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envstats News and Notes

Environment Statistics Section
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FOCUS: Consolidating the UN statistical programme on environment and climate change

The Expert Group on Environment Statistics (EGES) was established in 2014 to support the implementation of the Framework for the Development of Environment Statistics (FDES). The EGES was preceded by the Expert Group on the Revision of the UN FDES that functioned from 2009 to 2013. The Statistical Commission at its 44th session in 2013 endorsed the revised FDES 2013 as the framework for strengthening environment statistics programmes in countries and recognized it as a useful tool in the context of the Sustainable Development Goals (SDGs) and the Post-2015 Development Agenda. As the EGES gradually expanded to cover more aspects of climate change statistics, the Statistical Commission at its 55th session, approved the renaming of the Expert Group on Environment Statistics to the Expert Group on Environment and Climate Change Statistics (EG-ECCS) to cover both topics given their close interrelationship and requested the amendment of the work programme of the Commission to combine environment and climate change statistics into a single agenda item with one joint report.

The EG-ECCS is currently being restructured with a Steering Group and several sub-groups, each with a distinct scope, participation and function, which will be defined to respond to the request of the Statistical Commission at its 55th session. The restructuring process requires further effort and will be reflected in a revised Terms of Reference (ToR) of the EG-ECCS, ensuring that decisions of the Statistical Commission in prior years, such as the endorsement of the FDES in 2013 and the Global Set in 2022 are addressed with intensified support to Member States. The EG-ECCS comprises experts on environment and climate change statistics and related areas from all geographical regions representing United Nations Member States, as well as international and regional organizations.

Since environment and climate are cross-cutting areas of statistics, there are closely related activities across UNSD as well as other agencies, especially on climate and disasters and their relations with gender and health statistics, biodiversity, big data, water and waste, among others. In our effort to streamline and establish connections with these activities, several of the sub-groups are being shaped in such a way that duplication of coverage is addressed and reduced, and that collaboration is enhanced. Based on the 34 responses to the invitation to express interest in 12 activities recommended at the 11th meeting of the EG-ECCS, the following activities received the largest interest:

- Capacity development and knowledge sharing for climate change and environment statistics (22 interested experts);
- Implementation of climate change and environment statistics (20 interested experts);
- Climate change questions for surveys and censuses (complementary to ongoing process) (15 interested experts);
- Gender and climate change statistics (11 interested experts); and
- Waste statistics (11 interested experts).

Given that various aspects of the work in scope require engagement of experts who may be positioned outside national statistical offices (NSOs), yet linked under national statistical systems, additional efforts are being carried out to enhance the representation in the activity on health and climate change statistics building on previous discussions. Since UNSD is the secretariat for the proposed activities, we are currently in the process of setting up discussions on prioritized sub-groups to address the above activities, based on the above expressions of interest. The discussion sessions are expected to assist in defining the structure and process, the leading partners, engaging with further representation, and drafting concept notes and ToRs for the groups to be initiated in the first quarter of 2025.

The articles contributed to this newsletter illustrate progress in several of the above-listed activities, including on gender and health aspects being integrated into climate change statistics, as well as on the ongoing Sub-Group on Climate Change Questions for Surveys and Censuses. This is why the prompt initiation of the sub-group discussions is critical as it will ensure exchange of lessons, address key challenges and steer future priorities of work.

The budgetary restrictions at the United Nations over the past two years have obstructed important advocacy

activities, notably the planned attendance of UNSD and the organization of side events at the twenty-eighth and twenty-ninth sessions of the Conference of Parties to the UNFCCC. In addition, in-person meetings of the Expert Group on Environment and Climate Change Statistics have not been held in recent years owing to a lack financial resources. We have been informed that the operational budget for this year has been severely restricted and regrettably we cannot organize an in-person expert group in New York. Therefore, we would be grateful for any suggestions, financial assistance or contributions in kind to support an in-person expert group meeting, either in New York or in the donor's country of choice.

UNSD NEWS:

The Expert Group on Environment and Climate Change Statistics

The eleventh meeting of the Expert Group on Environment and Climate Change Statistics (EG-ECCS) was held virtually on 14-17 October 2024. With UNSD providing secretarial services from New York, the EG-ECCS assembled approximately 122 experts from countries and agencies, UN regional commissions and UN agencies. The meeting discussed, inter alia: (i) streamlining environment and climate change statistics; (ii) climate change statistics and indicators; (iii) environment statistics data collection; (iv) environment statistics toolbox; and (iv) capacity development in environment and climate change statistics.

Several experts made presentations on the above agenda items including on this Expert Group's first occasion to place both environment and climate change statistics on the agenda, on recent developments regarding the reporting to UNFCCC under the Enhanced Transparency Framework of the Paris Agreement, and the regular reporting required by countries in 2023 and beyond. The meeting facilitated fruitful dialogue which allows UNSD to continue to lead and coordinate the work programme on environment statistics and climate change statistics, in particular due to the adoption by the Statistical Commission of the Framework for the Development of Environment Statistics (FDES) in 2013 and of the Global Set of Climate Change Statistics and Indicators in 2022, as statistical frameworks to be used by countries embarking on environment statistics and climate change statistics respectively. Countries' extensive application and use of the Global Set and its accompanying tools (Climate Change Statistics Self-Assessment Tool (CISAT) and the Implementation Guidelines) were discussed at length. The EG-ECCS noted that the FDES and its tools (Environment Statistics Self-Assessment Tool (ESSAT), Manual of the Basic Statistics of Environment Statistics) have been used extensively by countries to produce environment statistics at varying stages of development.

Important linkages were made between climate and gender statistics, as well as climate and health statistics, and appreciation was expressed on the collaboration between the Environment Statistics Section and the Social and Gender Statistics Section, UNSD and UN-Women, and between UNSD and the UK Office of National Statistics, for the respective topics. Experts also appreciated the work undertaken by the EG-ECCS sub-group on compiling environment and climate change questions to be included in surveys and censuses, and the initiative to explore the use of big data for environment and climate change statistics.

Concerning the waste and water data which UNSD collects from countries via the UNSD/UNEP Questionnaire on Environment Statistics, experts agreed for continuation of close collaboration concerning methodologies used and for advocacy of inter-institutional stakeholder arrangements to be arranged, especially in light of evolving country demands related to circular economy. Capacity development drew much interest and UNSD, UNEP and regional institutions, delivering multiple capacity development activities on environment, climate change and disaster statistics, in partnership with specialized agencies and

other development partners, will continue engaging and collaborating, and identifying country demands, amid limited resources and the need to minimize duplication of effort.

The EG-ECCS recommended, inter alia, the following key actions: expansion of the participation of the group; further collaboration with key international agencies involved in climate change statistics, including FAO, OECD, WMO, UNDRR and ECE; and exploring options for high level coordination to seek complementarity between UN-led activities led by bilateral donors as well as other international funds and banks.

For further details about the eleventh meeting, refer to:
https://unstats.un.org/unsd/envstats/fdes/fdes_eges11.cshtml.
The Final Report of the meeting is available here:
https://unstats.un.org/unsd/envstats/fdes/EGES11/Final%20Report.pdf

Climate change and gender statistics

A previous mandate from the Statistical Commission (requesting that a gender perspective be adopted and integrated into all the agenda items of the Commission)[1] had been given due consideration in the advancement of the work concerning climate change statistics in collaboration with the Inter-Agency and Expert Group on Gender Statistics (IAEG-GS). Notably, climate change was identified as a priority for gender mainstreaming, with the IAEG-GS working closely with the EG-ECCS in collecting country experiences through a dedicated short survey on gender and climate change data being collected and used. Based on the survey outcomes and other inputs, the IAEG-GS is developing a guidance note on mainstreaming gender into climate change statistics.

The need for stronger gender reflection in the Global Set has been addressed in the past three annual meetings of the EG-ECCS, where it was recommended to use the indicators from the Asia-Pacific set of gender and environment indicators, developed by UN-Women and ESCAP through several regional consultations with Member States and international agencies such as UNEP and the International Union for Conservation of Nature. The Asia-Pacific indicator set measures the differentiated interactions of women and men with the environment, to understand their roles in environmental conservation and degradation, their diverse levels of preparedness and capacity to cope with disasters and the enablers and inequalities that make them vulnerable to the effects of climate change. Because of additional requests from countries with populations highly vulnerable to the effects of climate change, UN-Women developed a set of 100 gender and environment indicators, which is an expansion of the Asia-Pacific indicator set. Several indicators from the Asia-Pacific indicator sets, along with their detailed metadata, were proposed for consideration in a future update of the Global Set and, consequently, these indicators were discussed during a dedicated groupwork session, as part of the 11th meeting of the EG-ECCS.

Climate change and health statistics

There is a need to develop standards and tools for official statistics to monitor the impacts of climate change on health, an important area, where indicators are currently tier 3 in the Global Set. This subject was prioritized and addressed by the EG-ECCS at its past three annual meetings, based on the

[1] See https://unstats.un.org/UNSDWebsite/statcom/session_51/documents/2020-37-FinalReport-E.pdf (ref. 51/115 (b)).

project led by the Office for National Statistics of the United Kingdom, "Standards for Official Statistics on Climate-Health Interactions" (SOSCHI).[2]

Climate and health interactions is a subject of rapidly growing demand for further development of indicators and methodologies, with key initiatives led by WHO, with prioritized headline indicators, and the Lancet Countdown.[3] Related work on the selection of indicators is also being carried out under the global goal on adaptation (GGA). A recent meeting convened by the Lancet Countdown concluded with the expression of a shared desire by several international stakeholders, including WHO, the World Bank and UNSD, to work towards a shared approach to climate-health indicators, which may involve several sets of indicators, but within an agreed overarching framework to bring coherence. The indicators proposed by the SOSCHI project are focused on health outcomes and operationalize well-proven methodologies and would therefore form the core indicators of climate impact on health for international comparison. According to the agreed approach, the related sets of indicators would expand the scope and detail of the framework with new methods, measures of exposure and risk, etc.

The health indicators proposed by the SOSCHI project were reviewed during a dedicated groupwork session, as part of the 11th meeting of the EG-ECCS, which recommended further testing of the methodologies and data availability by countries in the revision process of the Global Set and noted that another cohort of indicator proposals would be presented to the EG-ECCS at its next annual meeting.

Capacity development and implementation of the Global Set of Climate Change Statistics and Indicators and the Framework for the Development of Environment Statistics

Capacity development is a key component of the work of UNSD and key partners to support countries in developing environment and climate change statistics. In collaboration with the secretariat of the UNFCCC and other partners, capacity development continues to be delivered in various formats such as online, on-site and through other collaborative efforts. UNSD, in collaboration with UNEP, ECLAC and ESCAP, has contributed to the conduct of climate change and disaster-related statistics workshops in the Dominican Republic, Fiji and Jordan under the 14th tranche of the United Nations Development Account project, workstream 2.1.

The Implementation Guidelines4 for the Global Set of Climate Change Statistics and Indicators were translated into Arabic, Chinese, French, Russian and Spanish under the auspices of the 14th tranche of the United Nations Development Account project, workstream 2.1 on climate change and disaster-related statistics, and will soon be available through the website of UNSD. UNSD collaborated with UNEP and all regional commissions to achieve these translations.

Sub-Group on Climate Change Questions for Surveys and Censuses

Based on a recommendation from the Expert Group on Environment Statistics (EGES), a Sub-group was established to develop a core set of climate change questions which can be included in censuses and surveys for countries to collect data on. With representatives from various parts of the world, the group comprises experts from both countries such as Cabo Verde, Italy, Mexico, Nepal, Suriname, United Republic of

[2] See https://zenodo.org/communities/soschi/.
[3] See https://lancetcountdown.org/
[4] https://unstats.un.org/unsd/envstats/Climate%20Change/Implementation_Guidelines.pdf.

Tanzania and Uganda (as well as Brazil that more recently joined) and international agencies such as ECLAC, SPC, UNFCCC and UN-Women.

The aim is to compile a repository of existing questions, propose new ones where feasible and formulate a core set to be applied in censuses and surveys on national level.
The questions, largely from Population and Housing Censuses, and also other sources such as agricultural censuses and specialized surveys, are being considered for their applicability to serve as inputs for data collection by countries on the Global Set of Climate Change Statistics and Indicators. This follows the Statistical Commission adoption of the Global Set in March 2022, and discussions at the 11th meeting of the Expert Group on Environment and Climate Change Statistics (EG-ECCS) in October 2024. UNSD hired a consultant to support the work on the core set and the findings were presented at a Global Webinar on 18 December 2024 which was attended by 57 climate and environment experts from across the globe. The sub-group is expected to further develop these findings along with the outputs of their group towards the core set.

Environment Statistics and Climate Change Statistics Surveys

UNSD has compiled over 100 specialized environment statistics and climate change surveys from countries which are available on the website (https://unstats.un.org/unsd/envstats/censuses/) and can be filtered by country, theme and year. Users can expect additional surveys collected from countries and which are being compiled to be added to this collection of specialized environment statistics and climate change surveys. Environmentally- or climate change-related questions in censuses are also available with the most recent expected to be added to this being Nauru which features 6 specific questions on climate change in addition to the traditional questions on the environment. Languages in which surveys or censuses are available include Arabic, English, French, Portuguese and Spanish. Interest in including environment and climate related questions in censuses and surveys has increased and this was discussed extensively at the eleventh meeting of the Expert Group on Environment and Climate Change Statistics and also features in the Report of the Secretary General on Environment and Climate Change Statistics (E/CN.3/2025/25) to the 56th session of the Statistical Commission in 2025 (https://unstats.un.org/UNSDWebsite/statcom/56).

Environment Statistics and Climate Change Statistics Reports

Many countries are continuing to compile environment statistics compendia and similar publications which apply the FDES 2013 which UNSD makes available on its website at https://unstats.un.org/unsd/envstats/fdescompendia.cshtml so far in Arabic, English, French, Portuguese and Spanish. More recently, countries (and agencies) have started producing separate climate change statistics publications for which UNSD has established a dedicated website at: https://unstats.un.org/unsd/envstats/climatechange_reports.cshtml.

UNSD continues to welcome contributions of both country compendia that apply the FDES 2013, other environment statistics compendia and specialized reports such as on climate change statistics, as well as surveys or censuses on environment statistics or climate change 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.

UNSD/UNEP Data Collection and Dissemination

UNSD/UNEP Questionnaire 2024 on Environment Statistics (waste and water sections)
The UNSD/UNEP Questionnaire 2024 on Environment Statistics, now in its 12th round of biennial data collection, was mandated by the Statistical Commission. Since 2006, the questionnaire has focused solely on

Waste and Water, helping to establish a consistent time series of data. It was sent to over 160 countries and territories, excluding OECD and EU members (for whom comparable data is collected through the OECD/Eurostat Joint Questionnaire on the State of the Environment). In August 2024, UNSD sent an announcement letter to the heads of National Statistical Offices and Ministries of Environment, encouraging them to appoint a single national focal point for the 2024 Questionnaire. Following this, the pre-filled 2024 Questionnaire was sent out in October 2024. A table on the generation of food waste was added to the 2024 Questionnaire for the first time. UNSD held an online session in November 2024 to assist countries with completing the Questionnaire. As of now, approximately 25 percent of countries have submitted responses, and UNSD has begun validating the data. Countries may be contacted for further information if necessary, and reminders will be sent to those who have not yet responded. Once all responses are validated, the complete results will be published on the UNSD website.

Data Dissemination on Environment Statistics

UNSD publishes global environmental statistics through two main web-based products: UNSD Environmental Indicators and Country Snapshots. Statistics on Water and Waste statistics are based on official data from national statistical offices and ministries of environment (or similar agencies), collected via the biennial UNSD/UNEP Questionnaire, along with comparable data from OECD and Eurostat and water resources data from FAO Aquastat. Data for other environmental themes are compiled by UNSD from various international sources. Additionally, the complete data and footnotes from each responding country are available on the Country Files webpage, with selected water and waste statistics updated on UNData. For any questions or comments, please contact envstats@un.org.

UNSD's coordinating and technical efforts in water statistics

UNSD continues to hold periodic meetings with stakeholders at international level who have a keen interest in water statistics. Typically, the international organisations who have a keen interest in either collecting water statistics from countries or providing policy advice regarding water (Eurostat, OECD, UNSD, World Health Organization, UN-HABITAT, Food and Agriculture Organization of the United Nations) participate. The content and harmonization of the harmonized UNSD/UNEP Questionnaire on Environment Statistics and the Joint OECD/Eurostat Questionnaire on the State of the Environment is often raised, especially as it pertains to best methodology for SDG indicator compilation.

The meetings allow for better coordination of the timing of when Questionnaires are sent to countries, and when country data can be made publicly available. This means that collective effort can be better aligned for compilation of key policy agendas such as the Sustainable Development Goal policy framework, circular economy analysis (where data concerning water reuse, wastewater treatment, desalination are of great interest), and climate change statistics compilation.

Outcomes of such regular meetings make collaboration among these institutions for other events much easier, such as for a side event to World Water Week, which took place in Stockholm, Sweden on 25-29 August 2024. In collaboration with the World Health Organization as key organiser, as well as with other key partners (UN-Habitat, University of Technology, Sydney and Agence Française de Développement), UNSD served as a panelist. The side event launched the SDG 6.3.1 indicator report: Progress on the proportion of domestic and industrial wastewater safely treated, and UNSD's participation meant it could advocate for the value of countries' efforts to provide data to international data collections on water statistics (such as the UNSD/UNEP Questionnaire on Environment Statistics) to an audience who is eager to advance water policy and understand possible limitations on the quantity and quality of water data.

As has been the case in recent years, the content and results of both the meetings themselves and work undertaken throughout the year by several of the participating international organisations has been presented

at the annual Expert Group on Environment and Climate Change Statistics. In 2024, countries (Jordan, Slovenia) presented on challenges and how to overcome them concerning their national level water statistics. Such an exchange of information helps determine what priorities in water statistics should be moving forward, helps identify where data gaps lie, and where links between data compilation and policy formation can be enhanced. Countries stressed the importance of multi-stakeholder communications for water statistics compilation, and the value of legal bases for ensuring water statistics are compiled well.

UNSD's contributions to the Joint Task Force on Environment Statistics and Indicators with UNECE

In maintaining close collaboration with the United Nations Economic Commission for Europe (UNECE), UNSD presented remotely in October 2024, to the Joint Task Force on Environment Statistics and Indicators. A chief purpose of UNSD's participation was to convey information to colleagues present concerning the content of the Expert Group on Environment and Climate Change Statistics (EG-ECCS) which was essentially the passage of information from a global forum to a regional one. The global level developments which UNSD was able to share included history and context of the EG-ECCS, methodological advancements pertaining to the Global Set of Climate Change Statistics and Indicators, and status of data collection undertaken via the UNSD/UNEP Questionnaire on Environment Statistics. As for many countries worldwide, the continued collaboration of many UNECE member states in providing responses to the Questionnaire is integral to its success in informing policy decision making.

UNSD participation at the Regional Workshop Strengthening Climate Change Data Ecosystems (CCDE): Senegal and the Region (Dakar, Senegal, 16-18 July 2024)

PARIS21 and the National Agency for Statistics and Demography of Senegal (ANSD), in collaboration with several partners organised a Regional Workshop entitled "Strengthening Climate Change Data Ecosystems (CCDE): Senegal and the Region". The regional workshop sought to disseminate the results of collaboration between ANSD, the Ministry of Environment and Sustainable Development, and PARIS21 and other development partners on climate change data and explore venues for strategic scaling-up support in Senegal and the region. UNSD was invited to present virtually on the Global Set of Climate Change Statistics and Indicators and its accompanying tools, the Climate Change Statistics and Indicators Self-Assessment Tool (CISAT) and the Implementation Guidelines in a session describing PARIS21's CCDE framework and tools, as well as other tools developed by other partners that can help governments build more robust CCDEs.

A rich discussion followed this session with several points being addressed to UNSD. There was interest in receiving capacity development support from UNSD to implement the Global Set; the importance of linking the Global Set to National Adaptation Plans and Nationally Determined Contributions was noted; and the linkage between environment statistics through the Framework for the Development of Environment Statistics (FDES) and climate change statistics through the Global Set was also explicitly noted. UNSD will continue to collaborate with all these partners to promote the development of climate change statistics in member states. (see also contribution from PARIS21 under International News below).

UNSD participation at the Workshop for the Generation of Climate Change Indicators in the Dominican Republic (22-24 October 2024)

This workshop was organized by ECLAC's Statistics Division in collaboration with UNSD and was part of the activities of workstream 2.1 "Statistics related to climate change and disasters" of the project "Resilient and agile national statistical systems to respond to post-COVID-19 data needs to recover better", under tranche 14 of the United Nations Development Account.

The main objective of the workshop was to strengthen national technical capacities for the development of climate change statistics. The workshop brought together 33 participants from 19 institutions to take part in practical training on priority topics related to climate change, based on the Global Set of Change Statistics and Indicators. that was adopted by the United Nations Statistical Commission at its 53rd Session. The Framework for the Development of Environmental Statistics (FDES, 2013) was also introduced. The discussions illustrated solid basis for producing climate change indicators from the Global Set with available data as well as the need to adjust and better define some indicators to national circumstances. Additional work was recommended including further use of the Climate Change Statistics and Indicators Self-Assessment Tool (CISAT) to establish priorities for future data collection, including big data and preparation of project proposals for financing climate change and disaster-related statistics within the National Statistical System. (see also a contribution from ECLAC concerning this workshop under International News below)

UNSD participation at the National workshop on climate change and disaster-related statistics (Amman, Jordan, 3-5 December 2024)

Under the leadership of United Nations Environment Programme (UNEP), UNSD, with other partners (the United Nations Office for Disaster Risk Reduction (UNDRR), and the Economic and Social Commission for Western Asia (ESCWA)), participated in a national workshop as part of the Development account (14th tranche) for Jordan aimed at advancing its climate change and disaster-related statistics. UNSD delivered presentations (collaboratively prepared by the environment statistics and geospatial information colleagues) on climate change statistics and international reporting, application of the Global Set of Climate Change Statistics and Indicators (Global Set) and its supporting tools, and geospatial information systems and earth observations.

The workshop brought together various stakeholders from within Jordan, who presented on the status of environment, climate change and disaster risk reduction statistics. This made mention, for instance of the variety of sources being used (e.g. surveys, administrative data, geospatial information, etc.) and dissemination platforms. Participants of the workshop were provided with technical capacity on climate change and disaster-related statistics, and were able to provide their expertise in applying the supporting tools of the Global Set, especially the Climate Change Statistics and Indicators Self-Assessment Tool (CISAT), and share feedback on it with UNSD.

Following the workshop, Jordan shall build capacity among institutions for compilation of environment, climate change and disaster risk reduction statistics; apply the CISAT while contrasting the Global Set to its existing work on the Framework for the Development of Environment Statistics; and ensure that the NSO's and other stakeholders' efforts to advance climate change and disaster risk reduction statistics are in full alignment with the guidelines presented during the workshop. (see also a contribution from UNEP concerning this workshop under International News below).

INTERNATIONAL NEWS

Strengthening Evidence-Based Policies and Data for Action on Waste

(Contributed by Chun Kyoo Park, Sara Castro Hallgren, and Emily Carroll, United Nations Office for Sustainable Development (UNOSD), Division of Sustainable Development Goals, DESA)

Humanity generates an estimated 2.1 billion tons of municipal solid waste (MSW) annually, a figure that could increase by more than 77% by 2050. Developing countries, particularly those with limited waste management infrastructure, bear the greatest burden of the environmental and social costs of waste and

pollution, including from rising levels of plastic and e-waste. Approximately 90% of waste in low-income countries ends up in unregulated dumps or is openly burned, while only 62% of MSW globally is managed in controlled facilities. This highlights the urgent need for more effective and sustainable waste management systems.

As low- and middle-income countries work to improve household incomes and reduce poverty, they face the dual challenge of managing increasing waste volumes while addressing existing gaps in infrastructure and policies. This necessitates a shift towards sustainable waste management practices and circular economy approaches that not only reduce environmental harm but also create opportunities for economic growth. Strengthened data systems and evidence-based policies aligned with SDG targets under Goals 8, 11, 12, and 14 are essential to support these efforts and ensure long-term sustainability.

To address these challenges, the UN Office for Sustainable Development, Department of Economic and Social Affairs (UNOSD-DESA) and the Green Growth Knowledge Partnership (GGKP)[1] have partnered to launch a Waste Management and Circular Economy Policy Support System (WMPSS). This initiative aims to help UN Member States close data, technical, capacity, and finance gaps in advancing resource circularity in solid waste management through a life-cycle approach. The initiative highlights the urgent need for national governments to adopt evidence-based policies that accelerate the transition towards a waste-to-resource approach, supporting sustainable development and strengthening links to the Sustainable Development Goals (SDGs). Enhanced waste management systems and data tracking are critical to addressing the global waste crisis while promoting equity, health, and economic opportunities.

A joint effort with UNSD/UNEP

The initiative is designed to complement the data collection activities of the UNSD/UNEP Questionnaire on Environment Statistics (which is known to have terminology harmonised with the Joint OECD/Eurostat Questionnaire on the State of the Environment) and to identify and address existing gaps, thereby strengthening data reporting and supporting evidence-based policymaking for the waste crisis.

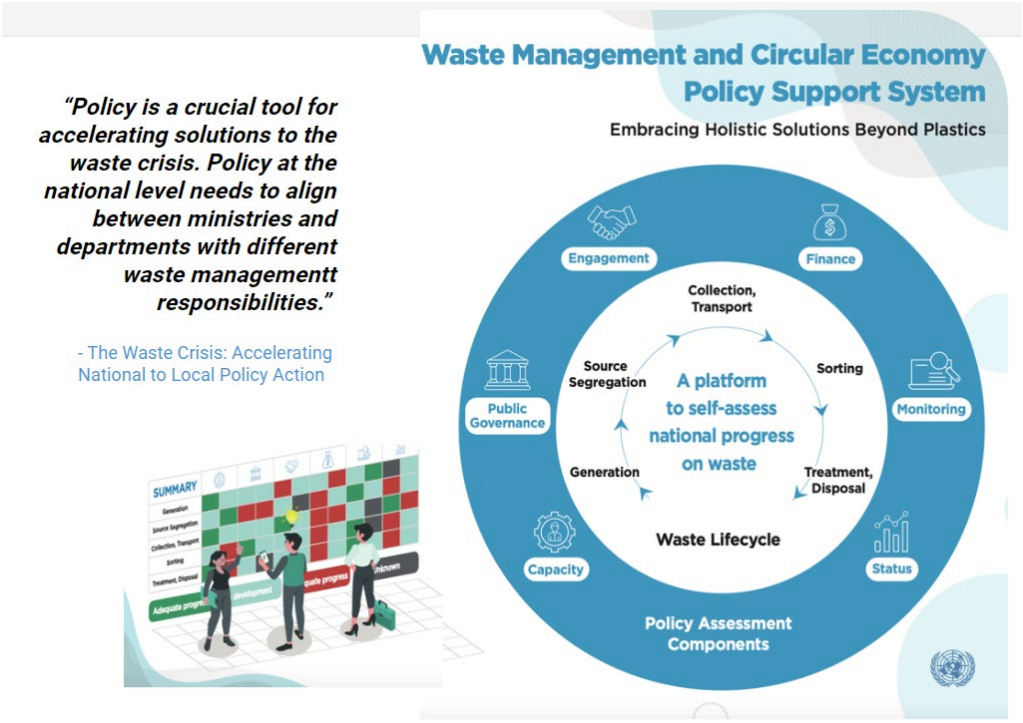
In the past year, UN Statistics experts have taken part in regional and country consultations to develop the system in line with the Questionnaire and address barriers in collecting and understanding data and reporting barriers on waste in countries. In July 2024 for example, the Central American Dialogue on Circular Economy addressed topics such as “Measuring what we waste - progress and gaps in solid waste management data” with UN Statistics experts and Member States under the Central American Integration System (SICA in Spanish). https://unosd.un.org/sites/unosd.un.org/files/eng_concept_note_and_agenda_policy_dialogue_ce_waste_23-25july2024.pdf

Insights gathered from these types of country consultations, expert groups, and ongoing desk research have shaped the development of a comprehensive online system designed to help Member States enhance their country-specific data and strengthen their official reporting capacities on waste.

The New Waste Management and Circular Economy Policy Support System (WMPSS) is now online!

The new policy support tool, which can be accessed at www.wastepolicysupport.org will strengthen national waste-related data, capacity and policy action for all waste types by providing:

- A self-assessment framework to benchmark national progress and gaps.
- Support to strengthen data collection and reporting systems.
- A tool for centralized waste management to enable evidence-based planning and investment.



Upcoming Regional Workshops

The tool will be piloted through regional workshops with national governments and key stakeholders, promoting collaboration and capacity-building for circular economy strategies at the regional level. The testing process will ensure the tool is tailored to country needs, incorporating feedback to enhance its relevance and effectiveness. These workshops will take place in Brazil in May, Madagascar in April and in Ghana in August, with regional champion countries.

Madagascar and Ghana: Sub-Regional Hubs for Waste Management Reform

Ghana and Madagascar will act as sub-regional hubs for the WMPSS, as both countries have expressed their commitment to improving waste management, serving as positive examples in the region. Both nations face significant challenges in waste management and data collection. Madagascar, as a Least Developed Country (LDC), faces critical challenges in waste management, including limited infrastructure for data collection systems, high costs associated with waste tracking, and the need to integrate data collection into broader waste management strategies. Despite these constraints, the country holds significant potential to transform into a nation guided by evidence-based approaches and policies underpinned by economic incentives. Ghana, on the other hand, receives approximately 15 million second-hand clothing items each week, a substantial portion of which ends up as waste. This underscores the urgent need for innovative approaches to effectively manage complex waste streams, and positions Ghana as a promising model for transformative waste management solutions. Together, both countries have the capacity to act as hubs for innovative waste management approaches, offering valuable lessons and implications for other nations regionally and globally.

The proposed system addresses these challenges by enabling systematic data collection and analysis, supporting evidence-based policymaking, and strengthening institutional capacity. These improvements are key to achieving long-term sustainability and resilience in waste management systems.

Learn more about the WMPSS here https://youtu.be/vw0fr-d2DWA or contact us!

Improved data on wastewater now available!

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

A key component of SDG 6 (Water) is Target 6.3, which focuses on improving water quality by reducing pollution, minimizing the release of hazardous chemicals, halving the proportion of untreated wastewater, and substantially increasing recycling and safe reuse globally by 2030. Indicator 6.3.1 specifically tracks the proportion of wastewater safely treated. Safely treated total, industrial, and domestic flows are separately estimated and reported where data are sufficient. UN-Habitat is pleased to share the co-custodianship of this indicator with the World Health Organization (WHO) and the United Nations Statistics Division (UNSD). The custodians work together with several different data sets to compute the indicator.

UN-Habitat and WHO have recently released the latest global report on the monitoring of wastewater for SDG 6.3.1.[5] The new report provides a comprehensive analysis of the current state of wastewater management, highlighting both the progress made and the challenges that remain. The report emphasizes the importance of reliable data and effective monitoring systems to inform policymaking and investment decisions, enabling countries to prioritize actions that will have the greatest impact on water quality and public health.

We are happy to state that many more Member States are now reporting on this indicator, compared to our previous report in 2021. For the first time in this report, we also present some initial data on wastewater reuse. The report draws on data from around the world, offering insights into the diverse approaches that

[5] https://www.unwater.org/publications/progress-wastewater-treatment-2024-update

countries are taking to monitor and manage wastewater. It underscores the need for enhanced international cooperation, knowledge-sharing, and sustained efforts to build on the momentum generated by the 2023 UN Water Conference.

In summary, the report highlights that knowledge of the total wastewater generated for all sources and safely treated is inconclusive, hindering informed decision-making in investment and policy development. As of the midpoint of the 2030 Agenda, significant strides have been made in wastewater management, although much work remains. We are still unable to make a comprehensive global estimate of wastewater treatment from all sources due to the under-reporting, as we need data from both 50 per cent of countries and 50 per cent of the world's population. We are very close to reaching this threshold, and it is our hope that we reach this goal in our next report, due in 2027. There is however an improvement in the level of reporting since the last indicator report in 2021. The number of countries reporting some type of wastewater statistics has increased by more than 50% from 69 in 2015 to 107 in 2022, covering 73% of the global population. Data on the proportion of total wastewater treated has also seen notable improvements, with 73 countries now able to report this metric compared to 42 in 2015. Reporting on industrial wastewater treatment remains limited, with data only reported from 22 countries representing 8 per cent of the global population. Regarding domestic wastewater, data were sufficient to estimate the proportion safely treated in 129 UN Member States covering 89 per cent of the world's population. Globally, 268 billion m^3 of household wastewater was generated in 2022, of which 155 billion m^3 were safely treated. The proportion safely treated (58%) represents a marginal increase compared to the estimates previously published for 2020 (56%). Regional disparities in the proportion of household wastewater safely treated are found to be broad.

During 2024 and continuing in 2025, UN-Habitat has organised a series of workshops and consultations in the regions to analyse the impact of wastewater management on climate change and reuse and will shortly release a report on climate emissions from wastewater treatment processes. It will also be working with Wastewater operators' partnerships through its GWOPA programme.

WHO implemented a data drive in 2024 to update its global domestic wastewater database. Draft 2024 country estimates and country files have been produced and shared with country focal points as part of a country consultation that ended on 31 January 2025. Through this process, countries have had the opportunity to provide feedback on the data that have been compiled to produce the draft estimates, in terms of correcting their interpretation or adding missing data sources. By March 2025, the country estimates will be finalized and regional and global estimates will be computed. These will be submitted to the SDG global database at UNSD, to complement those already submitted for 2020 and 2022, and to be included in the Secretary-General's 2025 SDG report.

For more details please contact: Dr Graham Alabaster, UN-Habitat Graham.alabaster@un.org or Dr Rick Johnston, WHO johnstonr@who.int

Partnership in Statistics for Development in the 21st Century (PARIS21) News

(Contributed by Paz Patiño, Yuqiao Kang, Karina Cázarez, PARIS21)

Regional Workshop on Strengthening Climate Change Data Ecosystems in Senegal

In partnership with the Agence Nationale de la Statistique et de la Démographie (ANSD), PARIS21 hosted a regional workshop on "Strengthening Climate Change Data Ecosystems (CCDE): Senegal and the region" in Dakar in July 2024.

The workshop convened climate change policymakers, statisticians, academics, and civil society representatives from Senegal, Benin, Botswana, Kenya, Malawi, and Togo. During the event, the UNSD Environment Statistics Section presented the Global Set of Climate Change Indicators and Statistics, along with the Climate Change Statistics and Indicators and Self-Assessment Tool (CISAT). Participants appreciated the complementarity of these tools with those presented by PARIS21.

The workshop provided a platform for peer learning and knowledge exchange, fostering collaboration between statisticians and policymakers working on climate change in the region. Senegal, as the host country, shared its experience in developing a climate change data action plan as part of its fourth National Strategy for the Development of Statistics (NSDS).

Discussions between Ministries of Environment and National Statistical Offices brought up strategies to improve the use of climate change data and enhance reporting under the Paris Agreement. UNFCCC hosted a session on the Biennial Transparency Reports (BTRs) that helped participants foresee upcoming reporting cycles. Civil society and other non-state actors recognized their critical role in strengthening the climate change data ecosystem (CCDE), offering valuable expertise to improve data analysis and interpretation.

Uniting the data and scientific communities to drive evidence-based climate action

PARIS21 joined the International Conference Sustainable Solutions, Shared Futures: Development Research for the 21st Century hosted by the University of Bonn in October,2024. During this event, PARIS21 hosted the session "Simulating Evidence-Based Climate Action: A Collaborative Approach."

The session immersed participants, mostly from academia, in a simulated climate change data ecosystem. Attendees role-played as part of a national statistical system, exploring the challenges of managing climate data and promoting its use.

Grounded in PARIS21's Mobilizing Climate Change Data Ecosystems Framework, this session highlighted the need for evidence-based climate action and collaboration between data and academic communities for impactful solutions.

PARIS21 COP29 virtual event: data-driven advocacy for climate action

To highlight successful approaches to collaboration between civil society organizations (CSOs) and governments in advancing evidence-based climate action, PARIS21 hosted an event at the OECD COP29 Virtual Pavilion on 5 November 2024. The event brought together representatives from civil society, national statistical offices (NSOs), and ministries of environment (MoEnv) to share lessons learned in leveraging data for climate action. It also explored how partnerships between CSOs and national statistical systems can foster a culture of data-driven decision-making to address climate change effectively.

During the event, PARIS21 introduced a new toolkit and training program designed to empower civil society organizations to effectively use official climate change statistics in their advocacy efforts. The "Climate Change Data-Driven Advocacy" training and toolkit are designed to equip civil society with the skills to access, interpret, and communicate official climate change statistics effectively. By focusing on practical applications, the initiative aims to enhance evidence-based climate advocacy. The toolkit is set to launch in 2025.

The recording and details of the PARIS21's COP29 virtual event are available here.

Promoting data-driven advocacy for climate action in Lesotho and Senegal

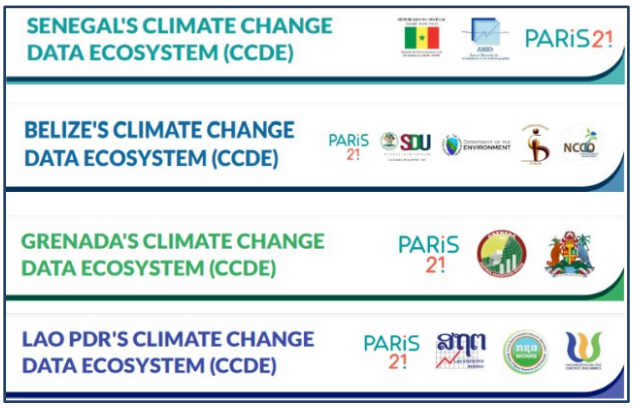
Given the vital role civil society organizations (CSOs) play in achieving climate goals, PARIS21 in partnership with the Bureau of Statistics of Lesotho and the Lesotho Council of NGOs, and with the Agence Nationale de la Statistique et de la Démographie (ANSD) and the Conseil des organisations non gouvernementales d'appui au développement (CONGAD) organized climate change data trainings in Lesotho and Senegal. The newly developed "Climate Change Data-Driven Advocacy" training for civil society organizations helps them access, use, and communicate official statistics related to climate change effectively.

These two workshops brought together over 50 representatives from civil society, equipping them with the skills to use official climate change statistics in their climate change advocacy efforts.

Country profiles: strengthening climate change data ecosystems for effective action

Drawing on the implementation of its Climate Change Data Ecosystem (CCDE) Framework and toolkit, PARIS21 has developed four country profiles analyzing the strengths, weaknesses, opportunities, and challenges of Senegal, Belize, Grenada, and Lao PDR CCDE. These profiles offer a comprehensive overview of climate data supply and demand, map key stakeholders, review existing action plans, and provide tailored recommendations to promote effective, data-driven climate policies and actions.

The CCDE assessments were conducted by PARIS21 in collaboration with the National Statistical Offices and Ministries of Environment in each country. To address the priority challenges and statistical capacity gaps identified, PARIS21 is working with these countries to develop strategic climate change data action plans. These plans will be integrated into their National Strategies for the Development of Statistics (NSDS), helping National Statistical Systems (NSSs) align efforts, mobilize stakeholders, and secure resources to strengthen their climate change data ecosystems. The country profiles can be accessed here.



Upcoming events

PARIS21 will continue rolling out the "Climate Change Data-Driven Advocacy" training for civil society organizations, with workshops planned in the Dominican Republic and Jamaica in Q1 2025.

E-waste Statistics Guidelines and Statistical Guideline for Measuring Flows of Plastic

(Contributed by Oliver Lysaght, Zhijie Li and Kees Baldé, UNITAR-SCYCLE Programme)

In Issue 55 of the ENVSTATS Newsletter, the UNITAR-SCYCLE programme and UNEP Early Warning and Assessment Division announced that it was in the process of drafting the third edition of the E-waste Statistics guidelines publication and the Statistical Guideline for Measuring Flows of Plastic throughout the Life Cycle. The objective behind the two guidelines is to support National Statistical Offices, other government agencies, and interested parties in constructing harmonised and robust statistics on e-waste and plastics.

The preparation of this third edition of the E-waste Statistics guidelines has been coordinated by the UNITAR-SCYCLE Programme with input from various leading agencies and experts in the field of e-waste statistics. This includes members of the Partnership on Measuring ICT for Development Task Group on Measuring E-Waste. By detailing a classification for electronics and measurement framework, data sources to populate the variables making up the framework, and recommended reporting indicators, the guidelines help facilitate the implementation of a comprehensive and consistent approach to measure the flows and stocks of electronics across their lifecycle based on internationally approved definitions, standards, and methods. Following the same principles as the previously endorsed guidelines, key updates in this third edition include: refreshed data inputs to the framework (such as product weights and lifetimes); an outline of newly developed approaches to measure areas such as transboundary e-waste flows, e-waste legislation, and e-waste recycling; updated examples from countries undertaking measurement of e-waste; and further guidance on opportunities for international reporting of statistics generated.

Coinciding with International E-Waste Day, UNITAR launched a global public consultation of the third edition of the guidelines in October 2024. The consultation ran for a month and benefitted from the responses of representatives from across 18 countries, several multilateral organisations and those in the third sector and social business. With the feedback received now having been incorporated into the guidelines, pilot testing of the updates contained in the guidelines are planned over the coming months. This includes as part of conducting training courses to build national capacity in at least three project countries and updating e-waste statistics at the level of the EU and the globe. This third edition of the guidelines are expected to be published in 2025. The work has been financed through the United Nations Environment Programme as part of UNEP's project on Enhancing countries' capacities for measuring progress on the transition towards a circular economy, with funds originating from the EU.

In parallel, UNITAR has been also working on a statistical guideline on plastic: the Statistical Guideline for Measuring Flows of Plastic throughout the Life Cycle, which is jointly prepared by UNITAR-SCYCLE and UNEP. The primary objective of the guideline is to provide guidance to data producers - including national statistical offices, waste management authorities, international organizations, academia, or other organizations - for producing high-quality statistics on plastic. By promoting such systemic alignment, this guideline will facilitate better datasets and understanding of plastic flows to, in turn, support decision-making at all levels, fostering responsible plastic production and consumption, effective plastic waste management, and the transition to a circular economy for plastics. Core indicators and their calculation proposed in the guideline will help capture the overall picture and the most essential aspects of plastic flows along the life cycle at the national level. The statistical guideline has concluded the global consultation process. The official release can be expected in the first half of 2025.

Related training material can be found at the UNITAR SCYCLE training website: Home - Scycle Academy for Circular Economy (ACE) and the general SCYCLE www.scycle.info and that of the Global E-waste Statistics Partnership www.globalewaste.org websites.

UNEP News

Enhancing Disaster Risk Reduction in Sub-Saharan Africa

(Contributed by Ekaterina Poleshchuk (UNEP), Moriken Camara (UNEP), Aneeshaa Choudhury Shudipta (UNDRR), Hervens Silme (UNDRR))

In 2024-2025, the United Nations Office for Disaster Risk Reduction (UNDRR) and the United Nations Environment Programme (UNEP) are providing technical support to enhance Disaster Risk Reduction (DRR) in sub-Saharan Africa, funded under the 11th European Development Fund's (EDF11) programme titled "Strengthening Disaster Risk Governance and Recovery Capacities." The initiative aims to address challenges in collecting and utilizing disaster loss data by strengthening national capacities and fostering collaboration between National Disaster Management Authorities (NDMAs) and National Statistics Offices (NSOs).

The first milestone was a three-day workshop in Nairobi, Kenya (25-27 November 2024), bringing together NDMA, NSO, and other stakeholders to enhance data sharing, governance, and align national statistical systems with international standards. Over 20 participants explored strategies to enhance data collection, governance, and integration for effective DRR target monitoring. It also fostered stakeholder collaboration, with ongoing virtual consultations to identify data gaps and promote cross-sectoral integration using an SFM Self-Assessment Tool.

The workshop featured seven sessions covering international standards and national practices in data governance, climate change, and disaster statistics, with key discussions on the Global Set on Climate Change Statistics and Indicators and the Sendai Framework for Disaster Risk Reduction 2015-2030. UNEP and UNDRR introduced a tailored roadmap template to guide national agencies in monitoring DRR targets, ensuring its relevance to Kenya's context.

Building on the success of the Kenya workshop, similar initiatives are planned for Ethiopia, Cameroon, Togo, and Burundi in the first half of 2025. These workshops will further strengthen national statistical systems, fostering data-driven decision-making to enhance disaster risk reduction and climate change resilience across sub-Saharan Africa.

All materials will be published here.

Data Collection and Capacity Development Activities on Economy-Wide Material Flow Accounts

(Contributed by Ekaterina Poleshchuk and Patryk Guenther, UNEP)

In 2024, the United Nations Environment Programme (UNEP) conducted data collection on Economy-Wide Material Flow Accounts (EW-MFA) data to support national reporting on SDG indicators 8.4.2/12.2.2 "Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP". All UN Member States, except those reporting EW-MFA statistics to Eurostat, were invited to validate the pre-filled questionnaire and replace global estimates with national data, if possible. By 31 December 2024, UNEP received data from 10 countries. Data from 35 countries reporting to Eurostat

were extracted by UNEP from the Eurostat Database. The data will be reported by UNEP to the Global SDG Database by 1st March 2025.

To increase the number of countries providing and reporting EW-MFA data, UNEP is developing e-learning courses and conducting capacity building activities. In particular, UNEP is providing technical support to Namibia and Ecuador in 2024-2025 (more information here and here respectively). The support to both countries is provided under the project titled "Resilient and Agile National Statistical Systems to Meet Post-COVID-19 Data Needs to Recover Better," supported by the 14th tranche of the United Nations Development Account (DA14 project). In 2024, UNEP also provided expert support to UNDP Belarus in their work with the National Statistical Committee of Belarus (Belstat) to build EW-MFA at the national level.

UNEP's Activities on Circular Economy Related Statistics
(Contributed by Therese El Gemayel, UNEP)

As part of the European Commission (EC)-funded project on Enhancing countries' capacities for measuring progress on the transition towards a circular economy (2024-2026), the draft guidelines for measuring circular economy was finalized and will be shared on the project website soon. In parallel, the project identified, in collaboration with UNITAR, e-waste statistics as the waste stream of interest for methodological update. In this regard, UNITAR has prepared, launched a global consultation, and finalized the draft of the 3rd edition of the E-waste Statistics: Guidelines on classification, reporting and indicators.

The upcoming project activities include the publishing of the guidelines on measuring circular economy, and country activities to build capacities in collecting and disseminating circular economy related statistics as well as e-waste statistics. The project targets six countries in Africa, Asia and Latin America and the Caribbean. The project focuses on various Sustainable Development Goal (SDG) indicators concerning Sustainable Consumption and Production (8.4.1/12.2.1, 8.4.2/12.2.2), food waste and loss (12.3.1a and 12.3.1b), waste (11.6.1, 12.4.2a, 12.4.2b and 12.5.1) and water (6.4.2).

UNEP's Measuring Progress Report Series
(Contributed by Therese El Gemayel, UNEP)

UNEP is finalizing the report Measuring Progress Special Edition: Disaggregation, which is expected to be launched early 2025. It is part of the Measuring Progress series, previously published by UNEP in 2019, 2021 and 2023.

The report series aims to inform on the environmental dimension of sustainable development, analyze the progress made in achieving the Sustainable Development Goals (SDG) targets, identify data gaps and better understand interlinkages between the environmental, social and economic dimensions.

The series concept is expected to slightly change building up to 2030 to include various statistical frameworks focusing on biodiversity loss, climate change and pollution. Given the adoption of multiple statistical frameworks since 2015, expanding the scope beyond the SDG framework is paramount to improve knowledge on the synergies and trade-offs with the environment being central and to inform the discussions of the post-2030 Agenda. The new concept will be shared on the series webpage.

UNEP's Activities on Environment Statistics in Indonesia

(Contributed by Dany Ghafari, UNEP)

United Nations Environment Programme (UNEP) in collaboration with BPS-Statistics Indonesia organized a three-day National Workshop from 12 to 14 August 2024 as part of the Statistics and Data Project "Resilient and agile National Statistical Systems to meet post-COVID-19 data needs to recover better" under the 14th tranche of the United Nations Development Account. The main objective of the workshop was to enhance the technical capacity of the National Statistical System (NSS) and other key stakeholders in determining the scope of environment statistics in the country, by bringing the various stakeholders together to provide hands-on training on the Framework for the Development of Environment Statistics (FDES 2013). The workshop was attended by participants from BPS - Statistics Indonesia, Ministry of Environment and Forestry, Ministry of Maritime Affairs and Fisheries, Ministry of Agriculture, Ministry of Energy and Mineral Resources, Meteorology, Climatology and Geophysics Agency, National Disaster Management Agency, Coordinating Ministry for Maritime and Investment Affairs, and other relevant agencies. All participants were invited to participate in an exercise on filling the Environment Statistics Self-Assessment Tool (ESSAT) with national information within the working groups with the support of UNEP experts, covering the six components of the FDES 2013.

UNEP's Activities on Environment Statistics in South Sudan

(Contributed by Dany Ghafari, UNEP)

United Nations Environment Programme (UNEP) in collaboration with Ministry of Environment and Forestry (MoEF) and the National Bureau of Statistics (NBS) organized a three-day National Workshop from 29 to 31 October 2024 as part of a national cross-cutting capacity development (CCCD) project in South Sudan, funded under the sixth replenishment of the Global Environment Facility (GEF-6). The main objective of the workshop was to align South Sudan's environmental statistics with global standards and best practices. The training workshop introduced the National Environmental Information Network (NEIN) members to the 2013 Framework for the Development of Environment Statistics (FDES 2013) and refine current indicator framework by applying the Environment Statistics Self-Assessment Tool (ESSAT) methodology.

UNEP's Activities on Climate Change and Disaster-related statistics in Jordan

(Contributed by Dany Ghafari, UNEP)

United Nations Environment Programme (UNEP), United Nations Statistics Division (UNSD), United Nations Office for Disaster Risk Reduction (UNDRR) and United Nations Economic and Social Commission for Western Asia (ESCWA), in collaboration with the Department of Statistics in the Hashemite Kingdom of Jordan, organized a National Workshop on Climate Change and Disaster-related statistics in Amman, Jordan from 3 to 5 December 2024 as part of the Statistics and Data Project "Resilient and agile National Statistical Systems to meet post-COVID-19 data needs to recover better" under the 14th tranche of the United Nations Development Account (DA14 project). The main objective of the national workshop was to increase the technical capacity for Climate Change and Disaster-related statistics in the country, by bringing the various stakeholders together to provide hands-on training on priority topics related to climate change and disasters, building on the extensive work of the UN in Jordan on Climate Change and Disasters at the local and national levels. The workshop was attended by participants from Department of Statistics, the Ministry of Environment, Ministry of Energy, Ministry of Water, Ministry of Municipals Affairs, Crisis Management Center, and the Civil Defense Public Security Directorate among others.

FAO News

(Contributed by Francesco Nicola Tubiello)

FAOSTAT agrifood systems emissions data

The Food and Agriculture Organization of the United Nations (FAO) released in October 2024 its annual updates of the FAOSTAT agrifood systems emissions data, covering the farm gate, land use change, and pre- and post-production processes. Data were disseminated in twelve specialized datasets and summarized under the FAOSTAT 'Emissions Totals' domain. An accompanying FAO data brief was also published, highlighting major global, regional and country trends. The FAOSTAT data cover 235 countries and territories, over the time series 1961-2022. They were used as input into major international peer-reviewed publications, including the 2024 Global Carbon Budget and Global Methane Budget scientific reports.

FAOSTAT Cropland Nutrient Budget and FAO Report on Sustainable Nutrient Management

The Food and Agriculture Organization of the United Nations (FAO) released in November 2024 its annual updates of the FAOSTAT cropland nutrient balance data, covering inputs and outputs of main plant micronutrients nitrogen, potassium and phosphate. Nutrient inputs are those applied on the farm gate, while nutrient outputs refer to those exported as crop and livestock products as they enter the food supply chain. The FAOSTAT data cover 235 countries and territories, over the time series 1990-2022. This dataset is among FAOSTAT's newest, benefiting from inputs of a large group of partners across academia, public institutions and the private sector. The FAOSTAT cropland nutrient balance statistics provided the basis for analysis in the FAO recently launched Sustainable Nitrogen Management Report, providing valuable information on global, regional and country trends on a number of essential data and indicators of soil health such as soil balances and nitrogen use efficiency.

Update on the first session of the sixteenth meeting of the Conference of the Parties to the Convention on Biological Diversity

(Jillian Campbell, Kieran Mooney and Lisa Janishevski, Secretariat of the Convention on Biological Diversity)

The first session of the sixteenth meeting of the Conference of the Parties (COP-16) to the Convention on Biological Diversity was held from 21 October to 1 November 2024 in Cali, Colombia with an unprecedented level of engagement from Parties and observers. The meeting had a strong focus on the implementation of the Kunming-Montreal Global Biodiversity Framework, which the Conference of the Parties adopted during its fifteenth meeting in 2022 (see https://www.cbd.int/doc/decisions/cop-15/cop-15-dec-04-en.pdf). For example, by the end of the first session of COP-16, 119 Parties had submitted at least one national target to contribute to the implementation of the Kunming-Montreal Global Biodiversity Framework. Further, 44 Parties had submitted national biodiversity strategies and action plans (NBSAPs). By 21 January 2025, 123 Parties had submitted at least one national target and 46 had submitted an NBSAP (for more details see https://ort.cbd.int/).

In keeping with the focus on implementation, numerous organizations launched initiatives or set out their approaches to support monitoring of the Kunming-Montreal Global Biodiversity Framework at the global, regional and national levels during the first session of COP-16. Examples of these include events on the Global Ecosystem Atlas, an indicator methodology for monitoring the implementation of the Gender Plan of Action, preparation of the seventh national reports to the Convention, the Global Knowledge Support Service for Biodiversity, BON in a Box and the NBSAP Accelerator, among others.

Among the major outcomes of the first session of the meeting was the creation of the "Cali Fund" to share benefits from uses of digital sequence information on genetic resources, the adoption of a new subsidiary

body and programme of work on the contributions of indigenous peoples and local communities towards the conservation and sustainable use of biological diversity, and benefit sharing, and the adoption of a global action plan on biodiversity and health. For details on these and other outcomes from the meeting see https://www.cbd.int/conferences/2024.

The COP also considered updates to the monitoring framework for the Kunming-Montreal Global Biodiversity Framework, which it previously adopted during its fifteenth meeting (see https://www.cbd.int/doc/decisions/cop-15/cop-15-dec-05-en.pdf), as well as means to support its use by Parties. The monitoring framework contains, among other things, the headline indicators that Parties have been requested to use in their national reports, and are urged to use in relevant national planning processes, including their national biodiversity strategies and action plans, according to their national circumstances. Similarly, the COP also considered how it could further develop and enhance its mechanism for planning, monitoring, reporting and review (see https://www.cbd.int/doc/decisions/cop-15/cop-15-dec-06-en.pdf). The COP was unable to complete its consideration of the updates to the monitoring framework and the further development and enhancement of its mechanisms for planning, monitoring, reporting and review during its first session. However, it is expected to do so during a resumed meeting of the COP-16 which will take place from 25-27 February 2025 in Rome.

Gender and Environment Statistics: available tools, data and uses

(Contributed by Sara Duerto Valero, UN Women)

Gender and environment statistics reflect the differentiated interactions between women, men and the environment. For instance, climate change affects women and men differently, as droughts and increasing aridity correlate with higher child marriage rates among girls, and increasing temperatures with high food insecurity among women; but floods and other hazards drive more men to participate in rescue operations and put their lives at risk. Similarly, women and men also contribute differently to environmental conservation and degradation, both through economic activities but also through subsistence, tradition, leisure and other activities. To better capture these interactions, individual-level environment data is needed.

To support countries with producing gender and environment statistics to monitor national environmental, climate and disaster policies, and to report to global environmental commitments, UN Women and UN ESCAP led a series of consultations to identify an Asia-Pacific list of Gender and Environment Indicators. The list is a living document, and continues being adjusted periodically in line with changing needs. Together with other key priority indicators, a set of 100 Gender and Environment indicators, offers a menu of options for National Statistical Systems wishing to produce related data. The list is currently being used by countries beyond the Asia-Pacific region.

Further, additional tools have been developed to support the production of data on gender and the environment and fill existing data gaps. For instance, in close consultation with FAO, ILO, IUCN, SPC, UNEP, UNDRR and UNESCAP, UN Women put together a Model Questionnaire on Gender and the Environment, that National Statistics Offices can use to implement individual-level surveys on this topic. A series of complementary tools, including an enumerators manual, sampling guidelines, and CAPI script, are available for governments looking to roll out the survey. At present data collection is completed or underway in Cambodia, Kiribati, Mongolia, Samoa and Tonga, and scheduled for rollout in Q1 2025 in Bangladesh, Senegal and Tanzania. Numerous other countries have reached out to UN Women for support and additional data collection is being planned in the coming months.

Together with UN ESCAP, UN Women has also supported Indonesia, Fiji and Philippines to identify national priority gender and climate change indicators building on the 100 Indicator list, and to produce data

for these indicators utilizing available sources. A similar process is underway in Chile and Brazil. This work has highlighted the relevance of reprocessing existing data, integrating multiple data sources, and collecting new environment data at the individual level. To fill gaps, Gender and Environment surveys may be implemented in some of these countries as well in 2025-2026.

A global conference on Gender and Environment Data was organized in 2023 by UN Women, UNFCCC, IUCN, WEDO, and the COP28 Presidency and Climate Champions. It resulted in an agreed Call to Action for stakeholders to contribute to filling gender and environment data gaps, and utilizing the data to inform national decisions, policy and advocacy. A follow-up global event is planned to take place in 2025, during COP30, to take stock of progress, and map next steps towards filling gender and environment data gaps.

Advancing Disaster-Related Statistics: Insights from the 4th Expert Forum

(Contributed by Raidan Alsaqqaf and Xuan Che, United Nations Office for Disaster Risk Reduction (UNDRR)-Bonn)

The Fourth Global Expert Forum for Producers and Users of Disaster-related Statistics took place from 28 October to 1 November 2024, in Addis Ababa, Ethiopia. It brought together over 80 experts in disaster risk reduction, national statistics, climate change, and geospatial information, and other policymakers and practitioners to collectively inch forward toward an internationally-agreed framework to guide cooperation on Disaster-Related Statistics (DRS). The forum also dedicated sessions to discussing topics such as enhancing communication between data producers and users to improve accessibility and utility, and strengthening capacity and resources for disaster-related statistics including in the context of climate adaptation.

The in-depth and parallel discussions explored specific components and issues to feed into the emerging Framework for DRS, such the integration of geospatial dimensions into statistical frameworks for better decision-making, integration of disaster statistics within civil registration systems and other administrative data to inform preparedness, as well as emerging possibilities associated with big data and recent advancements in data sciences.

The forum underscored the importance of a global framework to guide such diverse efforts relating to DRS, to ensure standardization and interoperability of data, enhance capacities for the production of data and its use to inform policymaking, and facilitate international cooperation to share learning and advances in this area. It is envisioned that such a framework will also support alignment of national disaster-related efforts with the Sendai Framework for Disaster Risk Reduction, the Paris Agreement, and other cornerstone frameworks for international cooperation.

The forum also facilitated sharing unique insights from the African continent, as it coincided with the Ninth session of the Statistical Commission for Africa (STATS-Comm Africa) and the Tenth meeting of the Regional Committee of the United Nations Global Geospatial Information Management for Africa (GGIM-Africa), facilitating more informed discussions on the challenges relating to DRS work across Africa.

Furter information about the forum's proceedings and associated work relating to DRS are available here:

- https://www.undrr.org/quick/91542
- https://www.uneca.org/eca-events/fourth-global-expert-forum-producers-and-users-disaster-related-statistics
- 2023 Expert Forum for Producers and Users of Disaster-related Statistics
- 2022 Second Expert Forum for Producers and Users of Disaster-related Statistics, hosted by ESCWA
- 2021 First Expert Forum for Producers and Users of Disaster-related Statistics, hosted by ECE

OECD News

(Contributed by Ivan Haščič, Sarah Miet, Miguel Cárdenas Rodríguez and Rodrigo Pizarro, OECD Environment Directorate)

OECD work on information, indicators and reporting related to the 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 Arturo de la Fuente (European Commission). The aim is to provide objective and reliable data and indicators to support international and national policy work, to advance the development of accounts and integrated databases, and to support the development and use of new information and monitoring tools. The 2025 meeting will be held on 25-27 March 2025.

Harmonised environmental data and indicators for international work

Environment at a Glance platform

The OECD Environment at a Glance platform provides real-time interactive online access to OECD indicators 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 download and share data, graphics, and thematic webbooks with key messages on major environmental trends in areas such as climate change, biodiversity, water resources, air quality, circular economy, and ocean resources. It is complemented by country profiles providing country-specific explanations of the indicators shown.

Main databases

Environmental datasets can be accessed on the OECD Data Explorer. Detailed data on environmental policy instruments are collected in the OECD PINE database and can be accessed through the PINE dissemination platform.

Environmental data collection

Environmental data have been collected since 1980 from OECD members, accession and partner countries via the OECD questionnaire on the *State of the Environment* and compiled from other international sources. The data collection via questionnaire is closely coordinated with the UNSD/UNEP *Questionnaire on Environment Statistics* and done jointly with Eurostat for common European Union member countries. This ensures a global country coverage for waste and water. The questionnaires have been sent early October 2024 for reply by end December 2024.

The collection of official data from countries is complemented with development of OECD methodologies for environmental indicators, drawing on underlying data from Earth observation, geospatial data, patent databases, and other global sources of microdata and big data. For more information, see OECD Environmental statistics, accounts and indicators.

New OECD publications

In November 2024, the OECD published the 4th edition of the Annual Climate Action Monitor. Developed by the International Programme for Action on Climate (IPAC), the Monitor provides an annual assessment of progress made by OECD and OECD partner countries towards their net-zero targets and the Paris Agreement commitments, based on a set of key indicators presented in the IPAC Climate Action Dashboard. This year's edition presents an in-depth evaluation of net-zero-targets, major climate-related hazards, and key trends in

climate action.

In December 2024, the OECD published an updated indicator methodology for Monitoring land cover change to understand biodiversity pressures. This paper builds on previous OECD work to develop a set of indicators assessing land cover and land cover conversions with likely biodiversity pressures on terrestrial and freshwater ecosystems. Key land cover conversions include tree cover loss and gain, cropland expansion and contraction, and urban and infrastructure development. The paper presents key results for 49 OECD and partner countries, showing that many countries have experienced a decline in natural and semi-natural vegetated land since the baseline year of 2000. Results for all countries globally are available through the OECD Data Explorer.

Implementing the SEEA and producing environmental-economic accounts

Ongoing developments

To support environment-economy policy integration, the OECD is actively engaged in the work of the UNCEEA and works with Eurostat, the FAO, UNEP and UNSD to establish global SEEA related databases (energy, air emissions, material flows, land cover, water). Together with UNECE, OECD organises seminars on the implementation of the SEEA. The 8th OECD-UNECE seminar will be held on 18-20 March 2025 and will focus on utilising SEEA for informing climate change policies and disaster-risk reduction, and measuring biodiversity extent, condition and drivers of biodiversity loss.

ECLAC Activities in Latin America and the Caribbean

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

Working Group on Environment Statistics: Recommendations for strengthening official environmental statistics systems. Twenty-third meeting of the Executive Committee of the Statistical Conference of the Americas of ECLAC, August 2024

This working group is led by the National Institute of Statistics and Census of Costa Rica, with the participation of 14 Latin American countries and the technical secretariat consisting of ECLAC, UNEP, and UN Women. The main objective of this working group is to compile a systematization of experiences of the participating countries as good statistical practices to strengthen environmental statistics for updated information on the status and governance of environmental, climate change, and disaster statistics as well as recognize opportunities for collaboration to strengthen NSOs' capacities in generating, disseminating, and systematizing environmental statistics.

For further information, kindly click here: https://rtc-cea.cepal.org/en/working-groups

Climate Change and Disaster Metrics in Latin America and the Caribbean: Advances and Challenges. Regional webinar coordinated by UN Big Data Regional Hub, 25 September 2024

ECLAC presented a regional review of the status of climate change and disaster statistics and its advances and challenges in the webinar. The webinar had more than 150 participants from all the countries across the region. ECLAC highlighted the importance of the NSOs' work on producing climate change statistics and indicators. This webinar is part of the ECLAC participation in the Inter-American Development Bank (IDB) Regional Public Goods project: Environmental and climate change indicators: a common approach using innovative methods and alternative data sources.

For further information, kindly click here: https://hub.ibge.gov.br/index.htm

Technical Assistance: Building climate change indicators in the Dominican Republic. National Workshop, 22-24 October 2024, Santo Domingo

Technical assistance was provided on environment statistics and the construction of climate change indicators to have a trained inter-institutional technical team and identify a common conceptual basis on environmental statistical processes (data, basic statistics, indicators, sources, among others) to build, sustain

and update the existing set of environmental indicators and build new indicators in the future. The ECLAC support consisted of an online workshop to identify, compile, and calculate some indicators from the Global Set of Climate Change Statistics and Indicators, based on the national environment statistics and advances on implementing the Framework for the Development of Environment Statistics (FDES) and the SDG agenda, with some experts' presentations.
For further information kindly click here:
https://www.cepal.org/es/eventos/taller-la-generacion-indicadores-cambio-climatico-republica-dominicana

Climate change indicators: sharing experiences and comments. Regional Workshop coordinated by UN Big Data Regional Hub, Medellin, Colombia, 10-11 November 2024

In the World Data Forum framework, the first face-to-face meeting of the project's Steering Committee 'Environmental and Climate Change Indicators: a common approach using innovative methods and alternative data sources', was held. Launched virtually on 9 September 2024, the project is led by the United Nations Regional Hub for Big Data in Brazil and the Sociedade para o Desenvolvimento da Pesquisa Científica (SCIENCE) and supported by the Inter-American Development Bank (IDB) and ECLAC. It aims to promote the generation of climate change indicators in Latin America and the Caribbean. The project's Steering Committee comprises representatives from National Statistical Offices (NSOs) of Argentina, Brazil, Chile, Colombia, Costa Rica, the Dominican Republic, Ecuador, Mexico, Paraguay, Peru, Paraguay and Uruguay for developing and implementing a common approach for calculating climate change indicators using innovative methods.

ECLAC Regular Data Collection on Environment Statistics: CEPALSTAT and Statistical Yearbook 2024

ECLAC's environment statistics team is compiling the environment statistics data series to update the CEPALSTAT database with the most recent data. It includes a new environment series to showcase the most relevant issues in the Latin American and Caribbean region. The third chapter of ECLAC's Statistical Yearbook, which is aimed at environmental information, is currently being developed. It shows a selection of tables and graphs that summarize statistical information from the regional perspective.
For further information, kindly click here:
https://statistics.cepal.org/portal/cepalstat/index.html?lang=en
https://www.cepal.org/es/taxonomy/term/8140

Planned activities for supporting the development of climate change indicators:

- Technical assistance to Panamá
- Technical assistance to Ecuador
- Participation as advisor of the Steering Committee of the IDB Regional Public Goods Project: Environmental and climate change indicators: a common approach using innovative methods and alternative data sources.

For further information, kindly click here:
https://comunidades.cepal.org/estadisticas-ambientales/es
https://comunidades.cepal.org/estadisticas-ambientales/en

ECA News

Fourth Global Expert Forum for Producers and Users of Disaster-related Statistics

(Contributed by Aster Denekew, United Nations Economic Commission for Africa)

Disasters caused by natural and man-made hazards have a significant impact on societies and economies worldwide. Understanding, monitoring, and responding to these events is crucial for effective disaster risk management and mitigation efforts. Disaster-related statistics play an important role in informing decision-making, formulating policies, and allocating resources for disaster prevention, preparedness, and response. However, there is often a disconnect between the producers of this data, such as statisticians, and the users, including policymakers, researchers, and practitioners. Establishing a platform where producers and users can come together to exchange knowledge, share experiences, and collaborate on improving the quality and accessibility of disaster-related statistics is essential. Developing disaster statistics and risk metrics will support evidence-based policy and decision-making and improve monitoring and reporting of progress towards internationally agreed goals and targets, including the 2030 Agenda for Sustainable Development, Agenda 2063, Sendai Framework for Disaster Risk Reduction, and Paris Agreement on Climate Change.

Recognizing the importance of disaster-related statistics, the United Nations in collaboration with its partners is organizing every year a global Expert Forum for Producers and Users of Disaster-related Statistics, to advance the production and use of disaster-related statistics for risk-informed development in support of the aim of the Inter-Agency and Expert Group on Disaster-related Statistics (IAEG-DRS) of the United Nations Statistical Commission. The Forum provides a platform where users and producers of disaster-related statistics collaborate and share knowledge.

The Fourth Global Expert Forum for Producers and Users of Disaster-related Statistics was hosted by the United Nations Economic Commission for Africa (ECA) in Addis Ababa, Ethiopia, from 28 October – 01 November 2024. The Forum was co-organized by the United Nations Office for Disaster Risk Reduction (UNDRR), United Nations Economic and Social Commission for Asia and Pacific (ESCAP), the United Nations Economic Commission for Europe (ECE), the United Nations Economic Commission for Latin America and the Caribbean (ECLAC), the United Nations Economic and Social Commission for Western Asia (ESCWA), the African Union Commission, the United Nations Statistics Division (UNSD) of the Department for Economic and Social Affairs, United Nations Environment Programme (UNEP) and United Kingdom Health Security Agency (UKHSA).

The Fourth Global Expert Forum aimed to advance the production and use of disaster-related statistics for risk-informed development in support of the aim of the Inter-Agency and Expert Group on Disaster-related Statistics (IAEG-DRS) of the United Nations Statistical Commission. The Forum provides a platform where users and producers of disaster-related statistics collaborate and share knowledge.

The Expert Forum was organised in a hybrid format. The participation included a total of 299 participants, experts coming from the National Statistical Offices, National Disaster Management Agencies, National Geospatial Authorities, UN Agencies, academic sector, non-governmental organizations and representatives of intergovernmental organizations, and international organizations.

Forum website: https://www.uneca.org/eca-events/fourth-global-expert-forum-producers-and-users-disaster-related-statistics

Madagascar: Water-Energy-Food Nexus Spatial Statistics and Analysis
(Contributed by Ayenika Godheart, United Nations Economic Commission for Africa)

Madagascar is actively pursuing an integrated approach to address the interconnected challenges of water, energy, and food security through a collaborative project led by the United Nations Economic Commission for Africa (ECA) in partnership with the World Food Program. This initiative aims to formulate effective policies and strategies that enhance sustainable development in Madagascar's energy and food sectors by utilizing advanced spatial visualization techniques to inform decision-making.

The project has been instrumental in uncovering Madagascar's potential for sustainable energy production by compiling and analyzing various spatial datasets. These insights serve as a critical resource for promoting sustainable practices within the energy-food nexus in the country. A significant outcome of this effort is the development of an interactive geodatabase focused on the Water-Energy-Food Nexus, which includes a geoportal and an interactive atlas. These tools provide an engaging experience while simplifying information access for policymakers and decision-makers.

The geodatabase features suitability analysis cartographic products that encompass thematic data related to energy potential, renewable energy sources, population density, agriculture, and infrastructure. This comprehensive analysis aids in identifying optimal locations for wind, solar, and small hydro power generation.

By harnessing geospatial technology, this initiative contributes to the formulation of effective policies and strategies for Madagascar's energy and food sectors. Notably, spatial data derived from the project has facilitated the identification of food-insecure zones across the country. This enables targeted interventions by the government and its partners to address these vulnerabilities effectively.

For further details on the project outputs, please refer to the link provided: Madagascar | Nexus-Water-Energy-Food

UNECE News

(Contributed by Michael Nagy and Jonathan Gessendorfer, UNECE)

Past events and ongoing activities

2024 Expert Forum for Producers and Users of Climate Change-Related Statistics (29-30 August 2024, Geneva)

The 12th UNECE Expert Forum for Producers and Users of Climate Change-Related Statistics was held on 29-30 August 2024 in Geneva, Switzerland. The main objective of the annual Expert Fora is to provide a platform for sharing experiences, discussing concepts and measurement issues, and identifying areas for practical guidance. The Expert Fora are organized by the UNECE Steering Group on climate change-related statistics (chaired by Statistics Canada).

Fifty-three experts from 25 countries and 12 organizations participated in four substantive sessions to discuss climate change-related statistics. To set the scene, presentations of related and timely workstreams happening at UNECE, UNDRR and UNFCCC were provided. In the other three sessions on ii) the institutional arrangements and the role of national statistical offices, iii) informing climate change adaptation and iv)

informing climate change mitigation, 13 presentations were given by countries and five by international organizations.

Presentations and other background documents are available on the event web page https://unece.org/statistics/events/EFCCRS2024.

Information on the Steering Group can be found here.

21st Session of the Joint Task Force on Environmental Statistics and Indicators (17-18 October 2024, Geneva), and transformation into a Joint Working Group as a standing body

The 21st session of the UNECE Joint Task Force on Environmental Statistics and Indicators (JTFESI) took place on 17-18 October 2024 in Geneva, Switzerland.

The JTFESI serves as a unique platform, regularly bringing together experts from National Statistical Offices and Ministries of Environment (or Environment Agencies) to exchange knowledge and experiences on environmental statistics and indicators. Initially focusing on countries in Eastern Europe, the Caucasus, Central Asia, and South-Eastern Europe, the JTFESI supports the harmonization of environmental data and strengthens its use for policymaking.

During the session, participants reviewed the updated *ECE Guidelines for the Application of Environmental Indicators – 2023 Edition* and explored new indicators to address emerging environmental and policy priorities. A panel discussion featuring experts from the OECD, UNDRR, and UNEP tackled the challenges of defining and measuring sustainable and resilient infrastructure, emphasizing the need for harmonized frameworks and robust indicators.

The session also celebrated the success of capacity development initiatives, such as the EU4Environment programme, for enhancing data quality and availability.

Delegates called for increased efforts to integrate environment and health data, particularly in the context of preparing the eighth pan-European environmental assessment.

Members strongly supported the proposed transformation of the JTFESI into a Joint Working Group on Environmental Statistics and Indicators, extending its mandate and geographic scope to include all UNECE and CES member countries. This change, endorsed by the UNECE Committee on Environmental Policy during its 29th session (6-8 November 2024), marks an important step toward enhancing international collaboration and capacity development in environmental statistics. The Conference of European Statisticians had already approved the proposal at its 71st Plenary Session in June 2023, underscoring broad regional consensus for this evolution.

Presentations, meeting documents, the meeting report, and the links of the video recordings are available at the meeting webpage https://unece.org/info/events/event/392462.

Sector review of environment statistics in Kazakhstan

A sectorial review of environment statistics of the Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan was carried out jointly with the National Statistics Office of Georgia, the Italian Statistical Institute, the Statistical Committee of the Republic of Armenia, the Institut de Conseil et d'Études en Développement Durable (Belgium) and ESCAP from 24-27 September 2024.

The main objectives of the review were to draft recommendations for a gradual strengthening of the national statistical capacity to produce environment statistics and environmental-economic accounts for informing national policies and to inform regional and global policy frameworks such as the Paris Agreement.

The review was based on a self-assessment tool and targeted meetings with experts from the National Statistical Office, the Ministry of Agriculture and Environment and other governmental stakeholders, as well as from academia, NGOs, media and international organisations based in Kazakhstan. A report is currently being drafted.

UNECE publication "Guidelines for the Application of Environmental Indicators - 2023 Edition"
The UNECE Secretariat, in collaboration with the Joint Task Force on Environmental Statistics and Indicators and supported by the Working Group on Environmental Monitoring and Assessment, has released the updated *Guidelines for the Application of Environmental Indicators – 2023 Edition*. This comprehensive tool aims to enhance environmental monitoring and support informed policymaking across the pan-European region.

The revised Guidelines feature a curated list of 230 environmental indicators, including 74 priority indicators with detailed metadata. Organized according to the six main themes of the Framework for the Development of Environment Statistics (FDES)—Environmental Conditions and Quality; Environmental Resources and their Use; Residuals; Extreme Events and Disasters; Human Settlements and Environmental Health; and Environmental Protection, Management and Engagement—the guidelines align with recent global policy frameworks and emphasize the importance of data disaggregation.

The Guidelines and metadata can be found at https://unece.org/population/guidelines-application-environmental-indicators.
A Russian version of the Guidelines will be published too.

UNECE publication "Data for Climate Action: How National Statistical Offices Can Contribute"
The work of the UNECE Task Force on the role of national statistical offices in achieving national climate objectives (chaired by Statistics Netherlands) has culminated, in January 2025, in the release of the publication: *Data for Climate Action: How National Statistical Offices Can Contribute*.

In 10 chapters and around 200 pages, the publication examines how official statistics can contribute to the reporting under the Paris Agreement; provide data for climate change mitigation, adaptation and just transition; inform the public; and measure climate-related costs, transfers and financial flows. For each of these topics, it describes the policy context, showcases what NSOs can offer now, identifies gaps they could fill in the future, and provides recommendations on how to better meet user needs.

The guidance, which will also be published in Russian, can be found here: https://unece.org/statistics/publications/data-climate-action-how-national-statistical-offices-can-contribute

New UNECE website on environment and climate change statistics
UNECE launched a new website designed so visitors can more easily find information on our publications, upcoming and recent meetings, networks of experts and recent highlights related to climate change and environment statistics.
https://unece.org/statistics/environment-climate-change

Upcoming Events

10th Joint OECD/UNECE Seminar on the Implementation of the System of Environmental-Economic Accounting (SEEA), 18-20 March 2025, Geneva
The 10th Joint SEEA OECD/UNECE Seminar on the Implementation of the System of Environmental-Economic Accounting (SEEA), which will take place from 18-20 March 2025 at the Palais des Nations in Geneva, Switzerland.

This in-person seminar will focus on the development of robust SEEA accounts to support critical policy areas such as climate change, disaster-risk management, and biodiversity conservation. It will provide a valuable platform for national statistical offices, line ministries, international organizations, academia, and NGOs to exchange knowledge and experiences in advancing SEEA implementation.

Registration is open until 6 March 2025. A concept note, the provisional programme and the registration link

can be found at the meeting webpage https://unece.org/statistics/events/joint-oecd-unece-seminar-seea-implementation.

2025 Expert Forum for Producers and Users of Climate Change-Related Statistics (1-3 September 2025, Geneva)

The UNECE Steering Group on climate change-related statistics is currently preparing this year's Expert Forum for Producers and Users of Climate Change-Related Statistics, which will take place from 1-3 September 2025 in Geneva, Switzerland. The call for contributions is expected to be released by the end of March.

All meeting documents, including the call for contributions and the programme will be made available on the meeting website: https://unece.org/statistics/events/EFCCRS2025

Environmental statistics updates from the European Environment Agency

(Contribution by Roberta Pignatelli, European Environment Agency)

Today, perhaps more than ever, the development of environment, climate and sustainable development policies requires sound scientific information, which in turn requires strong synergies between statisticians and thematic experts.

The European Environment Agency (EEA), together with its network of experts and partners in the Member States and beyond, continues to collect, analyze and publish scientific data and knowledge to inform citizens and support policy development and implementation across the European Union. In particular, the Agency builds its thematic work around the environment, climate and sustainability objectives set out in the European Green Deal (EGD), while also addressing emerging issues.

In addition, every five years the EEA produces the European Environment - State and Outlook Report (SOER), which covers all three thematic areas above and outlines solutions and pathways towards the EGD vision of making Europe a climate neutral continent by 2050. The next SOER will be published this autumn.

All this work is based on, among others, the 92 EEA indicators covering climate (37 indicators), environment (41 indicators) and sustainability (14 indicators). The vast majority (82%) of these indicators are updated every year.

About half of these indicators are currently used to monitor European policies. For example, the EEA publishes an annual report on progress towards the objectives of the EU's 8th Environment Action Programme, based on a set of 28 headline indicators and related targets. Also, every year the EEA contributes 18 indicators to Eurostat's annual monitoring of the SDGs in the EU, based on a set of 100 indicators selected for their policy relevance to the EU and their statistical quality. Twelve EEA indicators are being used to monitor both policy areas, thus increasing the coherence between different monitoring approaches.

From 2023 onwards, indicator production and other statistical activities in the EEA are being increasingly strengthened through structured cooperation with Eurostat. In particular, the EEA is developing a dissemination infrastructure for data, statistics and indicators (now defined in line with the UN Framework for the Development of Environment Statistics (FDES)), regularly contributing to the EU SDG monitoring process and to the production of EU-wide ecosystem accounts and generally making better use of Eurostat products in EEA analysis and assessment products.

This multidisciplinary and multidimensional approach is certainly an encouraging example of good practice

in cooperation between statistical offices and environmental agencies, which would also be desirable at regional, national and international levels.

Recent Eurostat activities

(Contributed by Christine Mayer, Eurostat)

An overview of Eurostat activities on environmental statistics and accounts can be found here: http://ec.europa.eu/eurostat/web/environment/overview. The key findings of the most recent Eurostat monitoring of the EU's progress towards the Sustainable Development Goals (SDGs) as well as information and data on the EU SDG indicators can be found here: https://ec.europa.eu/eurostat/web/sdi/overview
The following is a summary of developments in the last 6 months.

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.

The results of the data collection on inland waters, including regional information, are published in this online article (data for 2022). An overview of data published on forestry and forests by Eurostat can be found in this link and the data are available here (data for 2022).

The results of the 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 2024 and the data are published here. Also updated were the online articles on electrical and electronic equipment, waste packaging and batteries. The results of the 2022 data collection on waste statistics according to Regulation (EC) 2150/2002 are published here (data for 2022) and in the online articles here and here.

SEEA environmental accounts

Eurostat released a new online publication on climate change mitigation statistics. It consists of 4 articles, analysing greenhouse gas emission accounts, energy accounts, greenhouse gas emission footprints and investments in climate change mitigation. Each article features interactive graphs and maps that allow users to explore data from the environmental accounts on their own. The online publication is complemented by the environmental accounts dashboard, which includes 24 indicators giving insights into climate change, environmental economy, circular economy and environmental footprints.

The legal basis for the European Environmental Accounts was amended. In addition to the existing 6 mandatory modules - air emission accounts, material flow accounts, environmental taxes and subsidies, environmental sector, environmental protection expenditure and physical energy flow accounts - 3 new modules will be introduced in forest accounts, environmental subsidies and similar transfers accounts and ecosystem accounts. Data collections will start in 2025 and 2026 (for ecosystem accounts).

For the first time, Eurostat published estimations of investments in climate change mitigation. The data have been modelled based on investment data from Eurostat's structural business statistics (SBS). More comprehensive data will be made available in 2026.

By 2026, Eurostat will prepare feasibility studies regarding energy subsidies, including fossil fuel subsidies, monetary valuation of ecosystem services, climate change adaptation and water accounts.

Eurostat also produces quarterly estimates of greenhouse gases based on SEEA, and with a timeliness of 4 ½ months. In addition, Eurostat publishes greenhouse gas footprints and two datasets with material footprints

(aggregate and detailed).

Eurostat facilitates training courses on environmental statistics and SEEA for European compilers. Those courses are free of charge and also open to participants from outside the European Union, provided free places are available. Material from past courses is available here. Eurostat also organises annually online workshops where European countries present results of pilot projects on environmental statistical and accounts, co-financed with Eurostat grants.

Pacific Community update

(Contributed by Alison Culpin and Lisa Green, SPC)

Publications

In 2024, Samoa Bureau of Statistics released the results of their 2023 Gender and Environment Survey

The report details "Besides an increased frequency of disasters, slow-onset hazards are also increasingly noticeable. For instance, 77 per cent of people had witnessed the direct effects of sustained changes in temperatures, 54 per cent noticed changes in precipitation, and 85 per cent suffered from the increased spread of pathogens and mosquito-borne diseases. The types of impacts varied, ranging from worse health to lower income, prolonged time spent at work to maintain livelihoods, and increased domestic and care work burdens, among others."

The Republic of the Marshall Islands 2021 Census Analytical Report, published in 2024, contains some analysis on household exposure to natural disasters, impacts on income, relocation due to disaster, and whether preventative measures were taken by households against natural disasters. One-half of households reported that their income had been limited by natural disasters.

Natural Disaster and Climate Change Household Survey work is ongoing and it is expected that data from Cook Islands and Kiribati will be available in the first half of 2025.

Ongoing

The Vanuatu Bureau of Statistics project " Vanuatu Data Science Driving Innovation in Climate Change and Natural Disasters", with funding from the World Bank, is in the co-creation and design phase. The project aims to use data science as a tool in climate change monitoring, improving data accessibility and estimating damage.

Workshops

The Pacific Community held a "Loss and Damage Status and Next Steps Workshop", with the goal of facilitating understanding and networking about Loss and Damage in Pacific context and how planning to enhance support for Pacific Islands. The workshop included a discussion panel on "Monitoring, Reporting and Evaluation" of Loss & Damage, including the role of household surveys and international indicators.

Workshops and training focusing on environmental-economic accounts and climate change statistics in the Pacific are being planned for 2025. Details of these are being confirmed, but if countries are interested, please contact Lisa Green (lisag@spc.int)

ESCAP News

Development of a Common Statistical Framework on Disaster-related Statistics

(Contributed by Statistics Division, ESCAP)

The UN Statistical Commission (UNSC), at its 50th Session in 2019, requested the Statistics Division (UNSD), the Economic and Social Commission for Asia and the Pacific (ESCAP), the Economic Commission for Europe (ECE), the Economic Commission for Latin America and the Caribbean (ECLAC) and the United Nations Office for Disaster Risk Reduction (UNDRR), in consultation with members of the existing regional expert groups and task forces, to consider options and modalities for the establishment and coordination of: (a) a formal mechanism under the purview of the Commission to progress a common statistical framework on disaster-related statistics; (b) a network across the expert communities to sustain cooperation, coordination and fundraising for enhancing statistics related to hazardous events and disasters; and (c) a report to the Commission at a suitable time (Decision 50/116).

An Inter-Agency and Expert Group on Disaster-related Statistics (IAEG-DRS) was established in 2020 by UNSD, ESCAP, ECE, ECLAC, Economic and Social Commission for Western Asia (ESCWA), Economic Commission for Africa (ECA) and UNDRR to advance a common statistical framework on disaster-related statistics. The IAEG-DRS is currently co-chaired by ESCAP, UNDRR, and the United Kingdom (UK Health Service Agency).

ESCAP, as the co-chair of the IAEG-DRS, has developed an implementation plan to ensure the timely development of the common statistical framework and its submission to the UNSC. This plan has been reviewed and endorsed by the IAEG-DRS co-chairs in July 2024.

An annotated draft outline of the common statistical framework has been prepared and agreed upon by the IAEG-DRS co-chairs and its core group members. In December 2024, the IAEG-DRS secretariat invited IAEG-DRS members to express their interest in contributing to the drafting process as lead authors, co-authors, or reviewers. Based on these expressions of interest, the IAEG-DRS co-chairs will allocate drafting responsibilities among the members. The drafting process is planned to conclude by the end of March 2025, after which regional and global consultations will be conducted to review and refine the draft framework. It is anticipated that the final draft of the common statistical framework on disaster-related statistics would be submitted to the UNSC in 2026.

Training and Multi-Stakeholder Workshops on SEEA Land and Forest Accounting and Disaster-Related Statistics in Bhutan

(Contributed by Statistics Division, ESCAP and Ekaterina Poleshchuk, UNEP)

The Economic and Social Commission for Asia and the Pacific (ESCAP) and the United Nations Environment Programme (UNEP), together with other United Nations Development System partners, are working to strengthen the capability of countries to collect, process, and disseminate data and statistics. This initiative aims to respond to emerging economic, social, and environmental data needs in times of crises and disasters through innovative data sources, advanced data acquisition methods, and modern technologies, while ensuring progress towards the 2030 Agenda. In Bhutan, activities during 2024-25, supported by the United Nations Development Account, focus on producing land and forest accounts in line with Bhutan's SEEA implementation plan and creating a strategic plan for disaster-related statistics. To initiate this support, a capacity-building workshop on SEEA land and forest accounting and a multi-stakeholder consultative workshop on disaster-related statistics were held in Thimphu between 8-10 October 2024, with the support of the National Statistics Bureau (NSB) of Bhutan.

The SEEA workshop provided valuable insights into how SEEA concepts and classifications can be applied to Bhutan's land cover classes and timber resources. Participants used national datasets from 2016 and 2020

to produce a land cover change matrix with QGIS, assess data quality, and initiate an experimental land account. A data mapping exercise identified sources for asset accounts for forest and other wooded land, timber resources, and a flow account for timber resources. Moving forward, NSB will review training materials to consolidate their understanding and collaborate with NLCS and other departments to agree on roles and responsibilities.

The disaster-related statistics workshop focused on enhancing awareness of the Disaster-Related Statistics Framework (DRSF) and its components, such as hazard exposure, vulnerability, coping capacity, and disaster impacts. NSB and the Department of Local Governance and Disaster Management (DLGDM) presented the results of a diagnostic tool, highlighting Bhutan's policy priorities and current progress. Participants identified and prioritized a long list of statistics and indicators based on the DRSF components, discussing potential data sources for high-priority statistics. Next steps include NSB working with DLGDM to review and refine the list of statistics, collaborate with relevant agencies to draft an action plan for DRS production with assistance from ESCAP and UNEP.

More information is available at Training and Multi-Stakeholder Workshops on SEEA Land and Forest Accounting and Disaster-Related Statistics | ESCAP

COUNTRY NEWS

Botswana is working on an Environment Information System (EIS)

(Contributed by Kwashirai Chigodora, Statistics Botswana)

Botswana is currently working on the development of a National Environmental Information System (EIS), designed to serve as a comprehensive data portal for storing and providing easy access to environmental information for all relevant stakeholders. This initiative is a key component of the Global Environment Facility (GEF) Cross Cutting Capacity Development (CCCD) project, which aims to enhance the implementation, monitoring, and reporting of Multi-Lateral Environmental Agreements (MEAs) as well as the achievement of Sustainable Development Goals (SDGs). The EIS will support informed decision-making and foster greater collaboration among various sectors involved in environmental management and sustainable development.

Under the CCCD project, spearheaded by the Department of Environmental Affairs within the Ministry of Environment and Tourism, a National Environmental Information Network (NEIN) was established to bring together environmental data producers and users. The NEIN has played a key role in raising awareness about the United Nations Framework for the Development of Environment Statistics (FDES) and the Environment Statistics Self-Assessment Tool (ESSAT). Through its involvement in the ESSAT process, the NEIN gained valuable insights into the country's environmental data landscape, which have been instrumental in shaping the foundation of the EIS. This collaborative effort has provided a clearer understanding of data gaps and needs, ensuring that the EIS will effectively address the country's environmental information requirements.

With facilitation from the United Nations Environment Programme (UNEP) and the Centre for Environment and Development for the Arab Region and Europe (CEDARE), a five-member team received training on a prototype of the EIS. Upon returning, the team presented their findings to the NEIN, which then underwent additional introductory training on the system provided by CEDARE. These sessions offered the NEIN an opportunity to provide valuable feedback and share insights with the developers, contributing to the ongoing refinement and development of the EIS prototype.

The system, consisting of five key modules, is designed to support environmental policy assessment and development in Botswana, with a focus on fostering partnerships, encouraging citizen participation, and promoting shared information as the foundation for integrated environmental assessment, knowledge, and action. The five modules are:

1. **Module 1**: An Environmental Statistics and Reporting System that enables ministries and national agencies to upload their environmental data.

2. **Module 2**: A monitoring system for tracking progress towards the national SDGs and targets, allowing all agencies to contribute and assess advancements.

3. **Module 3**: An interactive State of the Environment Reporting (SoER) system, facilitating the creation and dissemination of environmental reports.

4. **Module 4**: A Spatial Information System to support geospatial data collection, analysis, and mapping for better environmental management.

5. **Module 5**: A shared EIS, which promotes data sharing and collaboration across various stakeholders.

These modules will collectively enhance Botswana's ability to assess and manage environmental issues effectively, ensuring a data-driven approach to policy-making and sustainable development.

The development of the system is guided by indicators from relevant SDGs and national development frameworks. It will offer flexibility for data providers and editors to input both indicators and metadata according to their needs, with access controlled by appointed moderators and administrators. The system will be hosted on servers at either the Ministry of Environment and Tourism or Statistics Botswana, and data providers will be responsible for uploading and regularly updating their data. To ensure consistency and alignment, data providers will be required to sign a data-sharing protocol that outlines agreed-upon indicators and data to be uploaded. Both the EIS and the data-sharing protocol are ongoing works in progress.

Environment and Climate Change Statistics in Brazil

(Contributed by Sandra de Carlo and Andre Luiz Ferreira, IBGE - Brazilian Institute of Geography and Statistics, Directorate of Geosciences - Department of Environment Statistics and Accounts)

The Brazilian Institute of Geography and Statistics (IBGE) has undertaken a preliminary assessment of data coverage using the Environmental Statistics Self-Assessment Tool – ESSAT (United Nations, 2016), with references from the Framework for the Development of Environment Statistics - FDES 2013 (United Nations, 2018), and the Climate Change Statistics and Indicators Self-Assessment Tool - CISAT (United Nations, 2023), which is based on the Global Set of Climate Change Statistics and Indicators, approved by the United Nations Statistical Commission in 2022 (United Nations, 2022).

The main purpose of this preliminary assessment was to identify and engage with other institutions which produce the data and develop an environment statistics action plan for the country. In addition to IBGE, several institutions generate statistics and indicators on these topics. Therefore, it is essential to carry out a deeper evaluation with these entities. This will facilitate the qualification and development of new strategies for action in the inter-institutional collaboration that the agenda demands.

One of the main gaps identified concerns about methodological omissions and their metadata. A significant part of information is derived from administrative records. Therefore, it is appropriate to reflect on the improvement of the data-sharing protocols of official information. This approach will facilitate the development of new strategies for inter-institutional cooperation as required by the agenda, particularly

regarding administrative records from other agencies and the statistical surveys conducted by the IBGE.

It is recommended that a collegiate body be established to coordinate environment statistics, equipped with legal and budgetary instruments. This will enable the development of a medium- and long-term environmental and climate change statistics plan. Thus, other areas of statistical production, such as environmental-economic accounts, can also benefit from this collaboration.

IBGE is planning to develop a national set of climate change indicators based on the Global Set. As a first step, a working group was created between IBGE and the Ministry of Environment and Climate Change to discuss the agenda with specialists in the context of the National Environmental Information System (Sinima) and pave the way for the establishment of a collegiate body.

IBGE is an active member of the UNSD-led Expert Group on Environment and Climate Change Statistics (EG-ECCS) and is also contributing to one of the sub-groups of the EG-ECCS that addresses the inclusion of environment and climate change questions in censuses and surveys.

For further information please see: https://agenciadenoticias.ibge.gov.br/en/agencia-news/2184-news-agency/news/41704-ibge-releases-publication-on-recommendations-to-systematize-environment-and-climate-change-statistics

Cuba's Experience in the Development of Environment and Climate change statistics

(Contributed by Mercedes Gonzalez, National Office of Statistics and Information, ONEI)

Cuba started producing environment statistics in the nineties of the past century. The development began in 1997 in the context of the institutional set up of the Ministry of Science, Technology and Environment (CITMA), the transformations in key sectors of the economy and the implementation of the Environmental Law together with environmental policies at the international level.

At present, the process of transformation of the Cuban economic and social development model based on the implementation of the National Economic and Social Policy Guidelines, the National Economic and Social Development Plan (PNDES) for 2030, and the modifications of legal instruments, at the national level have all had an impact on the work carried out. In addition to the above, the fulfilment of the 2030 Agenda and its Sustainable Development Goals (SDGs) and the work on addressing climate change as the main global challenge have also contributed.

In this context, the Cuban Statistical System has also carried out a process of gradual modernization with the aim of creating the conditions to guarantee the production of official statistics, which facilitates the evaluation and monitoring of policies, programs and responds to the increasingly growing demands for statistical information.

In the period from 1999 to 2006, work started on the collection of basic statistics and their dissemination in the Statistical Yearbook of Cuba in its Chapter on Territory and Environment. Inter-institutional links were established with the agencies of the Central State Administration that administer natural resources and implement policies. The collection of data and information for the calculation of Greenhouse Gases was initiated then, as well as data to respond to the Millennium Development Goals. Subsequently, and until 2020, the environment chapter in the Statistical Yearbook of Cuba was elaborated and disaster statistics were included. The National Office of Statistics and Information (ONEI) is initiating a process of systematization of new statistical products including environmental statistical information. To this end, it is supported by the Technical Committee of Environmental Information approved by Decree-Law 281/2011 "On the

Government Information System" and the National Group of Indicators coordinated by CITMA.

In the last three years further strengthening took place via the establishment of Temporary Working Groups on Biodiversity and Desertification, and Drought and Climate Change; also via the work for the preparation of national communications to the Conventions on Biodiversity, Climate Change; the continuation of the operation of the Technical Committee, under a new Decree-Law 6/2020 regulation, and strengthening of inter-institutional work for the SDGs and the PNDES 2030.

The work of the ONEI is guided by the National Strategy for the Development of Statistics, approved for the period 2021-2025. Among its strategic objectives, general objective II "National and territorial statistical production has increased its rationality through innovation and development", encompasses the most ambitious goals proposed by the ONEI to move to a higher status of development and greater harmonization with international practice. Specifically, it prioritised key areas which require modernization strategies, part of which consists of the improvement of environmental and climate change statistics. Its main actions include the implementation of the Framework for the Development of Environmental Statistics (FDES) and the Global Set of Climate Change Statistics and Indicators, as well as strengthening the capacities for the compilation of environmental accounts.

In view of the complexity and the level of preparation required for the above actions, ONEI developed strategies that would allow to move forward and meet the established priorities. In the first place, the GEF/UNDP International Cooperation Project, called Ecovalor "Incorporating multiple environmental considerations and their economic implications in the management of landscapes, forests and productive sectors in Cuba", made it possible to have funding to carry out a set of activities of working groups, inter-institutional workshops, training courses as well as exchange visits with statistical offices in the Latin American and Caribbean region.

An important role is fulfilled by ECLAC's Statistics Division, especially its Director, and the team of the Environmental Statistics and Climate Change Unit, who have supported ONEI throughout the process, starting with an assessment of the situation applying the Environment Statistics Self-Assessment Tool (ESSAT), the training courses and the advice on each step throughout the process. At the national level, instrumental are the commitment and motivation of the representatives of each of the ministries that produce statistics, or providers of administrative records which were identified as suitable data. In the first version of completing the ESSAT, it was identified that Cuba has 86 per cent of the environmental statistics and indicators, also the corresponding institutional arrangements responsible for the production of information and the demands to which they respond were identified. This work culminated in the publication of the first version of compiling Statistics from the FDES in the country, and the reformulation of the statistical products in correspondence with the structure and content of the same. The objective is to complete the technical sheets with the metadata of each of the available statistics and indicators in 2025.

Environmental Statistics in Luxembourg

(Contributed by Olivier Thunus, Statistics Luxembourg)

Environmental statistics are of great importance to the Luxembourg administrations and ministries. However, it was necessary to wait until 2014 for an integrated information system on environmental statistics to be set up in the country. Under the patronage of the Official Statistics Committee, a working group was set up with representatives of all the administrations and ministries responsible for the production or use of environmental data. Based on the Framework for the Development of Environment Statistics (FDES 2013), this working group organized the centralization of environmental data, the application of quality recommendations and the publication of statistics on the official statistics web portal.

In the same year 2014, Luxembourg participated in the work of the UNECE Expert Forum on Climate Change Related Statistics. Luxembourg chaired the Steering Committee from 2018 to 2020. In 2019, Statistics Luxembourg (STATEC) published its first dashboard on climate change related indicators applying the newly published UNECE recommendations (UNECE 2021). The Luxembourg experience was also useful in the development of the UNSD Global Set of Climate Change Statistics and Indicators that was adopted by the UN Statistical Commission in March 2022.

In April 2023, STATEC published an analysis document on the State of the Environment in Luxembourg. This publication aimed to answer seven hot topics using environmental indicators. This document is certainly the culmination of the implementation of the integrated information system on environmental statistics.

Building on its national experience, STATEC has established statistical cooperation with the Lao Statistical Bureau (LSB) with a view to developing their environmental statistics. Through study visits to Luxembourg and training given in Laos, the agents of the new environmental statistics department of the LSB were able to acquire the knowledge and skills necessary to implement their own integrated information system on environmental statistics. The FDES is at the heart of this system: the data collection questionnaires and associated databases were created as an exact replication of the FDES structure.

STATEC's current work focuses on the development of new biodiversity indicators to enable monitoring of the European Nature Restoration Act and certain Aichi Biodiversity Targets.

Environmental statistics are on the official statistics web portal:
LUSTAT Data Explorer

Analysis on the State of the Environment in Luxembourg is available on STATEC website:
The Environment in figures - Statistics Portal - Luxembourg

Climate Change and Environment Statistics in Nauru

(Contributed by Ramrakha Detenamo, Nauru Bureau of Statistics)

For the past two decades, Nauru has been a steadfast supporter of international agreements aimed at mitigating the impact of climate change. As a signatory to the United Nations Framework Convention on Climate Change (UNFCCC) (1992) and a ratifier of the Kyoto Protocol (2001) and the Paris Agreement (2016), Nauru has demonstrated its global responsibility in this pursuit.

On the national level, Nauru's climate change action plans involve mitigation and adaptation plans to ensure the country's survival and well-being. Rising sea levels and prolonged droughts have affected coastal communities and major infrastructure. As part of the adaptation to climate risks, the Nauru Bureau of Statistics (NBS) has taken a proactive stance, initiating the collection of basic climate change and environment information in our last census in 2021. Moving forward, NBS intends to incorporate part of the indicator list from the UN Global Set of Climate Change Statistics and Indicators in upcoming surveys, taking into account available resources, data availability, and capacity for monitoring.

NBS plans to establish a Natural Resources and Environmental Statistics Unit and has secured provisions for two positions to track changes related to climate change and environmental statistics. NBS is currently scoping the System of Environmental-Economic Accounting (SEEA) framework to assess whether it fits the context for Nauru. The aim is to start with the basic collection that meets our staff capabilities and our local counterpart and build on it with support from development partners and training.

Further engagement with development partners and experts on climate change and environmental statistics is

crucial. This collaboration will ensure a clear and realistic goal of collecting relevant statistics and foster a shared understanding and commitment to addressing climate change.

The following link will show the climate change questions collected during the Nauru Population and Housing Census 2021. You can access it here:
https://stats.gov.nr/documents/?catid=60&show_pagination=1&paged=1&limit=20

Environment and Climate Change Statistics in New Zealand

(Contributed by Adam Tipper and Sonja Miller, Statistics New Zealand)

Statistics New Zealand publishes a broad range of environment and climate change indicators and statistics for New Zealand framed by the System of Environmental Economic Accounting and the Environmental Reporting Act 2015. Some of these indicators/statistics align with the Framework for the Development of Environment Statistics and the Global Set of Climate Change Statistics and Indicators.

System of Environmental Economic Accounting

Greenhouse gas emissions accounting

Statistics New Zealand produces a series of greenhouse gas (GHG) emissions accounts, compiled under the System of Environmental Economic Accounting Central Framework (SEEA CF). Development of the accounts began in 2018 as a recommencement of the SEEA program, intended to support government policy by communicating the value of natural capital and to better the understanding of New Zealand's transition to a low emissions economy. As interest in SEEA GHG reporting has increased, the suite of accounts has grown to include production-based emissions on an annual, regional, and quarterly basis, and consumption-based emissions on an annual basis. These accounts are used by central and local government, commentators and media, business, and researchers.

Quarterly production-based emissions were developed after identifying customer need for more timely emissions data. Quarterly estimates are calculated using the GHG annual production estimates and activity indicators (e.g. energy statistics, card transaction data, transport data) to project emission trends beyond the latest Greenhouse Gas Inventory year. Using this indicator method, emissions can be estimated up to four months behind current time. The quarterly estimates are used to inform against government targets and also improve the timeliness of Statistics New Zealand's regional emissions series.

See the latest release of the quarterly account here. Greenhouse gas emissions (industry and household): June 2024 quarter

Environmental Reporting

The Environmental Reporting Act of 2015 provides the legal framework for national level environmental reporting in New Zealand, with reporting joint between Statistics New Zealand and the Ministry for the Environment. Statistics New Zealand produces environmental indicators (see https://www.stats.govt.nz/tools/environmental-indicators/), and also contributes to environment reports (see https://environment.govt.nz/facts-and-science/environmental-reporting/) alongside the Ministry for the Environment.

Agricultural Production Statistics (APS)

Statistics New Zealand produces regular agricultural production statistics. These data highlight how agriculture contributes to the economy but also provide information for understanding mitigation and

adaptation to climate change.

The Agricultural Production Statistics are produced annually. An Agricultural Production Survey is held every year for four consecutive years, followed by a full Agricultural Production Census the following year. Information collected includes:

- animal farming, including sheep, beef and dairy cattle, and deer
- crop growing, including grain and seed crops, fruit and vegetables, wine grapes and nursery plants
- forestry and farm practices, including irrigation and fertiliser use.

Future Developments

The Data Investment Plan (see https://www.data.govt.nz/leadership/data-investment-plan/) published by Statistics New Zealand in 2022 is a means to prioritise future development of data, statistics, and indicators (including environmental data). Its implementation requires a system wide approach involving local and central government, and crown research institutes. Two of the highest priorities for environmental data are enhanced and standardised climate change data, and a nationally consistent measurement of land use over time at the parcel level.

Environment and Climate Change Statistics in the Philippines

(Contributed by the Philippine Statistics Authority)

Measuring Gender-Climate Change Statistics: The Philippine Experience

The Philippine Statistics Authority (PSA) has been compiling environment statistics and indicators since its establishment in 2013, published through the Compendium of Philippine Environment Statistics or CPES. The CPES is a compilation of environment statistics and indicators collected from various government agencies, following the Framework for the Development of Environment Statistics (FDES) 2013. Based on FDES 2013, environment statistics and indicators are categorized into six (6) components: 1) Environmental Conditions and Quality, 2) Environmental Resources and their Use, 3) Residuals, 4) Extreme Events and Disasters, 5) Environmental Health and Human Settlements, and 6) Environmental Protection, Management, and Engagement.

The CPES, which was previously published biennially, is now released annually in various components. This includes materials such as press release, highlights, technical notes, statistical tables, infographics, and social media cards. At the end of each year, a publication consolidating all six components is published. Two of these components, Component 5 and Component 6 provide statistics disaggregated by sex. In Component 5, the reported number of cases and deaths of airborne, water-borne, and vector-borne diseases are collected from the Department of Health and PSA, respectively. Statistics on vector-borne diseases are considered as measures of climate change impacts and vulnerability. Meanwhile, the number of students pursuing environment-related higher education is gathered from the Commission on Higher Education.

To enhance the data collected for CPES, the PSA aims to continuously conduct technical capacity development activities with its stakeholders. This will improve the understanding and appreciation of the compilation of environment statistics and indicators. In addition, the PSA will strengthen its coordination and collaboration with partner agencies through technical working groups and interagency committees to provide more granular data. The PSA will also actively participate in various local and international engagements.

The compilation of the CPES relies on data and statistics provided by various government agencies. However, this may lead to challenges in compiling CPES, such as the lack of gender-disaggregated data. As part of data enhancement efforts, the PSA is exploring the use of alternative data sources, such as

administrative data and big data. There is also a consideration to include questions on gender-related information in existing instruments like surveys and censuses.

Furthermore, the PSA will spearhead the implementation of the Philippine Ecosystem and Natural Capital Accounting System (PENCAS) Act which was enacted into law in May 2024, as well as its Implementing Rules and Regulations once approved. This will institutionalize the generation of accounts and statistics related to the environment.

Climate Change through the lens of the Community-Based Monitoring System

The Philippine Statistics Authority (PSA) is mandated to implement the Community-Based Monitoring System (CBMS) which was signed into law on 17 April 2019 by virtue of Republic Act 11315. The CBMS is an organized technology-based system of collecting, processing, and validating data up to the smallest political unit of the country (barangay/village), targeting households for government programs aimed to reducing poverty and promoting economic development.

According to the Philippine Atmospheric, Geophysical, and Astronomical Services Administration (PAGASA), the Philippines experiences more tropical cyclones than any other region in the world, and these cyclones are significantly influenced by climate change. To assess the disaster readiness of each barangay, the Barangay Profile Questionnaire of the CBMS includes questions regarding their preparedness for disasters. The questionnaire aims to determine the availability of disaster risk reduction management plan, evacuation map, and hazard map on each barangay/village. Moreover, it asks about the existence of disaster/emergency response team and hotline. It also includes questions about the type of disasters experienced by the barangay, such as typhoon, flooding, storm surge, tsunami, etc.

The information collected through the CBMS can assist legislators in reducing, if not totally eliminating, the losses and damages caused by disasters. This initiative may also help address the threats posed by climate change.

In addition, the PSA is currently developing and compiling the Philippine Set of Climate Change Statistics Indicators. The activities include a comprehensive assessment of data, identification of relevant statistics and indicators for each thematic area, determining appropriate data sources, and evaluation of data availability to support the compilation process.

Water statistics in Slovenia

(Contributed by Mojca Zitnik, M.Sc., Statistical Office of the Republic of Slovenia)

In terms of water quantity, Slovenia, situated in the southern part of Central Europe, ranks among the most water-rich countries. Water statistics were developed over 50 years ago by the statistical office of the former Yugoslavia. Following Slovenia's independence, water statistics in the country have only been upgraded and supplemented with EU requirements. In Slovenia, data on water are systematically collected by three institutions: the Statistical Office of the Republic of Slovenia (SURS), the Environmental Agency, and the Ministry of Natural Resources and Spatial Planning. SURS collects data on drinking water supply, the sewage network, use of water in industry, and water consumption for irrigation (https://www.stat.si/StatWeb/en/Field/Index/13/113), the Agency mainly carries out water monitoring (chemical and ecological state of water, quality of drinking water and quantity of groundwater and drinking water reserves), while the Ministry is the administrator of the Information system for monitoring public environmental protection services (IJSVO) database, which contains various data on the public water supply and public sewage system. All three institutions cooperate intensively in the preparation of national and international reports (OECD/Eurostat Joint Questionnaire for inland waters, Water Information System for Europe (WISE), Aquastat, etc.).

Despite a long history of monitoring data on water statistics in Slovenia, SURS still faces numerous challenges in the preparation and provision of data. One of the main challenges is the establishment of successful cooperation with other institutions. Successful and fruitful cooperation is essential for obtaining and providing timely and high-quality data, and for fulfilling international obligations. To overcome this challenge, Statistical Office's employees regularly meet (at working meetings) with colleagues from other institutions. Another important challenge is overcoming the increase in non-response among reporting units, which do not want to complete statistical questionnaires due to overload, lack of staff and financial burdens. SURS is trying to solve this by explaining to these reporting units the importance of their data for monitoring environmental, social and economic conditions in the country and thereby helping decision-makers in preparing policies for the development of society and improving the quality of life of every citizen. To reduce the burden of reporting units in sending data, SURS has established electronic reporting and data transmission. Reporting units thus transmit data online using pre-prepared questionnaires that include certain controls to prevent incorrect reporting, making data transmission faster and easier. To overcome incorrectly completed questionnaires, SURS also prepares additional methodological explanations and a document with answers to the most frequently asked questions together with the questionnaires.

To ensure high-quality, accurate and timely water statistics, which are also important for developing water accounts in Slovenia, it is essential that SURS's employees are constantly trained and follow all development guidelines at the national and international levels.

Data on water statistics for Slovenia are presented in the Statistical Office's SiStat Database:
https://pxweb.stat.si/SiStat/en/Podrocja/Index/99/environment

Situation and Prospects of Environmental Statistics and Accounts at the National Institute of Statistics of Tunisia

(Contributed by Karim Salah, Environmental Statistician, National Institute of Statistics, Tunisia)

The Tunisian statistical system is decentralized, with statistics being produced by several specialized government entities. For instance, statistics related to health and education fall under the responsibility of their respective ministries.

The law concerning the National Statistical System, dated April 13, 1999[6], defines the fundamental principles of statistical activities, the structure of the National Statistical System, its mission, and the role of each of its components. Accordingly, the National Institute of Statistics (INS) serves as the central executive body of the National Statistical System. It is responsible for the technical coordination of statistical activities (Article 18). According to Article 19, the INS is tasked with ensuring, in coordination with other specialized public statistical structures, the collection, processing, analysis, and dissemination of statistical information.

The National Institute of Statistics collects and disseminates environmental statistics in the *Statistical Yearbook of Tunisia*[7]. This publication compiles statistical information on numerous aspects of economic and social life. It is published annually and contains statistics produced by the INS and other entities within the national statistical system. Chapter 19, dedicated to the environment, includes statistics on water (resources, withdrawals, consumption, and discharges), land use, and elements related to the evolution of the forestry sector (reforested areas, areas affected by forest fires). Statistical data are also available online, covering water, air, soil, forests, waste, and biodiversity.[8]
The INS became involved in the field of environmental statistics following the MEDSTAT project. This

[6] https://www.ins.tn/sites/default/files-ftp1/files/2020-04/Lois_Decrets-fr_0.pdf
[7] https://www.ins.tn/publication/annuaire-statistique-de-la-tunisie-2017-2021
[8] https://www.ins.tn/statistiques/45

statistical cooperation project between the European Union and Mediterranean partner countries began in 1996. Starting in 1999, it incorporated an environmental component (Medstat-Env), which concluded in 2009 and was relaunched in 2022 (currently ongoing). The Medstat-Env project enabled the INS to address various domains based on available data sources: waste, air, biodiversity, soil and forests, and water.

As part of the Medstat-Env project, two reports (compendiums) on environmental statistics and data in Tunisia were published in 2003 and 2006. Additionally, the results of these efforts were highlighted in a publication on environmental statistics covering all Mediterranean countries involved in the Medstat project.[9]

In 2009, the National Institute of Statistics developed a pilot water account, followed in 2017 by the compilation of water flow and stock tables for the years 2010 and 2015[10]. However, this program is currently on hold and requires increased efforts in coordination and cooperation with institutions producing water-related information.

Currently, the National Institute of Statistics, with the support of the fifth phase of the Medstat project[11], is working on the development of two indicator systems: one related to climate change, in line with recent methodological work by the United Nations Statistics Division (UNSD)[12], and another related to biodiversity, adhering to the Kunming-Montreal Global Biodiversity Framework.

Tunisia has committed to achieving the 2030 Agenda for Sustainable Development, a globally agreed-upon framework. It is therefore the responsibility of the National Institute of Statistics to improve the availability and quality of statistics to monitor progress toward the Sustainable Development Goals (SDGs).

To strengthen its capacity in data production and to promote better decision-making based on reliable and up-to-date data for achieving the 2030 Agenda and improving the lives of its population, Tunisia has joined the Data4Now initiative[13]. This will optimize public policies and enhance transparency. The initiative also reflects the country's commitment to modernizing and innovating in the field of statistics.

The steering of the Data4Now initiative in Tunisia, along with national priorities and activities, can be accessed via the following link: https://unstats.un.org/UNSDWebsite/capacity-development/data-for-now/country-details/Tunisia.

In the short term (by 2025), the development of an environmental tax account is planned. In Tunisia, there are mandatory levies related to the use of certain environmental resources or the provision of environmental services, such as sanitation fees and the Environmental Protection Tax (TPE) on imported goods containing plastic pellets (tariff codes 39-01 to 39-14), established by the 2003 Finance Law (Articles 58 to 60) to fund the "Pollution Control Fund" (FODEP). Data on environmental tax revenues are widely used in environmental and economic policy reviews, as well as in work on policy integration and structural policies.

The objective of this project is to provide users, particularly decision-makers, with as comprehensive information as possible on environmental taxation in Tunisia, in the form of a satellite account of the System of National Accounts (SNA). Environmental taxation, in principle, aims to incorporate the cost of environmental damage (negative externalities) into prices, thereby encouraging more environmentally friendly production and consumption choices.

[9] https://ins.tn/sites/default/files-ftp3/files/publication/pdf/version_fr.pdf
[10] This was part of a twinning project between the National Institute of Statistics and the National Institute of Statics and Economic Studies of France and Istat of Italy.
[11] https://south.euneighbours.eu/fr/project/medstat-v-cooperation-statistique-euro-mediterraneenne/#:~:text=MEDSTAT%20V%20couvre%20les%20domaines,sexe%20et%20statistiques%20du%20travail
[12] https://unstats.un.org/unsd/envstats/climatechange.cshtml
[13] https://unstats.un.org/UNSDWebsite/capacity-development/data-for-now/

In the medium term (2026-2027), it is essential for the National Institute of Statistics (INS) to produce a dedicated publication on environmental statistics to better track developments and address the challenges of sustainable development. Drawing on the Framework for the Development of Environment Statistics (FDES) by the UNSD, this publication will serve users and promote the dissemination of environmental statistics culture.

Standards for Official Statistics on Climate-Health Interactions

(Contributed by Myer Glickman, Bonang Lewis and Vijendra Ingole, UK Office for National Statistics)

The Standards for Official Statistics on Climate-Health Interactions (SOSCHI) project led by the UK Office for National Statistics is entering the final year of development for the first set of official metrics to measure the impact of climate on health. This project is in partnership with the National Institute of Statistics Rwanda and African Institute of Mathematical Sciences (AIMS) in Rwanda, and the Ghana Statistical Service and Regional Institute of Population Studies (RIPS) at the University of Ghana. The project also benefits from a wide range of expert involvement including from leading climate experts in the Lancet Global Countdown, London School of Hygiene and Tropical Medicine, UK Health Security Agency (UKHSA) and the Cochrane Planetary Health Thematic Group.

The indicator framework aims to unlock a wealth of new insight, giving countries greater ability to plan services and policies in the face of a range of climate-related health impacts. The proposed indicator set will help to operationalize the UN Global Set of Climate Change Statistics and Indicators, SDG targets and other frameworks with respect to climate-related health impacts.

Since the last update in the 55th Issue of the ENVSTATS News (p44) the project team have published first draft details of the framework and key indicators and launched a beta version of the climate and health tools platform, hosted by the UN Global Platform. The first version of our new climate health framework currently includes the following topics; additional topics and detailed methods will be released in March 2025:

- Airborne diseases – cerebrospinal meningitis
- Heat and cold related mortality
- Extreme weather – wildfire smoke PM2.5
- Malnutrition and foodborne disease - stunting
- Vector-borne diseases – malaria
- Mental health – suicides related to excess heat
- Water-borne diseases – diarrheal disease

In 2025-26 the project will focus on finalizing methodologies, user testing of the indicator calculation program code in R and online tools, and global consultation to ensure the framework and data platform meet user needs. All stakeholders and users of climate-health statistics are invited to give feedback on the published proposals and to register their interest in implementation of new indicators in their national contexts. The team can be contacted on climate.health@ons.gov.uk.

FORTHCOMING EVENTS

- 56th session of the Statistical Commission, 4-7 March 2025 (https://unstats.un.org/UNSDWebsite/statcom/56)

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