INTRODUCTION TO DATA COLLECTION ACTIVITIES

Session Three: Environment Statistics Data Collection
International data collection and reporting requirements

Seventh Meeting of the Expert Group on Environment Statistics
17 November 2020

Introduction of data collection activities

- UNSD conducted an inventory of regular, international primary environmental data collection, reporting and dissemination from countries undertaken by the United Nations, specialized agencies, intergovernmental organizations, and conventions.

- In light of the SDG indicators, and the emerging demands for climate change statistics and indicators, there is great demand for the coordination of data collection and dissemination on environmental statistics and indicators. The Inventory serves as a resource to alleviate the reporting burden on countries.

- A standardized reporting format, summarizes country data collection by each institution.

- Countries provide data to these international institutions through questionnaires, national communications or online reporting.

- Three inventories have been conducted, in 2015, 2017 and 2019.

Introduction of data collection activities

- This inventory is compiled by UNSD in collaboration with the members of the Intersecretariat Working Group on Environment Statistics (IWG-ENV) and other partner organizations:

  https://unstats.un.org/unsd/envstats/coordination

  https://unstats.un.org/unsd/envstats/Inventory_datacollection_dissemination

- Results included in the Background Document to the Report of the Secretary-General on Environment Statistics to the 51st session of the Statistical Commission, Annex 2:

  https://unstats.un.org/unsd/statcom/51st-session/documents/BG-item-4e-EnvironmentStats-E.pdf

- The inventory on data collections serves as a response to the mandate from the 34th session of the United Nations Statistical Commission. This mandate empowered UNSD to convene the IWG-ENV to develop and harmonize concepts, methods and standards, as well as coordinate data collection and capacity development in environment statistics.

Objectives

- Support institutions' continuous efforts to promote data sharing and exchanges on the basis of common data templates and to encourage in-depth assessments of data.

- Provide a platform to compare and harmonize data collection from a methodological point of view.

- Provide countries and institutions with a picture of data flows from various national sources with the intention to reduce reporting burden and avoid duplication of efforts, both at the national and international levels.

- Encourage countries to provide their own, national and official data, and to encourage users to refer to these data as a matter of priority over external or non-official data.

Inventory includes following information

Information on data collection activities from the following institutions and programmes are included:

Conventions	UN agencies, international, intergovernmental organizations		
• Basel Convention	• CARICOM	• FAO-AQUASTAT	• UNEP-GEMS-Water
• CBD	• COMESA	• FAO-FAOSTAT	• UNEP-Ozone
• CMS	• CRED	• FAO-FISHSTAT	• UNEP-WCMC
• CITES	• OECD	• FAO-FRA	• UNICEF
• Ramsar Convention	• ECE	• Eurostat	• UNSD
• Stockholm Conv. (POPs)	• ECLAC	• IEA	• WHO
• UNCCD	• EEA	• IUCN	• World Bank
• UNFCCC	• ESCAP	• UN-HABITAT	
• World Heritage Convention	• Eurostat	• UNDRR	

Example of a template

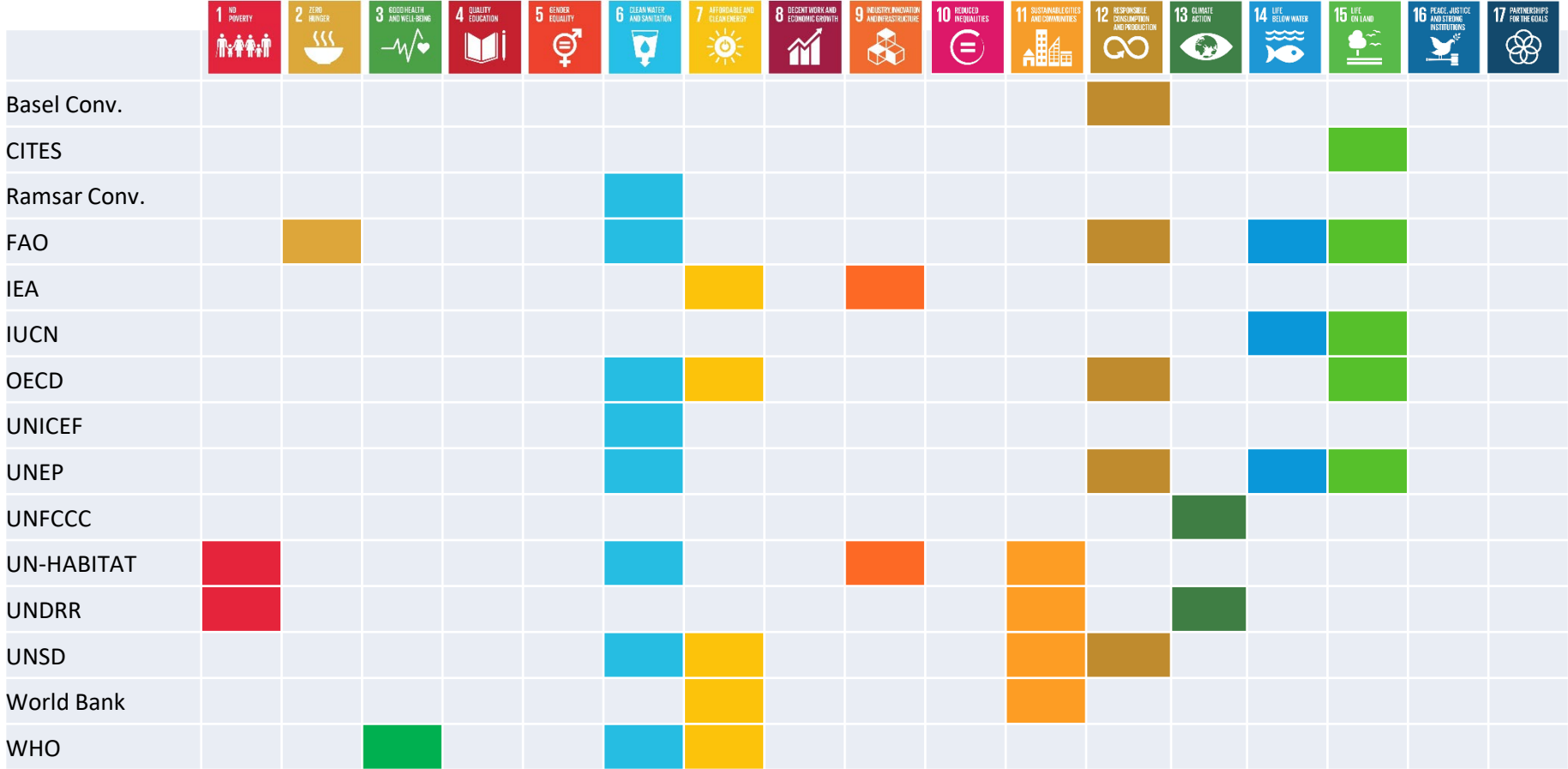| Institution	Food and Agriculture Organization of the United Nations (FAO); AQUASTAT				
Website	http://www.fao.org				
Focal point	Mr. Pietro Gennari, FAO Chief Statistician, chief-statistician@fao.org				
Description of data collection	AQUASTAT. Topics include: water resources, water uses, dams, irrigation and drainage, wastewater, institutional frameworks.				
Periodicity of data collection	Dual update: A light annual update with SDG-related variables and A full data set update every 5 years.	**Geographical coverage**	Global	**Temporal coverage**	AQUASTAT: 1961-2015, data availability varies.
SDG coverage	6.4.1 Change in water-use efficiency over time (Tier II) 6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources (Tier I)				
Outputs	AQUASTAT: http://www.fao.org/nr/water/aquastat/main/index.stm AQUASTAT Profiles (147 country, 6 regions and 11 river basins): http://www.fao.org/nr/water/aquastat/countries_regions/index.stm				
Metadata (link)	Refers to the AQUASTAT glossary for definition of the variables included in the database: http://www.fao.org/nr/water/aquastat/data/glossary/search.html?lang=en Three levels of metadata (data-point, variable, database) are described at: http://www.fao.org/nr/water/aquastat/metadata/index.stm				
Methodological guidance used for data collection	International Recommendations for Water Statistics: https://unstats.un.org/unsd/envaccounting/irws/ The International Standard Industrial Classification of All Economic Activities, Rev. 4: https://unstats.un.org/unsd/cr/registry/isic-4.asp World Programme for the Census of Agriculture 2020 (based on the CPC classification): http://www.fao.org/3/a-i4913e.pdf				
Data validation process	AQUASTAT is currently moving from a data collection based on country surveys filled in by national consultants towards a data collection similar to the FAO global Forest Resources Assessment (FRA, see above) based on officially nominated national correspondents. Manual and automated cross-checking is made within time-series, between variables, with neighbouring countries and other existing data sources. Regular contacts between national correspondents and FAO staff form part of the validation process and ensure country endorsement.				

Responses by topics

- The current responses to the inventory show that institutions collect and disseminate a multitude of environment-related data and statistics.

- Several environment topics, including water and waste, feature in multiple institutions' data collection mandates.

Count of data collections (reporting) per topic

statistics/indicators   descriptive
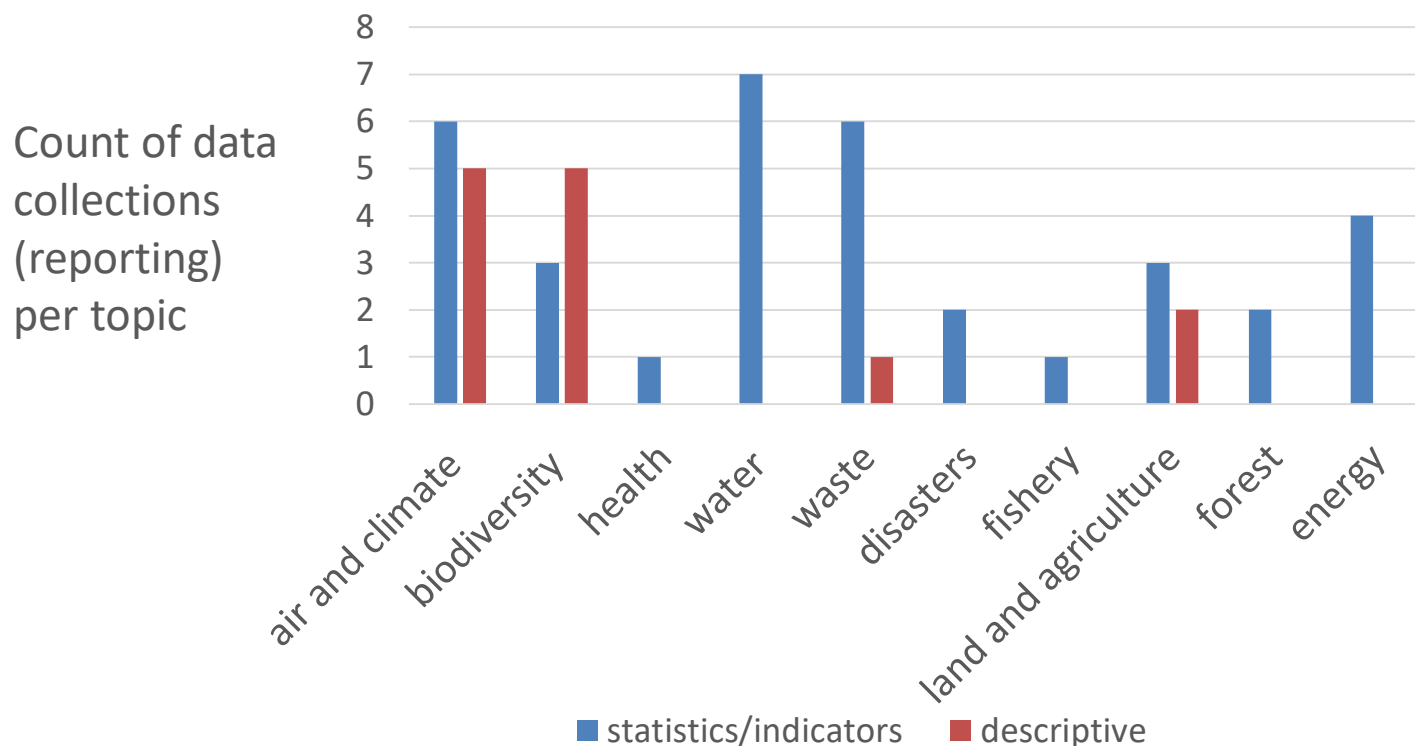
Some data related to the SDGs

	1 No Poverty	2 Zero Hunger	3 Good Health	4 Quality Education	5 Gender Equality	6 Clean Water	7 Affordable Energy	8 Decent Work	9 Industry	10 Reduced Inequalities	11 Sustainable Cities	12 Responsible Consumption	13 Climate Action	14 Life Below Water	15 Life on Land	16 Peace Justice	17 Partnerships
Basel Conv.												X					
CITES															X		
Ramsar Conv.						X											
FAO		X				X						X		X	X		
IEA							X		X								
IUCN														X	X		
OECD						X	X					X			X		
UNICEF						X											
UNEP						X						X		X	X		
UNFCCC													X				
UN-HABITAT	X					X			X		X		X				
UNDRR	X										X		X				
UNSD						X	X				X	X					
World Bank							X				X						
WHO			X			X	X										

- A lot of data collection effort on SDG 6: Clean water and sanitation, 7: Affordable and clean energy, 11: Sustainable cities and communities, 12: Responsible consumption and production, 14: Life below water, and 15: Life on land.

Example: Water data collection spanning across many institutions and multiple SDG indicators

Multiple organizations work on water-related statistics among whom there is established collaboration, e.g., in the areas of water resources, abstraction, use, supply and wastewater.

- **FAO-AQUASTAT**: water resources, water uses, dams, irrigation and drainage, wastewater, institutional frameworks.

- **OECD**: inland waters, marine environment, water quality, wastewater.

- **Ramsar Convention**: concerns about change in the extent of water-related ecosystems over time.

- **UNICEF** and **WHO**: Joint Monitoring Programme (JMP) for water supply and sanitation.

- **UN-HABITAT**: country, urban, rural, and city level data on selected number of environmental related indicators such as access to water, sanitation, etc.

- **UNEP**: Global Environment Monitoring System for Water (GEMS-Water), water quality data of ground and surface waters.

- **UNSD**: freshwater resources, abstraction and use, supply, wastewater.

Key issues

- Need to further complete and regularly update the inventory.

- Need clearer understanding of what is regular primary data collection.

- Need more streamlined thematic categorization.

- Need to distinguish internationally comparable statistics, from non-comparable (indicators), from descriptive information.

- Need more specific temporal and geographic coverage and periodicity.

- Specify type of reporting: mandatory, optional, voluntary.

The way forward

Summaries

- There is rich information in this data collection inventory.

- Should be conducted on a regular basis.

- It helps identifying the data overlaps and data gaps, this inventory can be used to synchronize institutions to collaborate better on the data cycles, definitions, methodologies, etc.

Questions

- Are there any institutions that were not currently covered?

- Are there any other topics that are worthy of additional or closer coordination?

- Are there any suggestions on improving the template, in terms of structure, e.g. types of reporting (mandatory, optional, voluntary)?

Thank you!

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