Selected SDG indicators related to the UNSD/UN Environment Questionnaire

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Outline

1. Selected environmentally-related SDG Indicators

   – Goal 6: Clean Water and Sanitation

   – Goal 11: Sustainable Cities and Communities

   – Goal 12: Responsible Consumption and Production

2. UNSD's environment statistics data collection and its application to the SDGs.

Timeline

- 19 July 2014: Proposal for the SDGs to the General Assembly by the UN General Assembly's Open Working Group

- 6 March 2015: Creation by the Statistical Commission of an Inter-agency and Expert Group on SDG Indicators (IAEG-SDGs) composed of Member States and including regional and international agencies as observers to provide a proposal of a global indicator framework (and associated global and universal indicators)

- 25 September 2015: Adoption of the 2030 Development Agenda by the General Assembly. Contains the 17 Goals and 169 Targets

- 11 March 2016: Global indicator framework of 230 indicators agreed as a practical starting point by the Statistical Commission

- 10 March 2017: The Statistical Commission recommended to the Economic and Social Council the adoption of a resolution adopting the global indicator framework, stating that indicators will be reviewed in 2020 and 2025, and requesting the IAEG-SDGs to further refine and improve the global framework.

The 17 SDGs

SDG Indicators

- 17 Sustainable Development Goals (SDGs), 169 Targets and 230 Indicators.

- Indicators classified in three Tiers:
  - Tier 1: indicator conceptually clear, established methodology and standards available and data regularly produced by countries (83 ind.).
  - Tier 2: Indicator conceptually clear, established methodology and standards available but data are not regularly produced by countries (59 ind.).
  - Tier 3: Indicator for which there are no established methodology and standards or methodology/standards are being developed/tested (83 ind.).

  $\Rightarrow$ Not everything is set in stone and there are methodologies that need to be developed.

- Custodianship
  - Each indicator has at least one custodian agency
  - Role of developing metadata and collecting the data from the countries
  - Adjust data for comparability and make estimates if necessary

- Dissemination
  - SDG indicators database (https://unstats.un.org/sdgs/indicators/database/)
  - The Sustainable Development Goals Report
  - Secretary-General's Progress Report

Environment Statistics and the SDGs

- Environmental dimension of sustainable development fully fleshed out in the goals:
  - 6. Clean Water and Sanitation
  - 7. Affordable and Clean Energy
  - 11. Sustainable Cities and Communities
  - 12. Responsible Consumption and Production
  - 13. Climate Action
  - 14. Life below Water
  - 15. Life on Land

  and also mainstreamed/embedded under all other goals.

- Almost half of the SDG targets require environment statistics to compile their indicators.

- Need for **improvement in data and statistics** to monitor progress on the SDGs and the associated need for statistical capacity building is key for developing countries.

Selected environmentally-related SDG indicators

- UNSD involved in the methodological development or data collection (through the UNSD/UN Environment Questionnaire on Environment Statistics) of 6 indicators of three goals.

6 CLEAN WATER AND SANITATION

Ensure availability and sustainable management of water and sanitation for all

11 SUSTAINABLE CITIES AND COMMUNITIES

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

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

Ensure sustainable consumption and production patterns

Source: Tier Classification for Global SDG Indicators, 20 April 2017

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

- UNSD collects data through the UNSD/UN Environment Questionnaire.

- Table below extracted from Table W4: Wastewater Generation and Treatment of the Questionnaire.

- Issues raised in discussions include definition of "treatment". A definition within the International Recommendations for Water Statistics (United Nations, 2012) is being considered.

Line	Category	Unit
1	Total wastewater generated	1000 m^3/d
7	Wastewater treated in urban wastewater treatment plants	1000 m^3/d
11	Wastewater treated in other treatment plants	1000 m^3/d
15	Wastewater treated in independent treatment facilities	1000 m^3/d

Indicator = (Lines 7 + 11 + 15)/Line 1

Indicator 6.4.1: Change in water-use efficiency over time (Tier III)

- Custodian Agency: FAO; partner agencies: UNSD, UN Environment, IUCN, OECD and Eurostat

- UNSD collects data through the UNSD/UN Environment Questionnaire.

- Table below extracted from Tables W2: Freshwater Abstraction and Use, and W3: Water Supply Industry (ISIC 36) of the Questionnaire.

- Using the seven variables, a contribution to a prospective estimate of the indicator can be derived.

- Issues raised in discussions include definition of "abstraction" as opposed to "use". Per the Questionnaire, "Total freshwater available for use" is equal to "Freshwater abstracted" + "Desalinated water" + "Reused water" + "Imports of water" – "Exports of water".

- Abstraction is known to be used as a proxy for Use.

Line	Category	Unit
W2, 4	Freshwater abstracted by water supply industry (ISIC 36)	millions m^3/y
W2, 5	Freshwater abstracted by households	millions m^3/y
W2, 6	Freshwater abstracted by agriculture, forestry and fishing (ISIC 01-03)	millions m^3/y
W2, 7	Freshwater abstracted by manufacturing (ISIC 10-33)	millions m^3/y
W2, 8	Freshwater abstracted by electricity industry (ISIC 351)	millions m^3/y
W2, 9	Freshwater abstracted by other economic activities	millions m^3/y
W3, 1	Gross freshwater supplied by water supply industry (ISIC 36)	millions m^3/y

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

- Custodian Agency: FAO; partner agencies: UNSD, UN Environment, IUCN, OECD and Eurostat

- UNSD collects data through the UNSD/UN Environment Questionnaire.

- Table below extracted from Tables W1: Renewable Freshwater Resources, and W2: Freshwater Abstraction and Use of the Questionnaire.

- Using the two variables below, a contribution to a prospective estimate of the indicator can be derived.

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

Indicator = Line W2,3/Line W1,5

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

- Target 11.6: By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management.

  => Indicator 11.6.1: Proportion of urban solid waste regularly collected and with adequate final discharge out of total urban solid waste generated, by cities

Indicator 11.6.1: Proportion of urban solid waste regularly collected and with adequate final discharge out of total urban solid waste generated, by cities (Tier II)

- Custodian Agencies: UN-Habitat and UNSD; partner agencies: UN Environment

- UNSD involved in the methodology and in the data collection

- Issues:
  - No internationally agreed definition of urban solid waste
    - => Invent one: What should be in? Plastics dumped into oceans?
    - => Use a proxy: Municipal waste ?
  - What is adequate final discharge?
  - Denominator: Waste "collected" or "generated" ? => Difficult to estimate municipal waste generated.
  - Who could be the national source in the country?
  - Definition of a minimum number or size of cities a country should report on.
  - OECD/Eurostat do not collect data at the city level. Eurostat did a pilot at the European regions level => No city level for "developed" countries.

Indicator 11.6.1: Proportion of urban solid waste regularly collected and with adequate final discharge out of total urban solid waste generated, by cities (Tier II)

- Table below extracted from Table R5: Management of Municipal Waste – City Data of the Questionnaire.

- Using the four variables, a prospective estimate of the indicator can be derived.

- Adequate final discharge: Recycling, composting and incineration with energy recovery.

- Time series exist for waste "collected" in the UNSD/UN Environment Questionnaire at the city level. UNSD so far does not collect on municipal waste generated.

Line	Category	Unit
5	Total amount of municipal waste collected	1000 t
6	Recycling	1000 t
7	Composting	1000 t
9	Incineration with energy recovery	1000 t

Indicator = (Lines 6 + 7 + 9)/Line 5

Ensure sustainable consumption and production patterns

- Target 12.4: By 2030, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment.

> => **Indicator 12.4.2: Hazardous waste generated per capita and proportion of hazardous waste treated, by type of treatment**

> => **Indicator 12.5.1: National recycling rate, tons of material recycled**

Indicator 12.4.2: Hazardous waste generated per capita and proportion of hazardous waste treated, by type of treatment (Tier III)

- Custodian Agencies: UN Environment and UNSD (more specifically the BRS Secretariat); partner agencies: OECD and Eurostat

- UNSD involved in the methodology and data collection

- Issues:
  - Terminology of the UNSD/UN Environment Questionnaire and national reports under the Basel Convention not harmonized.
  - Definition of treatment: recycled and incinerated or incinerated with energy recovery? (The Basel Convention does not have a definition of treatment)
  - Inclusion of imports-exports => As they can be important for some countries, they should be included.
  - Year of treatment can be different from year of generation.

Indicator 12.4.2: Hazardous waste generated per capita and proportion of hazardous waste treated, by type of treatment (Tier III)

- Table below extracted from Table R2: Management of Hazardous Waste of the Questionnaire.

- Inclusion of imports-exports in the denominator => use of line 5: Hazardous waste treated or disposed of during the year.

- Treatment defined as recycled and incinerated.

- Using the four variables below, prospective estimates of the indicator can be derived, one per capita, and two for the types of treatment.

- Both data from the UNSD/UN Environment Questionnaire and the national reports under the Basel Convention should be viewed as complementary (e. g. in terms of number of countries reporting) and can be used for quality check.

Indicator = Line 2/Population	Indicator = Line 6/Line 2	Indicator = Line 7/Line 2

Line	Category	Unit
2	Hazardous waste generated during the year	tonnes
5	Hazardous waste treated or disposed of during the year	tonnes
6	Recycling	tonnes
7	Incineration	tonnes

Indicator 12.5.1: National recycling rate, tons of material recycled (Tier III)
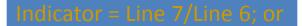
- Custodian Agencies: UN Environment and UNSD; partner agencies: OECD and Eurostat

- UNSD involved in the methodology and data collection

- Issues:
  - Difficult to have a statistics representing all waste, and other types of waste (hazardous waste) already monitored by other indicators => use of municipal waste as a proxy.
  - Discussion with respect to municipal waste "collected" as opposed to municipal waste "generated" is also a feature (as in indicator 11.6.1).
  - Year of generation or collection can be different from year of recycling.
  - Inclusion of imports-exports of municipal waste.

Indicator 12.5.1: National recycling rate, tons of material recycled (Tier III)

- Table below extracted from Table R3: Management of Municipal Waste of the Questionnaire.

- Using two of the three variables, a prospective estimate of the indicator can be derived.

- UNSD collects data only on municipal waste collected.

- Imports-exports can be either included (line 6) or not (line 3).

Indicator = Line 7/Line 6; or   Indicator = Line 7/Line 3

Line	Category	Unit
3	Total amount of municipal waste collected	1000 t
6	Municipal waste managed in the country	1000 t
7	Recycling	1000 t

Responses by table to 2016 round of the UNSD/UN Environment Questionnaire

W1: Renewable Freshwater Resources	74%
W2: Freshwater Abstraction and Use	74%
W3: Water Supply Industry	74%
W4: Wastewater Generation and Treatment	56%
R2: Management of Hazardous Waste	64%
R3: Management of Municipal Waste	76%
R5: Management of Municipal Waste – City data	70%

out of 50 responses received as of April 2017.

Thank you for your attention!

Please contact us:
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