UNSD/UNEP Questionnaire on Environment Statistics and its application to SDG environment-relevant indicators

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شعبة الإحصاءات في الأمم المتحدة (UNSD) و برنامج الأمم المتحدة للبيئة (UNEP)

استمارة الإحصاءات البيئية لعام 2016

قسم : النفايات

جدول المحتويات

الإرشادات	المقدمة، الخطوات التي ينبغي اتباعها، وصف الجداول
التعاريف	قائمة التعاريف
جدول النفايات 1	إنتاج النفايات حسب المصدر
جدول النفايات 2	إدارة النفايات الخطرة
جدول النفايات 3	إدارة النفايات البلدية
جدول النفايات 4	تركيب النفايات البلدية
جدول النفايات 5	إدارة النفايات البلدية - بيانات على مستوى مدينة
جدول النفايات 6	صفحة المعلومات التكميلية

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الفرع: المياه

قائمة المحتويات

الإرشادات	مقدمة، الخطوات التي تتبع، وصف الجداول وجدول التحويل
التعاريف	قائمة التعاريف
الجدول م1	موارد المياه العذبة المتجددة
الجدول م2	استخراج المياه العذبة واستخدامها
الجدول م3	صناعة إمدادات المياه (ISIC 36)
الجدول م4	إنتاج المياه العادمة ومعالجتها
الجدول م5	السكان الموصولون بمعالجة المياه العادمة
الجدول م6	صحيفة المعلومات التكميلية

Consultative meeting on the implementation framework for the environmental dimension of the 2030 agenda in the Arab region

Cairo, Egypt, 18-21 September 2017

Environment Statistics Section, United Nations Statistics Division

Outline

1. UNSD/UNEP Questionnaire on Environment Statistics (water and waste sections)
2. Its application and value in measuring progress toward the Sustainable Development Goals

UNSD/UNEP Questionnaire on Environment Statistics

- Objective: to provide internationally comparable statistics on environmental issues based on standard questionnaires and methodology.
- About 170 member states and areas in 5 languages.
- Complemented by the OECD/Eurostat Joint Questionnaire on the State of the Environment – their member states.
- Close collaboration is maintained on conceptual issues, validation procedures and data validation.
- Collaboration is also maintained with, inter alia, FAO/Aquastat (water statistics), the Basel Convention (hazardous waste), UN Regional Commissions on similar issues, including translation.
- Sent to National Statistical Offices and Ministries of Environment.
- Linked to economic statistics through the use of ISIC Rev. 4 in several tables allowing for better alignment with System of National Accounts, System of Environmental-Economic Accounting.

UNSD/UNEP Questionnaire on Environment Statistics

- To promote data quality assurance, UNSD carries out extensive data validation procedures that include built-in automated procedures, manual checks and cross-references to national sources of data.

- Communication is carried out with countries for clarification and validation of data.

- UNSD does **not make any estimation or imputation for missing values** so the number of data points provided are actual country data which are considered to be official statistics.

- Only data that are considered accurate or those confirmed by countries during the validation process are included in UNSD's environment statistics database and disseminated.

Water Questionnaire

Water

W1: Renewable Freshwater Resources (SDG-related)

W2: Freshwater Abstraction and Use (SDG-related)

W3: Water Supply Industry (ISIC 36) (SDG-related)

W4: Wastewater Generation and Treatment (SDG-related)

W5: Population Connected to Wastewater Treatment

http://unstats.un.org/unsd/environment/questionnaire.htm

Table W1: Renewable Freshwater Resources

Line	Category	Unit	
1	Precipitation	Millions m^3 per year	الهطول
2	Actual evapotranspiration		التبخر الفعلي
3	Internal flow (=1-2)		التدفق الداخلي =(2-1)
4	Inflow of surface and groundwaters from neighbouring countries		التدفق الداخل للمياه السطحية والمياه الجوفية من البلدان المجاورة
5	**Renewable freshwater resources (=3+4)**		**موارد المياه العذبة المتجددة =(4+3)**
6	Outflow of surface and groundwaters to neighbouring countries		التدفقات الخارجة للمياه السطحية والمياه الجوفية إلى البلدان المجاورة
7	Of which: Secured by treaties		ومنها: المكفول بمعاهدات
8	Not secured by treaties		غير المكفول بمعاهدات
9	Outflow of surface and groundwaters to the sea		التدفق الخارج للمياه السطحية والمياه الجوفية إلى البحار

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)**	**المياه العذبة المستخرجة =(2+1)**	
4	*Of which abstracted by:* Water supply industry (ISIC 36)	ما استُخرج منها بواسطة: صناعة إمدادات المياه (ISIC 36)	
5	Households	الأسر المعيشية	
6	Agriculture, forestry and fishing (ISIC 01-03)	الزراعة والحراجة وصيد الأسماك (ISIC 01-03)	
7	Manufacturing (ISIC 10-33)	الصناعة التحويلية (ISIC 10-33)	
8	Electricity industry (ISIC 351)	صناعة الكهرباء (ISIC 351)	
9	Other economic activities	الأنشطة الاقتصادية الأخرى	
10	Desalinated water		
11	Reused water		
12	Imports of water		
13	Exports of water		
14	**Total freshwater available for use (=3+10+11+12-13)**		
15	Losses during transport		
16	**Total freshwater use (=14-15)**		
17	Of which used by: Households		
18	Agriculture, forestry and fishing (ISIC 01-03)		
19	Of which for: Irrigation in agriculture		
20	Manufacturing (ISIC 10-33)		
21	Electricity industry (ISIC 351)		

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	Manufacturing (ISIC 10-33)	
7	Electricity industry (ISIC 351)	
8	Other economic activities	
	Population supplied by water supply industry (ISIC 36)	
19	Total population supplied by water supply industry (ISIC 36)	%
10	Urban population supplied by water supply industry (ISIC 36)	
11	Rural population supplied by water supply industry (ISIC 36)	

W4: Wastewater Generation and Treatment

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

What's different this collection round?

- UNSD's periodic dissemination of data when finalized
- UNSD and several key users (institutional: [UNEP, UN-HABITAT, World Bank]; academia) of this data collection have been liaising with one another on new (often SDG-related) issues.

UNSD data dissemination

UNSD disseminates data through:

- UNSD Environmental Indicators (Air and climate, Biodiversity, Energy and minerals, Forests, Governance, Inland water resources, Land and agriculture, Marine and coastal areas, Natural disasters, and Waste) (http://unstats.un.org/unsd/environment/qindicators.htm)
- Country Files (access to country files is restricted to countries and international organizations that participate in the data collection (http://unstats.un.org/unsd/environment/Questionnaires/index.asp)
- Country Snapshots (these include UNSD environmental indicators and other economic/demographic data (http://unstats.un.org/unsd/environment/Questionnaires/country_snapshots.htm)
- Environment statistics in UNData (http://data.un.org/)

UNSD/UNEP Questionnaire on Environment Statistics– Conclusion

- Data completeness and data quality remain a challenge (in particular for developing countries).
- Challenges: national capacity constraints (financial, human, technical), inadequate institutional set-up and collaboration within countries in environment statistics.
- Measures to address challenges: Environment Statistics Section of UNSD, in collaboration with key partners, is assisting countries in strengthening their statistical capacity through training workshops and direct country assistance.

The 17 SDGs


SUSTAINABLE DEVELOPMENT GOALS
1 NO POVERTY
2 ZERO HUNGER
3 GOOD HEALTH AND WELL-BEING
4 QUALITY EDUCATION
5 GENDER EQUALITY
6 CLEAN WATER AND SANITATION
7 AFFORDABLE AND CLEAN ENERGY
8 DECENT WORK AND ECONOMIC GROWTH
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
10 REDUCED INEQUALITIES
11 SUSTAINABLE CITIES AND COMMUNITIES
12 RESPONSIBLE CONSUMPTION AND PRODUCTION
13 CLIMATE ACTION
14 LIFE BELOW WATER
15 LIFE ON LAND
16 PEACE, JUSTICE AND STRONG INSTITUTIONS
17 PARTNERSHIPS FOR THE GOALS

Selected environmentally-related SDG indicators

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

Ensure availability and sustainable management of water and sanitation for all

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

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

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
- 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.

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

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

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

ESCWA region's data

- 7 out of the 18 ESCWA countries have provided data for at least one year in the 2016 collection round for the Questionnaire which can be utilized for SDG indicator compilation.
- There are 24 variables in the Questionnaire which can be used in SDG indicator compilation.
- Of the 7 countries providing data for SDG compilation, data were provided for between 7 and 18 of those 24 variables.