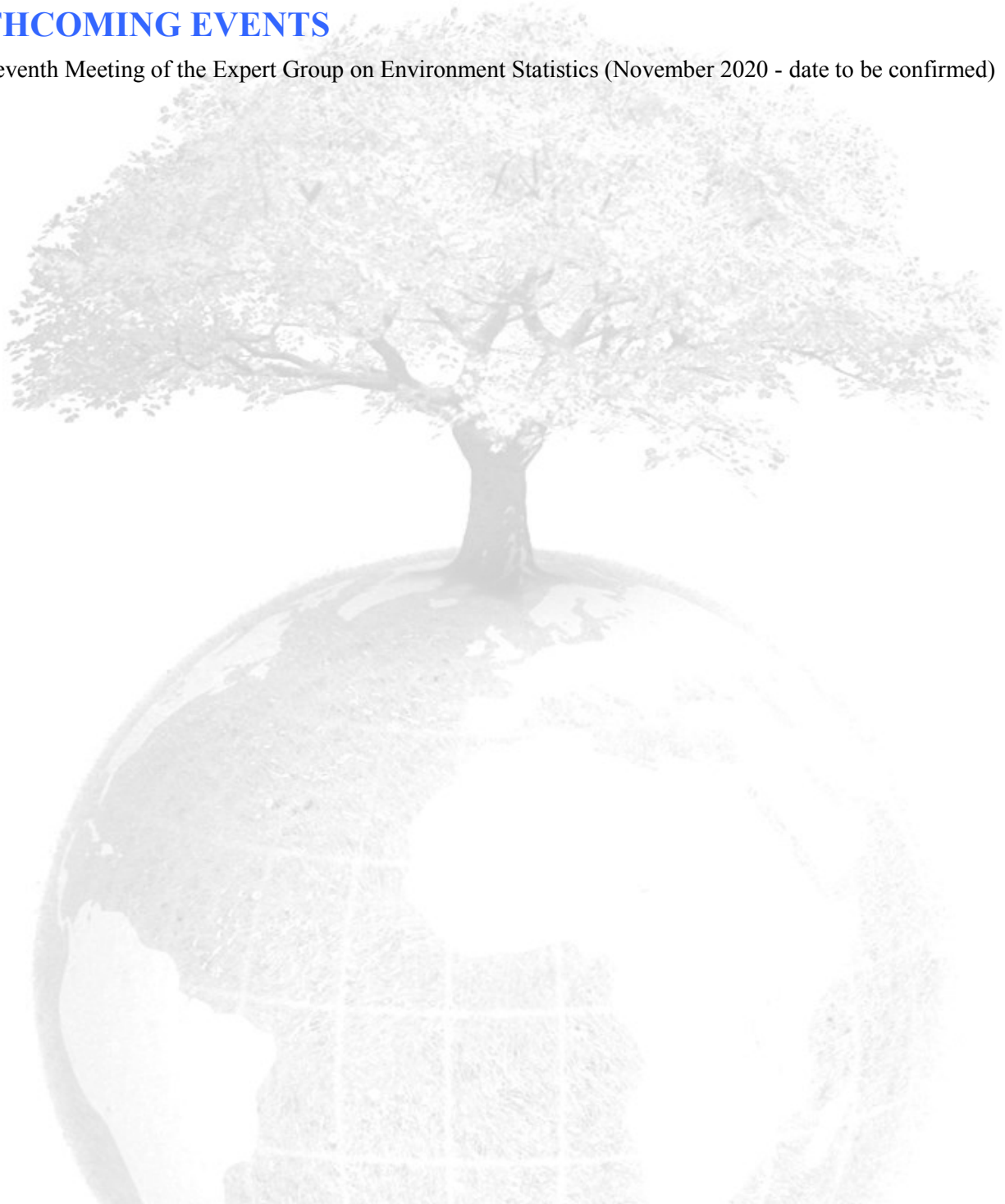
In fulfilment of the third phase of the capacity building programme, UNSD in collaboration with the Gambia Bureau of Statistics (GBoS), organised two national workshops involving key stakeholders with regards to provision of environment data from various ministries, departments and agencies across The Gambia. The workshops were conducted under the Programme on Statistics and Data of the 10th Tranche of the United Nations Development Account (DA 10th Tranche). During the second national workshop held in August 2019 discussion about contribution towards completion of The Gambia's first Environment Statistics compendium by key stakeholders took a centre stage. Thus, more environment data was contributed by various institutions after the second national workshop. As a result, The Gambia's first Environment Statistics [compendium](#) has been successfully completed and published on the GBoS website under the Environment category. The Environment Statistics compendium includes, inter alia, times series of temperature and precipitation, forest cover, agricultural production and statistics on disasters. Another key outcome within the mentioned collaboration is a National Action Plan which outlines the needed steps, actions and resources to further develop environment statistics in The Gambia, for which an environmental statistician was appointed at GBoS. Given that interinstitutional dialogue is instrumental for developing official environmental statistics, GBoS joined the quarterly meetings of the Agricultural and Natural Resources Working Group under the National Environment Agency.

In order to ensure timely, quality and reliable provision of environment data especially for subsequent Environment Statistics compendiums, GBoS has started assisting key environment data producers in designing either a questionnaire or a template for data collection. GBoS has assisted the Department of Forestry to design a questionnaire for data collection. However, the questionnaire is yet to be finalised. Furthermore, GBoS will continue to assist any key environment data producer or otherwise upon formal request or GBoS might make a suggestion for assistance if deemed necessary.

GBoS has consulted national counterparts including involvement of the UNFCCC focal point in The Gambia in the context of assessing The Gambia's preparedness to produce climate change statistics and indicators, following UNSD's invitation to take part in its Pilot Survey on Climate Change Statistics and Indicators. This survey is still an ongoing process. The above activities will assist national policies, in particular those addressing climate change impacts, water and waste management issues, as well as international reporting requirements.

FORTHCOMING EVENTS

Virtual Seventh Meeting of the Expert Group on Environment Statistics (November 2020 - date to be confirmed)



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