Session 3 Environment Statistics for Monitoring the Sustainable Development Goals

National Technical Training Workshop on Environment Statistics

Kololi, Banjul, The Gambia

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Outline…

1. Provide a brief description of the Sustainable Development Goals
2. Demonstrate the increased emphasis on “environment” within the SDGs
3. Show some examples of how data and statistics are needed for SDG indicators
4. Show two examples of how SDG indicator data for The Gambia and other countries are being disseminated in the public domain

The Sustainable Development Goals

All but goal 5, have corresponding FDES statistics:
https://unstats.un.org/unsd/envstats/fdes/SDGsInd_BasicSetMatrix.pdf

SDG Preamble

Plan of action for people, planet and prosperity. It also seeks to strengthen universal peace in larger freedom. All countries working together.

- **People:** to end poverty and hunger **in a healthy environment**
- **Planet:** to **protect the planet** from degradation, including through sustainable consumption and production, **sustainably managing its natural resources** and taking urgent action on **climate change**, so that it can support the needs of the present and future generations.
- **Prosperity** : ensure prosperous and fulfilling lives and that economic, social and technological progress **occurs in harmony with nature.**
- **Peace:** to foster peaceful, just and inclusive societies

Source: https://sustainabledevelopment.un.org/post2015/transformingourworld

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The Eight Millennium Development Goals (2000-2015)

eradicate extreme poverty and hunger;
achieve universal primary education;
promote gender equality and empower women;
reduce child mortality;
improve maternal health;
combat HIV/AIDS, malaria, and other diseases;
ensure **environmental sustainability**; and
develop a global partnership for development.

Observation: Far less emphasis on the environment within the MDGs than for the SDGs

Process to develop indicators

- Lead by Inter-agency and Expert Group on SDG Indicators (IAEG-SDGs), (46th Session of UN Statistical Commission 2015)
- IAEG-SDGs: Led by national statistical offices, open and transparent
- Global indicator framework adopted by UN General Assembly 6 July 2017
- Official list of (232) SDG Indicators https://unstats.un.org/sdgs/indicators/indicators-list/
- SDG Metadata repository https://unstats.un.org/sdgs/metadata/
- SDG Tier III Workplans https://unstats.un.org/sdgs/tierIII-indicators/
- Tier I and II are within metadata repository; Tier III have workplans
- SDG Tier Classification https://unstats.un.org/sdgs/iaeg-sdgs/tier-classification/

Tiering within SDG Indicators

- SDG Tier Classification (not to be confused with FDES tiering)
  - **Tier 1:** Indicator is conceptually clear, has an internationally established methodology and standards are available, and data are regularly produced by countries for at least 50 per cent of countries and of the population in every region where the indicator is relevant.
  - **Tier 2:** Indicator is conceptually clear, has an internationally established methodology and standards are available, but data are not regularly produced by countries.
  - **Tier 3:** No internationally established methodology or standards are yet available for the indicator, but methodology/standards are being (or will be) developed or tested.
  - Tiers assist in developing global implementation strategies
  - Tiering revised by IAEG-SDGs based on work by custodian agencies

Measuring Sustainable Development Goal Indicators

- The **national policies** to achieve these goals in each and every country need to be **informed by high-quality, timely and reliable data** dis-aggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts
- Gaining the **political will** and resources to ensure the production of these statistics signals intent to measure and monitor progress in sustainable development.
- Global indicators: **Complemented by indicators at the regional and national level** to be developed by member states

SDG indicators related to UNSD Water and Waste Data Collections

SDGs compiled by international custodian agencies

- UNSD working with custodian agencies on methodologies

UNSD Data collections on water and waste can be used by countries to provide context around the SDG indicators

Allows for comparison on progress of policy achievements to countries in similar situations…

Ensure availability and sustainable management of water and sanitation for all

Make cities and human settlements inclusive, safe, resilient and sustainable

Ensure sustainable consumption and production patterns

The Sustainable Development Goals

Source: Inter-Agency Expert Group-SDGs tier classification for global SDG indicators (updated 15 Dec 2017): https://unstats.un.org/sdgs/iaeg-sdgs/tier-classification/

Ensure availability and sustainable management of water and sanitation for all

Target 6.3: By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.

=> **Indicator 6.3.1: Proportion of wastewater safely treated**

Target 6.4: By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity.

=> **Indicator 6.4.1: Change in water-use efficiency over time**

=> **Indicator 6.4.2: Level of water stress: freshwater withdrawal as a proportion of available freshwater resources**

Indicator 6.3.1: Proportion of wastewater safely treated (tier II)

- Custodian Agencies: WHO, UN-Habitat, UNSD; partner agencies: UN Environment, OECD and Eurostat
- Endeavouring to use the UNSD/UN Environment Questionnaire to the extent possible.
  - Response rates remain a challenge
- UNSD participated in an Expert Group Meeting on Global Wastewater Monitoring for the SDGs with co-custodians and other experts.
- Available metadata are here: https://unstats.un.org/sdgs/metadata/

Table W4, Line:	Category	Unit
1	**Total wastewater generated**	1000 m^3/d
10	Wastewater treated in urban wastewater treatment plants	
14	Wastewater treated in other treatment plants	
18	Wastewater treated in independent treatment facilities	

Indicator = (Lines 10 + 14 + 18)/Line 1

Table W4: Wastewater Generation and Treatment

Line	Category	
1	Total wastewater generated	Millions metres^3 per year
2	By: Agriculture, forestry and fishing (ISIC 01-03)	
3	Mining and quarrying (ISIC 05-09)	
4	Manufacturing (ISIC 10-33)	
5	Electricity, gas, steam and air conditioning supply (ISIC 35)	
6	Electricity industry (ISIC 351)	
7	Construction (ISIC 41-43)	
8	Other economic activities	
9	Households	
10	Wastewater treated in urban wastewater treatment plants	
11	Of which: Primary treatment	
12	Secondary treatment	
13	Tertiary treatment	
14	Wastewater treated in other treatment plants	
15	Of which: Primary treatment	
16	Secondary treatment	
17	Tertiary treatment	
18	Wastewater treated in independent treatment facilities	
19	**Non-treated wastewater**	
20	Sewage sludge production (dry matter)	1000 t

Indicator 6.4.1: Change in water-use efficiency over time

(tier II)

- Custodian Agency: FAO; partner agencies: UNSD, UN Environment, IUCN, OECD and Eurostat
- The indicator can be derived using the seven variables in the table below.
- Application of International Standard Industrial Classification of All Economic Activities (ISIC) Rev. 4.
- Ensuring data provided by countries can inform SDG indicator compilation, but also environment statistics, and environmental-economic accounting.
- Available metadata are here: https://unstats.un.org/sdgs/metadata/

Indicator = (water abstracted [by all or various industries])/(gross freshwater supplied by water supply industry)

Table W2: Freshwater Abstraction and Use

Line	Category	Unit
1	Fresh surface water abstracted	Millions m^3 per year
2	Fresh groundwater abstracted	
3	**Freshwater abstracted (=1+2)**	
4	*Of which abstracted by:* Water supply industry (ISIC 36)	
5	Households	
6	Agriculture, forestry and fishing (ISIC 01-03)	
7	*of which for:* Irrigation in agriculture	
8	Mining and quarrying (ISIC 05-09)	
9	Manufacturing (ISIC 10-33)	
10	Electricity, gas, steam and air conditioning supply (ISIC 35)	
11	Construction (ISIC 41-43)	
12	Other economic activities	

Table W3: Water Supply Industry (ISIC 36)

Line	Category	Unit
1	Gross freshwater supplied by water supply industry (ISIC 36)	Millions m^3 per year
2	Losses during transport by (ISIC 36)	
3	Net freshwater supplied by water supply industry (ISIC 36) (=1-2) (=4+5+6+7+8)	
of which supplied to:		
4	Households	
5	Agriculture, forestry and fishing (ISIC 01-03)	
6	Mining and quarrying (ISIC 05-09)	
	Manufacturing (ISIC 10-33)	
7	Electricity, gas, steam and air conditioning supply (ISIC 35)	
	of which to: Electric power generation, transmission and distribution (ISIC 351)	
8	Construction (ISIC 41-43)	
	Other economic activities	

Indicator 6.4.2: Level of water stress: freshwater withdrawal as a proportion of available freshwater resources (tier I)

- Custodian Agency: FAO; partner agencies: UNSD, UN Environment, IUCN, OECD and Eurostat
- The two variables below contribute to the calculation of the indicator.
- Metadata are available here: https://unstats.un.org/sdgs/metadata/

Tables W1, W2, line:	Category	Unit
W1,5	Renewable freshwater resources	millions m^3/y
W2,3	Freshwater abstracted	

Indicator = Line W2,3/Line W1,5

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9	Manufacturing (ISIC 10-33)	
10	Electricity, gas, steam and air conditioning supply (ISIC 35)	
11	*of which for:* Electric power generation, transmission and distribution (ISIC 351)	
12	Construction (ISIC 41-43)	
13	Other economic activities	

Table W1: Renewable Freshwater Resources

Line	Category	Unit
1	Precipitation	Millions m^3 per year
2	Actual evapotranspiration	
3	Internal flow (=1-2)	
4	Inflow of surface and groundwaters from neighbouring countries	
5	**Renewable freshwater resources (=3+4)**	
6	Outflow of surface and groundwaters to neighbouring countries	
7	Of which: Secured by treaties	
8	Not secured by treaties	
9	Outflow of surface and groundwater to the sea	

SDG indicator example 6.5.1: Degree of integrated water resources management implementation (0-100)

SDG 6.5.1 (Tier 2) Degree of integrated water resources management implementation (0-100)

The Gambia	2017	
Degree of integrated water resources management implementation (%)	30	(World average: 48%)

6.5.1	Degree of integrated	204	Benin	2018	63	Environment Live, U	PERCENT
6.5.1	Degree of integrated	218	Ecuador	2018	42	Environment Live, U	PERCENT
6.5.1	Degree of integrated	268	Georgia	2018	35	Environment Live, U	PERCENT
6.5.1	Degree of integrated	270	Gambia	2018	30	Environment Live, U	PERCENT
6.5.1	Degree of integrated	288	Ghana	2018	49	Environment Live, U	PERCENT
6.5.1	Degree of integrated	320	Guatemal	2018	25	Environment Live, U	PERCENT
6.5.1	Degree of integrated	352	Iceland	2018	52	Environment Live, U	PERCENT
6.5.1	Degree of integrated	368	Iraq	2018	25	Environment Live, U	PERCENT
6.5.1	Degree of integrated	388	Jamaica	2018	43	Environment Live, U	PERCENT
6.5.1	Degree of integrated	404	Kenya	2018	53	Environment Live, U	PERCENT
6.5.1	Degree of integrated	438	Liechtenst	2018	70	Environment Live, U	PERCENT
6.5.1	Degree of integrated	454	Malawi	2018	40	Environment Live, U	PERCENT

Source: https://unstats.un.org/sdgs/indicators/database/

SDG indicator example 11.5.2: Direct disaster economic loss in relation to global GDP, including disaster damage to critical infrastructure, disruption of basic services, and the in the housing sector

	2018
Direct economic loss attributed to disasters (Current USD)	10,739,175

Last update: 8 July 2019

Source of data: United Nations Global SDG Database, United Nations Office for Disaster Risk Reduction (2019)

https://unstats.un.org/sdgs/indicators/database/

Direct economic loss attributed to disasters (millions of current USD)	Georgia	2017	433282.5	United Nations Office for Disaster Risk Reductic
Direct economic loss attributed to disasters (millions of current USD)	Gambia	2010	16762.5	United Nations Office for Disaster Risk Reductic
Direct economic loss attributed to disasters (millions of current USD)	Gambia	2015	2916675	United Nations Office for Disaster Risk Reductic
Direct economic loss attributed to disasters (millions of current USD)	Gambia	2016	491700	United Nations Office for Disaster Risk Reductic
Direct economic loss attributed to disasters (millions of current USD)	Gambia	2017	27937.5	United Nations Office for Disaster Risk Reductic
Direct economic loss attributed to disasters (millions of current USD)	Gambia	2018	10739175	United Nations Office for Disaster Risk Reductic
Direct economic loss attributed to disasters (millions of current USD)	Ghana	2011	17437.5	United Nations Office for Disaster Risk Reductic
Direct economic loss attributed to disasters (millions of current USD)	Ghana	2012	21594808	United Nations Office for Disaster Risk Reductic
Direct economic loss attributed to disasters (millions of current USD)	Ghana	2013	46800	United Nations Office for Disaster Risk Reductic
Direct economic loss attributed to disasters (millions of current USD)	Ghana	2014	327496.7	United Nations Office for Disaster Risk Reductic
Direct economic loss attributed to disasters (millions of current USD)	Ghana	2015	698775	United Nations Office for Disaster Risk Reductic
Direct economic loss attributed to disasters (millions of current USD)	Ghana	2016	354562.5	United Nations Office for Disaster Risk Reductic

Disclaimer: the data being submitted by UNISDR has been extracted from two sources: (a) the Sendai Framework Monitoring System as provided by designated national focal points; and (b) Desinventar disaster loss databases. Some of the data has not finalized an official validation process and may be subject to revision at a later date.