



## Training of UNCT Data Officers and Economists: Module III

Guidance on how to  
enhance support to the  
national SDG reporting

(22 June 2022,  
Afternoon Session)



## OUTLINE

- I. Recap on challenges faced by countries and UNCT on SDG monitoring
- II. Recap on the role of Data Officers and UNCT on SDG monitoring
- III. Best practices to enhance support to the national SDG reporting process
- IV. Tools that can support UNCT and government agencies in the national SDG reporting process
- V. Primer on progress assessment
- VI. Primer on data disaggregation
- VII. Country case (Costa Rica)
- VIII. Open discussion

## I. Recap on challenges faced by countries and UNCT on SDG monitoring

1. Data scarcity as a key challenge for global SDG Reporting: key reasons
  - Extensive number of indicators
  - Lack of alignment of National and Global Indicator Frameworks (which also creates data discrepancies)
  - Insufficient coordination among data producers at national level
  - Low capacity of NSS and technical skills of official statisticians
  - Low investments by donors and national governments in SDG data production and use
2. Integration of traditional and new/alternative data sources
3. Use of non-official data sources and the issue of country ownership
4. Issues with country data validation of international estimates

## II. Recap on the role of Data Officers and UNCT on SDG monitoring

1. Role of RCO Data Officers and Economists in supporting countries with SDG reporting
2. Role of UNCTs in supporting countries with SDG reporting

# Role of RCO Data Officers and Economists in supporting countries with SDG reporting

- RCO Data Officers and Economists are not expected to be experts in the production of statistical indicators and/or their methodology across the wide array of sectors/topics the SDGs cover.
- The potential contribution of RCO Data Officers and Economists in this area should rather aim to **strengthen the NSO and facilitate coordination between the NSO/NSS and custodian agencies**. This could include:
  - **advising the NSO/NSS on cross-cutting issues** such as when and under what conditions it is possible to use proxies or alternative national indicators;
  - **conducting assessments of statistical capacity**
  - working to **prioritize capacity development activities**
  - **supporting the VNR development process** by ensuring the use of available SDG data and advising on different ways to present and communicate data/statistics
  - serving as a **link between the NSO, the National SDG reporting mechanism (which may vary significantly across countries) and the custodian agencies** to communicate needs/challenges
- RCO Data Officers and Economists are also expected to **support the CCA/UNSDCF processes**, ensuring that statistics and SDG indicators are properly mainstreamed in these processes and final documents (focus of Module II of this training programme)

## Role of UNCTs in supporting countries with SDG reporting (1)

The UNCT includes all the UN entities working in a given country – Therefore, the UNCT may include some custodian agencies as well as non-custodian agencies, whereas many custodian agencies may not be present at country level.

Broadly, the **UNCT can support the work of Data Officers and Economists** in all the different actions to **strengthen the NSO** and **facilitate coordination between the NSO/NSS and custodian agencies** (including non-resident agencies).

For example, the UNCT can work to:

- ✓ Support national/subnational **multi-stakeholder consultations and reviews**
- ✓ Play honest broker's role to bring various government departments and major groups to one table to enhance programme coordination and policy coherence
- ✓ Support mainstreaming of the SDGs and national customization

## Role of UNCTs in supporting countries with SDG reporting (2)

- ✓ Support strengthening of evidence-based policy making
- ✓ Support national SDG report / VNR preparations, providing effective inputs into the analysis and not just remaining at the transactional level as often happens (i.e. the government hiring a private consultant and different UN agencies contributing to the costs).
- ✓ Support the organization and coordination of capacity development activities
- ✓ Support the collection, analysis, synthesis and dissemination of SDG-related data and evidence
- ✓ Support preparation of the Cooperation Frameworks under the guidance of the Resident Coordinator with a particular attention to mainstream statistics and SDG monitoring in the process [Module II]

### III. Best practices to enhance support to the national SDG reporting process

1. Best practices to strengthen the collaboration between UNCTs and the government on SDG monitoring
2. Best practices to strengthen the collaboration within UNCTs on SDG monitoring
3. Different ways to disseminate, present and communicate data/statistics based on target audience
4. How to use SDG indicators in VNRs and other national SDG progress reports



## Support the NSO in its coordination role:

1. Promote the revision of statistical laws and regulatory frameworks, where necessary, consistent with the Fundamental Principles of Official Statistics, to:
  - ✓ enhance the status, independence and coordination role of national statistics offices;
  - ✓ strengthen their access to data, including enhanced data sharing across the national statistical system, and thereby their ability to more efficiently respond to emerging data and statistical needs;
  - ✓ develop a mechanism for the use of data from alternative and innovative sources within official statistics;
  - ✓ improve transparency of, and public access to, official statistics; and
  - ✓ strengthen the availability of sustainable funding for national statistical systems.

## Best practices to strengthen the collaboration between UNCTs and the government on SDG monitoring (2)

2. Ensure that the NSO has appointed an official SDG focal point in charge of coordinating SDG monitoring activities in the country
3. Facilitate the coordination between NSOs and other government data producers, by supporting the appointment of designated focal points within relevant government institutions for each SDG indicator
4. Help the NSOs in communicating with custodian agencies when necessary, (e.g. to discuss methodologies, get to the bottom of any data discrepancies and organize capacity development activities)
5. Support the NSO in the validation process of SDG indicators produced by custodian agencies
6. Support the NSOs/NSS on advocacy and resources mobilization for statistics
7. Understand the national statistical planning instruments and align/mainstream activities with/in it
8. Regular communication on SDG-related initiatives and publications

# Best practices to strengthen the collaboration within UNCTs on SDG monitoring (3)

## Improve coordination mechanisms

- ✓ Inter-agency working group/task force on data to better coordinate agencies' data activities and establish a common interface with NSS and the planning department
- ✓ Experience from Uruguay [Module I]

## Promote joint data collection mechanisms and capacity development activities for SDG indicators

- ✓ A recent [mapping exercise](#) undertaken by the International Working Group on Household Surveys shows that approximately one third of all SDG indicators (77 out of 232 indicators, covering 13 out of 17 goals) can be sourced from household surveys.
- ✓ More coordinated household survey programmes at national/international level are key to improve data availability.

## Enhancing coordination of capacity development interventions at country level

Mainstreaming of capacity development activities in UNSDCF-related work plans and in national instruments for statistical planning (such as annual or multi-annual statistical plans, NSDS, sectoral statistical plans, sub-national statistical plans or other)

Improve coordination and cooperation between UN agencies in the organization of capacity development activities to maximize impact and avoid duplication of services

- [Global Calendar of Statistical Events: https://unstats.un.org/capacity-development/calendar/](https://unstats.un.org/capacity-development/calendar/)

# Different ways to disseminate, present and communicate data/statistics based on target audience (1)

- SDG and Analytical reports
- Briefing Notes
- Simple to Complex tabulations
- User-friendly publications (digital report with simple infographics)

- SDG and Analytical reports
- Briefings Notes
- User-friendly publications (digital report with simple infographics)
- Website, Social media

- SDG and analytical reports
- Complex tabulations
- Data repository
- Detailed and standardized metadata
- Web data services (APIs)

- Complex tabulations
- Data repository
- Microdata
- Detailed Metadata
- Analytical reports
- Web data services

- Simple tabulations
- Press releases & interviews/press briefings
- User-friendly publications (digital report with simple infographics, posters, leaflets)
- Website, social media

- Simple to Complex tabulations
- SDG and analytical reports
- Data repository
- Metadata
- Web data services
- Website, Social Media



Promote compliance with **Open Data Charter Principles** - foundation for the release of data:

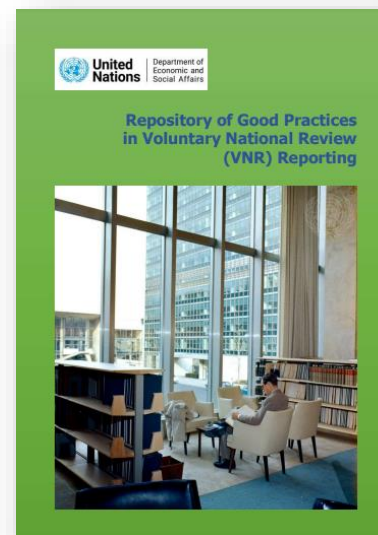
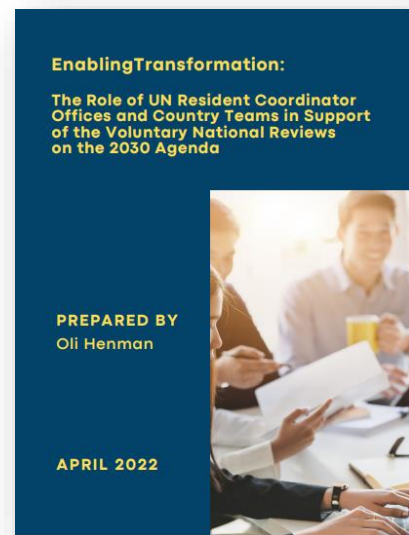
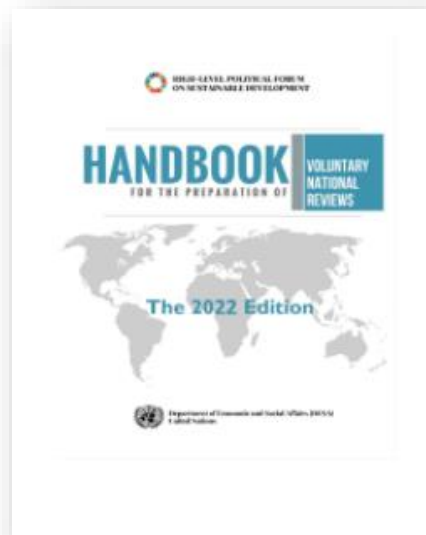
1. Open by Default
2. Timely and Comprehensive
3. Accessible and Usable
4. Comparable and Interoperable
5. For Improved Governance and Citizen Engagement
6. For Inclusive Development and Innovation



# How to use SDG indicators in VNRs and other national SDG progress reports

## Best practices for VNRs and SDG progress reports (based on VNR guidelines)

- Countries are required to prepare a minimum of two VNRs during the course of the period up to 2030 as part of their SDG implementation
- 3 key critical areas for preparing a comprehensive & well-informed VNR
  - Selection of the list of SDG indicators (promote the alignment to the GIF)
  - Assessing progress towards the SDG targets
  - Assessing inequalities between geographical areas and population groups (LNB)



Collection of UN resources for the preparation of VNRs:

<https://sustainabledevelopment.un.org/vnrs/>



## IV. Tools that can support UNCTs and government agencies in the national SDG reporting process

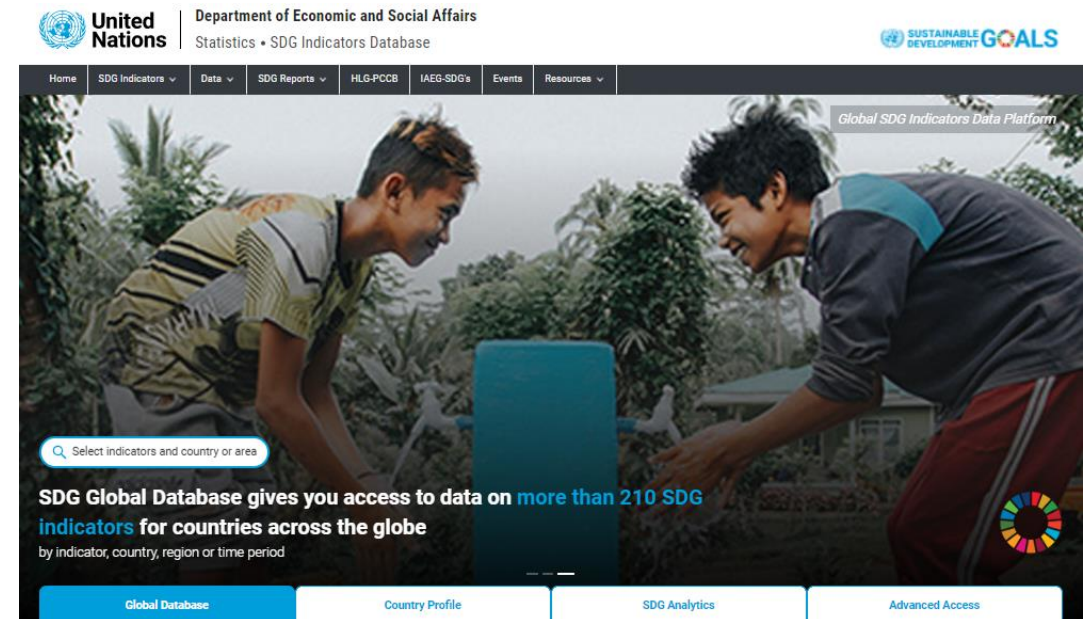
### ■ SDG Global Database

Revamped in September 2021, the **Global Sustainable Development Goal Indicators Database** provides access to data on more than 210 SDG indicators for countries across the globe, SDG Country Profiles, new SDG analytics, and various advanced access options.

The new interface also contains useful links, such as the official list of SDG Indicators, the metadata repository, Tier classification, Data collection and Focal points, as well as other useful resources (regional groupings, e-Handbook and UNCT Toolkit).

### Other Data Hubs list:

[https://unitednations.sharepoint.com/sites/DCO-WG-UNSDG\\_CF/Lists/Data%20Portal%20List/AllItems.aspx](https://unitednations.sharepoint.com/sites/DCO-WG-UNSDG_CF/Lists/Data%20Portal%20List/AllItems.aspx)



<https://unstats.un.org/sdgs/dataportal>

## IV. Tools that can support UNCTs and government agencies in the national SDG reporting process

### ■ SDG Monitoring and Reporting Toolkit for UN Country Teams

This toolkit is developed to support national governments in the monitoring and reporting on the SDGs. It brings together the collective experience of United Nations entities—the funds, programmes, agencies, regional commissions and other parts of the UN Development System—in a single, easy to access page. It is updated continuously as new resources become available.

- [Global Policies and Guidelines](#)
- [Data resources](#) (UN Global Database and country profiles, SDG Global Reports)
- [Capacity Building and Coordination](#)

The screenshot shows the homepage of the SDG Monitoring and Reporting Toolkit for UN Country Teams. At the top, there is a navigation menu with links for HOME, NEWS, HLG-PCCB, IAEG-SDGs, EVENTS, SDG INDICATORS, REPORTS, and RESOURCES. The main heading is "SDG Monitoring and Reporting Toolkit for UN Country Teams". Below this, there is an "Introduction" section with a brief description of the toolkit and a note that it is a 'live' document. A horizontal menu contains four categories: "Global Policies and Guidelines", "Data Resources", "SDG Localization & Implementation", and "Capacity Building and Coordination". The "Resources" section features three main items: "E-Handbook on the Sustainable Development Goals Indicators", "The 2019 Edition" of the Handbook, and "The Sustainable Development Goals Report 2018". On the right side, there is a "QUICK LINKS" section with links to the 2030 Agenda, SDGs Database, and a survey on the implementation of the Cape Town Global Action Plan. Below these are links for "SDGs report 2021" and "SG's progress report 2021" in multiple languages.

<https://unstats.un.org/sdgs/unct-toolkit/>

## IV. Tools that can support UNCTs and government agencies in the national SDG reporting process

- **Intersecretariat working group on household surveys - Mapping of SDG indicators**

The members of the technical working group agreed to map the range of global SDG indicators for which data can be derived from household surveys.

The information was collected from member agencies of the Intersecretariat Working Group on current or proposed use household surveys for SDG monitoring.



SDG Mapping

<https://unstats.un.org/iswghs/sdg-mapping/>

## IV. Tools that can support UNCTs and government agencies in the national SDG reporting process

- **Global Network of Data Officers and Statisticians**

Launched in October 2020, the Global Network is a forum hosted on Yammer for all official statisticians, data officers, data scientists, and geospatial information experts from National Statistical Systems and National Geospatial Information Ecosystems, from the global UN system including UN Country Teams.

Aims to help national governments build resilient and sustainable national data and information systems for the full implementation of the SDGs through collaboration, knowledge-sharing, networking, and technical support.

It currently has **2 333 Members**.



<https://yammer.com/unstats/>

## What you can do on the network



Get informed about events and activities held globally related to statistics and data management



Build capacities by attending live webinars, workshops and discussions & watching recordings



Advertise job and consultancy opportunities, call for papers or projects



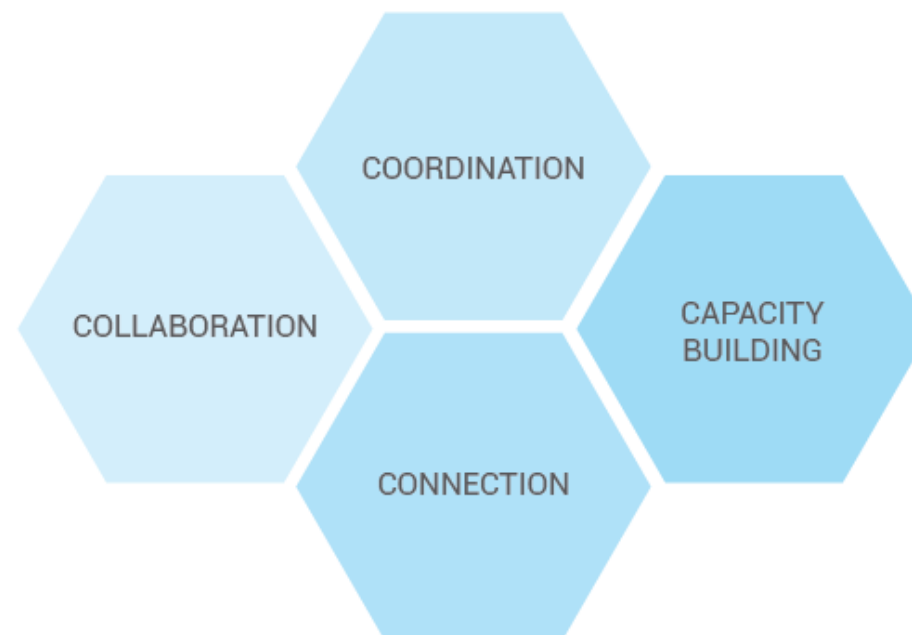
Find and propose expertise on specific topics



Connect with the global community of statisticians, geospatial data experts, and data officers



Exchange best practices, notably on the SDG Monitoring



<https://yammer.com/unstats/>

## IV. Tools that can support UNCTs and government agencies in the national SDG reporting process

### ■ Global Calendar of Statistical Events

UNSD has developed a calendar of statistical events with a special focus on capacity building events that are organized by UN system entities and other international and regional organizations.

The calendar is updated once a month and includes upcoming, current, and past events collected from currently 57 sources.

The screenshot shows the 'Global Calendar of Statistical Events' page from the UN Statistics Division. The page features a navigation bar with links for TOPICS, DATA, METHODOLOGY, EVENTS, PUBLICATIONS, and ABOUT. A 'Filter by' sidebar on the left allows users to filter events by 'All Events', 'Capacity Building', or 'Online'. It includes dropdown menus for Keywords, Year, Country, Region, Topics, Event Organizers, and Source Organization, along with 'Clear filters' and 'Back' buttons. A 'Current Events' section is also visible. The main content area displays a list of events, including 'Introduction to statistics production with the use of geographical information systems (GIS)', 'Government Finance Statistics and Excessive Deficit Procedure – Part I', 'Understanding of Multinational Enterprise Groups (MNEs)', and 'Physical environmental accounts'. Each event entry includes a date range, location, source (Eurostat), and a link to more details. A 'COVID-19 impact' warning is present at the top of the event list.

<https://unstats.un.org/capacity-development/calendar/>

## IV. Tools that can support UNCTs and government agencies in the national SDG reporting process

### ■ UN SDG:Learn Platform

In 2020, Global Network of Institutions for Statistical Training (GIST) launched the UN SDG:Learn Statistics platform, which serves as a gateway for statistical learning made available by international agencies, regional training institutes and national statistical offices.

Users can navigate through the following categories:

- Statistical classification
- SDGs
- E-learning, face-to-face or microlearning materials.
- Language.
- Region.

As of May 2022, the platform contains over 66 SDG courses in multiple languages and more courses will be soon available.



<https://www.unsdglearn.org/>

## IV. Tools that can support UNCTs and government agencies in the national SDG reporting process

### ■ Other global and regional knowledge hubs and collaborative platforms

- [UNSDG Knowledge Portal](#)
- [Data Strategy Knowledge Hub](#)
- [UN Info](#)
- [Sustainable Knowledge Platform - Voluntary National Reviews database](#)
  
- **Regional Collaborative Platforms Knowledge Hubs**
  - [Africa Knowledge Hub](#)
  - [Arab States Knowledge Hub](#)
  - [Asia Pacific Knowledge Hub](#)
  - [Latin America and Caribbean Knowledge Hub](#)

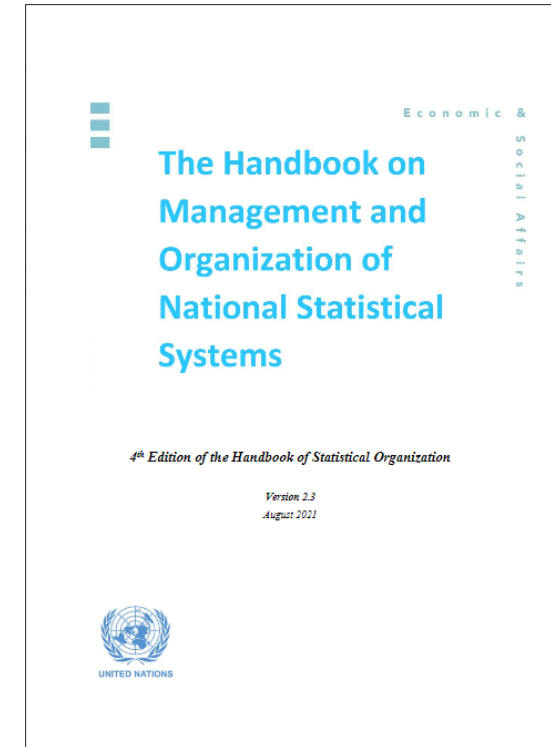




## IV. Tools that can support UNCTs and government agencies in the national SDG reporting process

- **Handbook on Management and Organization of National Statistical Systems**

The Fourth version of the Handbook on Management and Organization of National Statistical Systems gives an overview of the main statistical programmes and statistical development activities for each of the UN SDG custodian agencies.



<https://unstats.un.org/wiki/display/HSO/Organization+cards>

## IV. Tools that can support UNCTs and government agencies in the national SDG reporting process

- **SDG Financing Tools:**

As part of the [Bern Network on Financing Data for Development](#), two innovative solutions were presented in the 2021 World Data Forum that aim at leveraging SDG financing for development.

- The [“Clearinghouse”](#) will help match supply and demand for development data financing
- The World Bank’s new [“Global Data Facility”](#) will help identify financing needs and gaps and foster financing to under-funded SDGs, countries and statistical activities



## V. Primer on progress assessment



## V. Primer on progress assessment

- **Monitoring progress towards the SDGs:**
  - Seven years into the implementation of the 2030 Agenda for Sustainable Development, assessing whether and when the SDG Targets and Goals will be achieved, while leaving no one behind, is becoming a pressing issue.
  - Two main questions to answer:



How far are countries from SDG Targets?



How fast are countries progressing towards SDG Targets?



## V. Primer on progress assessment

Answering these two questions is relevant to:

- **International Organizations**: custodian agencies of SDG indicators having, among others, the role of monitoring progress at global, regional and national levels;
- **Regional Commissions**: responsible for coordinating efforts for the preparation of regional and sub-regional SDG progress reports;
- **Countries**: ultimate owners of the SDGs and responsible for their implementation.
  - Required to prepare a minimum of two VNRs during the course of the period up to 2030 as part of their SDG implementation.
  - One of the key components of VNRs is the assessment of SDG progress

## V. Primer on progress assessment

The two questions translate into two distinct measurement objectives:

- Assessing the **current status** of a SDG indicator as described by the latest available data (i.e. measuring the “distance to the **target**”)
- Forecasting the **future status (trend)** = whether the SDG targets will be reached by 2030 (i.e. forecasting “progress over time”).

Different statistical techniques are used by different international/regional agencies (e.g. UNSD, UN ESCAP, Eurostat, FAO, OECD, SDSN), and each has advantages and disadvantages. Countries should select the most suitable method on the basis of the nature of the target and available data.



## V. Primer on progress assessment

- **Examples of SDG progress reports with numerical assessment of current status and trend**

### 1: UN Statistics Division - The Sustainable Development Goal Progress Chart (Link to 2021 edition )

- Presents a snapshot of global and regional progress towards selected targets under the 17 SDGs.
- Assessment based on a limited number of indicators and on the most up-to-date data available.
- Accompanied by a statistical annex providing details on the methodology for current status and trend assessment adopted for each indicator



## V. Primer on progress assessment

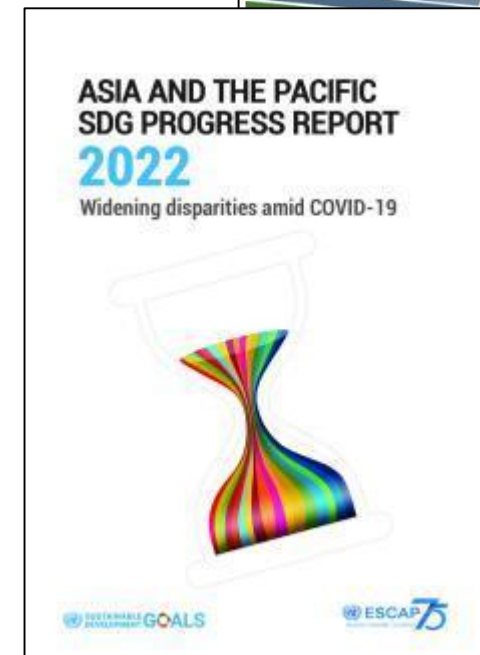
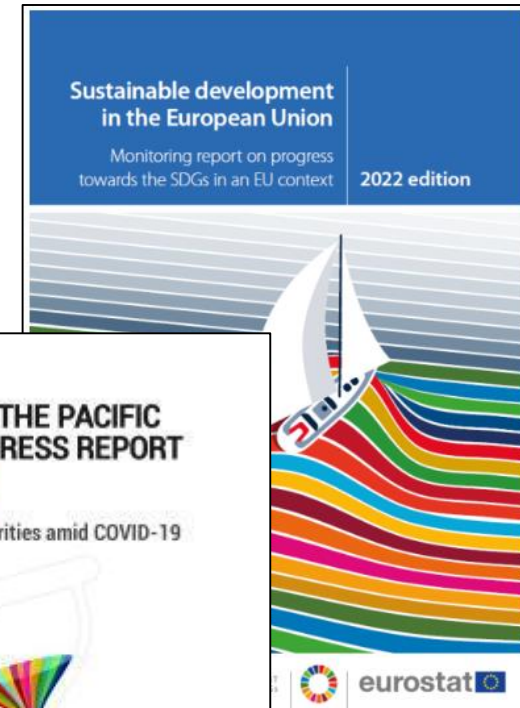
### ■ Examples of SDG progress reports with numerical assessment of current status and trend (2)

#### 2: Eurostat - Sustainable Development in the European Union ([Link](#))

- Regular report monitoring **progress towards the SDGs in EU countries**
- Provides a statistical presentation of SDG trends over the past 5 years (**short-term**) and, when data are available, over the past 15 years (**long-term**)

#### 3: ESCAP - The Asia and Pacific SDG Progress Report ([Link](#))

- Analyses **progress towards the SDGs in Asia and the Pacific and its 5 sub-regions**
- Tool for countries: [National SDG Tracker \(\[Link\]\(#\)\)](#)– allows countries to add their data, enter national target values, and visualize progress in few simple steps.





## V. Primer on progress assessment

### ■ Examples of SDG progress reports with numerical assessment of current status and trend (3)

#### 4: OECD – The Short and Winding Road to 2030: Measuring Distance to the SDG Targets (Link)

- Looks at current achievements and recent trends of SDG indicators in OECD countries.

#### 5: SDSN – Sustainable Development Report (Link)

- Annual independent quantitative report on the progress of UN Member States towards the SDGs

#### 6: FAO – Tracking progress on food and agriculture-related SDG indicators (Link)

- Presents the story lines and quantitative assessment for SDG indicators under the custodianship of FAO. Complemented by a detailed methodological annex.



## V. Primer on progress assessment

- **Assessing the current status of SDG indicators**
- Corresponds to measuring how close the latest available value of a SDG indicator is to the ideal value. This operation is straightforward when the ideal value is explicitly set in the formulation of the target.
- Need of a standardized distance measure (to facilitate comparison across indicators)
- Different approaches adopted by different international organizations:
  - **FAO**: (normalized) distance to the target, with respect to the maximum distance.
  - **OECD**: z-score (distance to the target compared to the overall variability of the current status).
  - **SDSN**: relative distance with respect to the worst value among countries.
  - **UN ESCAP**: baseline status index approach adopted on regional data. Proportion of the distance to the target travelled from the baseline year to the latest year.

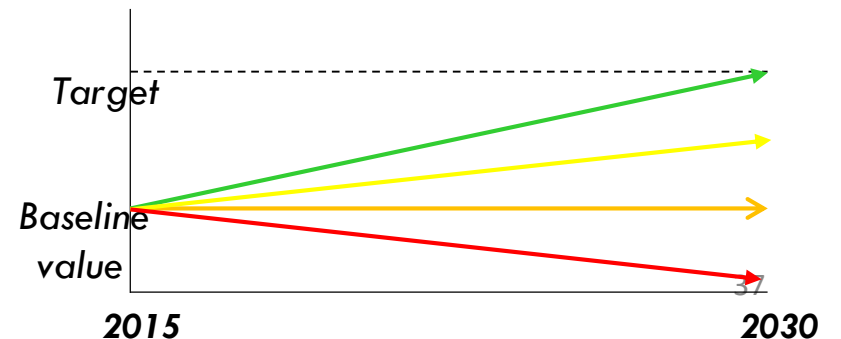
## V. Primer on progress assessment

### ■ Assessing the trend of SDG Indicators:

- Corresponds to assessing – given the observed trend – the **likelihood that a country or a region will achieve SDG Targets by 2030**
- **Example:** Eurostat/FAO/SDSN/UNSD assess the trend by comparing the actual growth shown by SDG indicators since the baseline year with the required growth to reach the target by 2030:

$$R = \frac{\text{Actual Growth}}{\text{Required Growth}}$$

- Different approaches can be selected to model growth: e.g. **linear, geometric**
- Values of R close to 1 indicate that countries are on track to achieve the target. **IOs categorize values of R into classes** identifying the degree of progress towards or deterioration from the target



## V. Primer on progress assessment

- **Data needs for current status and trend assessment**

- Values of SDG indicators for each country  $i$  in the baseline year  $t_0$ :  $x_{it_0}$
- Values of SDG indicators for each country  $i$  in the current year  $t$ :  $x_{it}$
- Target value of the generic SDG indicator:  $x^*$
- More sophisticated techniques require also all the data points in the time series, for years going from the baseline to the last year



## V. Primer on progress assessment

### ■ Main challenges of current status and trend assessment

- 1) The discussed approaches apply only to a minority of targets (about the 30%) with a clear numerical benchmark set in the SDG monitoring framework. In other cases, different IOs adopt different solutions for their progress reports:
  - OECD/SDSN/UN ESCAP set “statistical targets” based on the indicators’ distribution or on worst/best performing countries.
  - The FAO does not set any target. For current status assessment, it estimates the empirical distribution of indicators, assigning countries to their corresponding position (quintile) in the distribution. For trend assessment, it only assesses the actual growth.
  - VNRs: countries can (to some extent) set their own targets depending on national policy objectives and priorities.

## V. Primer on progress assessment

### ■ Main challenges of current status and trend assessment (2)

- Many SDG indicators are new: low quality and/or scarcity of baseline data. Time series with very few data points. This restricts the range of applicable methods (that need to be applied consistently across all SDG indicators) and forces custodian agencies to adopt rather simple methodological approaches.
- Many targets combine multiple and complementary policy objectives: impossible to monitor them effectively with 1 or 2 indicators only. When targets are monitored with more than one indicator, should aggregation at target and goal level be performed? If yes, how? Different IOs suggest different answers:
  - OECD/SDSN: simple average of indicators under the same target/goal
  - FAO: does not perform aggregation at target/goal level due to indicators heterogeneity
  - UNSD: selects a limited set of indicators per goal and performs the assessment only at the indicator level

## VI. Primer on data disaggregation



## VI. Primer on data disaggregation

### ■ Data disaggregation and the SDGs

- With the adoption of the 2030 Agenda for Sustainable Development, Member States have pledged to leave no one behind (LNOB) and reach the furthest behind first
- This calls for more **disaggregated data** than what currently available in most countries.
- An overarching **principle of data disaggregation** is at the core of the SDG Monitoring Framework:

*“SDG Indicators should be disaggregated, where relevant, by income, sex, age, race, ethnicity, migratory status, disability and geographic location, or other characteristics in accordance with the Fundamental Principles of Official Statistics.”*

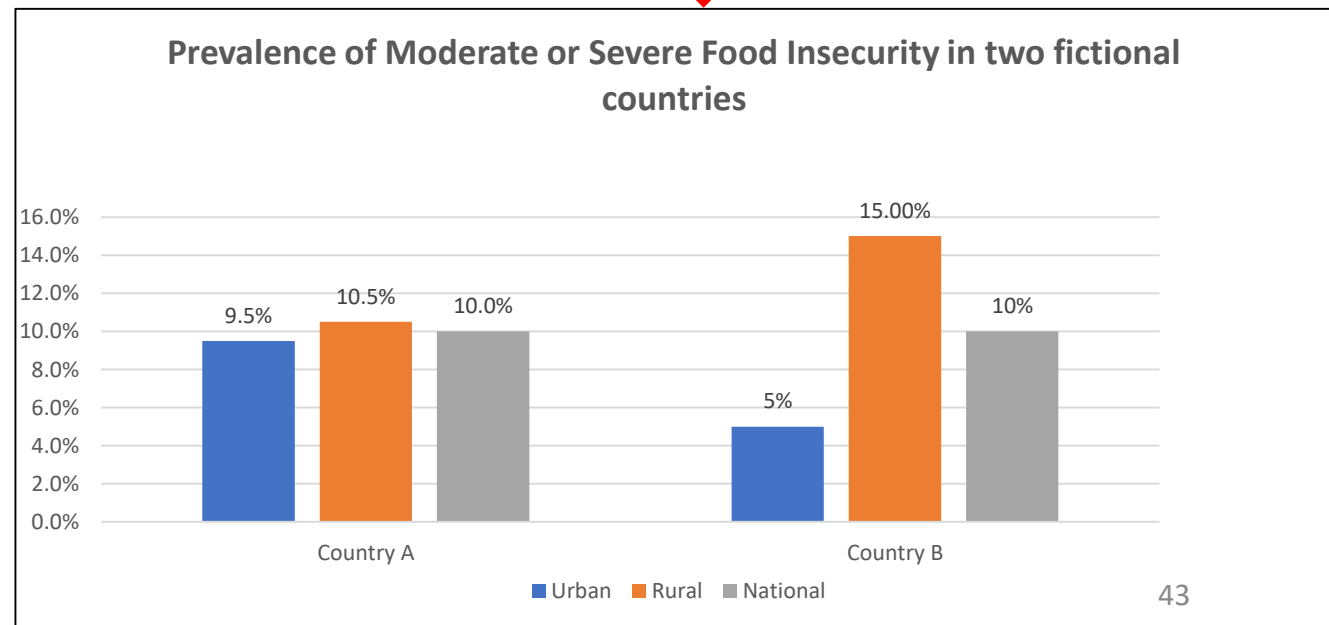




## VI. Primer on data disaggregation

### ■ The importance of disaggregated data and statistics

- Improving data disaggregation is fundamental for the full implementation of the SDGs, as disaggregated data can speak for those left behind.
- The **“big picture”** does not always portray the **full picture**.
- Need disaggregated data on vulnerable populations to understand:
  - Who they are;
  - Where they are;
  - How many they are.



## VI. Primer on data disaggregation

### ■ Main challenges of data disaggregation

The need of more disaggregated data imposes significant additional **challenges to National Statistical Systems**:

- **Cost** of data collection and analysis;
- **Quality** concerns;
- **Confidentiality** and **sensitivity**.

The challenge is not only data disaggregation: the call is for high quality, timely, disaggregated data for a very broad agenda

- **Need to develop methodological tools to:** 1) collect new data, 2) analyse and integrate existing data.
- **Need to ensure comparability over time and within/across countries:** need of standard approaches and definitions.

## VI. Primer on data disaggregation

### ■ The IAEG-SDGs work on data disaggregation

The UNSC stressed the importance of data disaggregation repeatedly and requested the IAEG-SDGs to make efforts to develop the necessary statistical standards and tools and build capacity on data disaggregation for the SDGs (decisions 47/101, 48/101, 49/101, 50/101, 51/101).

In response to these requests, the IAEG-SDGs created a dedicated work stream on data disaggregation. This led to:

- The development of a [minimum disaggregation set](#);
- A comprehensive summary of [disaggregation standards and classifications](#) for all SDG Indicators;
- A compilation of [categories and dimensions of data disaggregation](#) currently in place and planned by custodian agencies;
- A compilation of [policy priorities](#) by disaggregation dimension;
- A compilation of [tools and resources](#) for data disaggregation;
- A [practical guidebook](#) on data disaggregation.

**Resources accessible from:** <https://unstats.un.org/sdgs/iaeg-sdgs/disaggregation/>

## VI. Primer on data disaggregation

### ■ The compilation of data disaggregation categories and dimensions

Disaggregation matrix distinguishing between three main types of dimensions for data disaggregation:

- The minimum disaggregation set: disaggregation dimensions specifically mentioned in the target or indicator name and information on their categories, whether data are available in the Global dataset and, if not, when these disaggregated data are expected to be produced.
- Other current disaggregation: additional data disaggregation for which data are currently available in the Global indicator database.
- Future additional disaggregation: disaggregation dimensions and categories mentioned in the indicator metadata, but not currently included in the database.

## VI. Primer on data disaggregation

### ■ Traditional sources of disaggregated data and statistics

#### Censuses

- **Pros:** offer full coverage of target populations.
- **Cons:** 1) Implemented only every 5/10 years; 2) Costly: they cannot be used to collect all the wide spectrum of information needed for SDG monitoring.

#### Sample surveys

- Example: household surveys represent the official data source for about the 30% of SDG indicators (mapping performed by the ISWGHS). Many more if we consider other types of surveys (e.g. business, agriculture, etc.)
- **Pros:** Can offer detailed information on the social, economic and environmental dimensions of target populations at relatively high frequency.
- **Cons:** their sample size is generally not large enough to guarantee reliable direct estimates for all sub-populations (especially rare ones) and/or complete coverage of all possible disaggregation domains. Increasing the sampling size to overcome these issues is not an option due to associated costs and complexity.

## VI. Primer on data disaggregation

### ■ Enhancing survey data at the analysis stage to address data disaggregation

- Issues related to the limited sampling size of surveys can be addressed at the data analysis stage, by adopting indirect estimation approaches allowing to borrow strength from auxiliary data sources.
- In this respect, many IOs and custodian agencies are exploring the use and adaptation of innovative statistical techniques, such as small area estimation (SAE) methods, to enhance the precision of disaggregated estimates of SDG indicators based on survey data.
- SAE techniques are model-based estimation approaches allowing to integrate survey microdata with traditional (censuses and admin records) and innovative (geospatial info and big data) additional data sources to “borrow strength” from other disaggregation domains and/or time periods.

## VI. Primer on data disaggregation

### ■ Main challenges to implement SAE

- Model-based approaches have stricter data requirements than standard estimation methods: need to find good quality auxiliary information correlated with the variable to be estimated.
- Model assumptions should be carefully validated through adequate diagnostic techniques.
- SAE methods are not cost free but require investing in advanced statistical and software skills for their implementation: need of technical assistance and capacity development activities for NSOs.

## VI. Primer on data disaggregation

### ■ SAE4SDG Toolkit in Wiki

- Toolkit produced by [UNSD](#), under the guidance of the [IAEG-SDGs](#) and the [ISWGHS](#): <https://unstats.un.org/wiki/display/SAE4SDG/SAE4SDG>
- Represents a space to provide information on methods to produce disaggregated data through SAE.
- Aims to complement and use the existing methodological work and case studies to encourage and enable national statistical offices to employ SAE for the monitoring of the SDGs.
- Outlines the key steps to help countries in moving from SAE experiment to official data production.
- Aims to be a space for partners to document and include references for their work on small area estimation.