Monitoring water and sanitation in the 2030 Agenda for Sustainable Development

Integrated Monitoring Initiative for SDG 6

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UN WATER

Global agenda for people, planet and prosperity

In September 2015, Heads of State from around the world gathered in New York to adopt the 2030 Agenda for Sustainable Development, an ambitious "plan of action for people, planet and prosperity", aiming to do nothing less than "transform our world". Building on the United Nations Millennium Declaration and its eight Millennium Development Goals (MDGs, 2000–2015), the 2030 Agenda and its 17 Sustainable Development Goals (SDGs) expand the earlier focus on poverty reduction to now cover all aspects of sustainable development in all countries worldwide to ensure that no one is left behind. One of the SDGs is dedicated to water and sanitation (SDG 6) and seeks to "ensure availability and sustainable management of water and sanitation for all".

The SDGs provide a framework for governments to develop policies and programmes to target today's most urgent issues, and for civil society to hold governments to account. Country ownership is clearly highlighted across the 2030 Agenda, and inspired by the global ambition of the SDGs, countries need to set their own targets that take national circumstances into account. The role of the United Nations system is to support countries in realizing the Agenda.

Towards a sustainable water future

To ensure sustainable management of water and sanitation for all, it is essential to look at the water cycle in its entirety, including all uses and users. Countries need to move away from the sectoral development and management of water resources in favour of a more integrated approach that can balance different needs fairly. This is exactly what SDG 6 seeks to do, by expanding the MDG focus on drinking water and basic sanitation to include water, wastewater and ecosystem resources. Together with SDG target 11.5 on water-related disasters, all the main aspects of freshwater in the context of sustainable development are covered. Bringing these components together under one goal is an initial step towards addressing sector fragmentation and enabling coherent and sustainable management, thereby establishing SDG 6 as a major step towards a sustainable water future.

Tracking progress towards the 2030 Agenda

To ensure progress and strengthen accountability, it is essential to set up solid mechanisms for results monitoring and reporting. To this end, United Nations Member States have developed a set of global indicators through the Inter-agency and Expert Group on SDG Indicators (IAEG-SDGs). The final indicator framework includes about 230 indicators, of which 11 track progress towards SDG 6.

The 2030 Agenda specifies that global follow-up and review shall primarily be based on national official data sources, which is why countries are responsible for collecting and sharing indicator data and metadata for the purpose of global reporting. The data are compiled and validated by indicator-specific custodian agencies, which then submit the data to the United Nations Statistics Division (UNSD) to in-

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form follow-up and review at the annual High-level Political Forum on Sustainable Development (HLPF).

How do water and sanitation data add value to countries?

Credible and timely water and sanitation data provide numerous social, economic and environmental benefits in both public and private sectors, in particular:

- **Stronger accountability:** Data can communicate that work is being done and progress is happening. Data can enable greater transparency, which reduces the incidence of waste and corruption.
- **Attract commitment and investments:** Data can quantify problems and make it easier to communicate needs for political commitment and public and private investments.
- **Evidence-based decision-making:** Data can inform policy- and decision makers of where to focus efforts and which solutions are most effective to ensure the greatest possible gains with existing resources.
- **Leaving no one behind:** Disaggregated data can help identify specific groups or areas with unmet needs and higher levels of risk, to which interventions can be targeted.

Water and sanitation monitoring involves a wide range of stakeholders, spanning various sectors and levels of government. Bringing together these stakeholders and their data increases the value of the data. As such, integration across indicators can bring:

- **More efficient use of monitoring resources:** Cross-sectoral coordination and collaboration can create synergies in existing monitoring efforts, increasing data availability and reducing duplication and reporting burdens.
- **More holistic policies and integrated resources management:** A comprehensive data set can allow for better informed policy and investment decisions that account for synergies and trade-offs between social, economic and environmental development objectives. It can also enable an integrated management approach which can reduce institutional fragmentation.

How can the global indicators be used?

It is important to recognize that different types of indicators serve different purposes.

The global indicators are broadly defined to track progress towards the SDGs at the global level, with countries asked to provide one national value (aggregate) for each global indicator. Having one national value can act as a very powerful message, emphasizing the need for strategic focus and internal and international investment. It can also be used to communicate progress to the general public in order to ensure accountability. For example, in 2015, only 40 per cent of wastewater in Country X was safely treated, with the lowest performance in Region Y. In 2020, thanks to strong national and international commitments, 50 per cent of Country X's wastewater was safely treated.

For policy- and decision-making and planning at the national and subnational levels, more detailed information is needed to prioritize, optimize and plan interventions. The global indicators are still useful, but the data need to be disaggregated spatially and temporally, as well as by sector, subcomponent and different socioeconomic strata. For example, in City X, 60 per cent of the population uses on-site facilities, of which only 30 per cent are safely managed. The situation is particularly bad in District Y, where only 5 per cent is safely managed. The local government is therefore focusing on improving on-site facilities (rather than building an expensive treatment plant), starting with District Y. City X is also home to many hazardous industries. To relieve the existing secondary-level treatment plant, and the river into which it discharges, the local government is investing in the stricter enforcement of pollution laws and discharge permits (again, rather than building an expensive treatment plant). The enforcement efforts are particularly strict during the dry season, when the receiving river has a low base flow and is more sensitive to high pollution loads.

Targets and indicators

Target 6.1 By 2030, achieve universal and equitable access to safe and affordable drinking water for all

▶ **6.1.1 Proportion of population using safely managed drinking water services**

- **Custodian agency:** World Health Organization (WHO) and United Nations Children's Fund (UNICEF)
- **Example of national data sources:** National Statistical Office for household surveys and censuses, combined with institutional/utility records.

Data on access to safely managed drinking water services can help target efforts to vulnerable groups.

Target 6.2 By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations

▶ **6.2.1 Proportion of population using safely managed sanitation services, including a handwashing facility with soap and water**

- **Custodian agency:** WHO and UNICEF
- **Example of national data sources:** National Statistical Office for household surveys and censuses, combined with institutional/utility records.

Sanitation data can be used to identify any correlation with diseases and to illustrate the social and economic benefits of investing in sanitation.

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

▶ **6.3.1 Proportion of domestic and industrial wastewater flow safely treated**

- **Custodian agency:** WHO and United Nations Settlement Programme (UN-Habitat)
- **Example of national data sources:** National line ministries and institutions (e.g. for water, sanitation, the environment, health, public services, planning, housing, infrastructure, production), utilities and on-site service providers, the National Statistical Office for household surveys and registers of economic activities.

Wastewater utilities often collect data on wastewater collection and treatment for management and regulatory purposes.

▶ **6.3.2 Proportion of bodies of water with good ambient water quality**

- **Custodian agency:** United Nations Environment Programme (UNEP)
- **Example of national data sources:** National line ministries and institutions (e.g. for water, the environment, natural resources), universities and research institutions, non-governmental organizations (NGOs) and citizens' science initiatives.

Ambient water quality data provide a picture of water body health over time and help identify pollution hotspots. This can inform the enforcement of pollution laws and discharge permits.

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

▶ **6.4.1 Change in water-use efficiency over time**

- **Custodian agency:** Food and Agriculture Organization of the United Nations (FAO)
- **Example of national data sources:** National line ministries and institutions (e.g. for water, agriculture and the environment), National Statistical Office.

Is national economic growth dependent on the use of water resources? Data enable targeted interventions to sectors with high water use and low use efficiency.

▶ **6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources**

- **Custodian agency:** FAO
- **Example of national data sources:** National line ministries and institutions (e.g. for water, agriculture and the environment), National Statistical Office.

Water-basin level data on water stress allow for an analysis of water scarcity and its impact on the population, the economy and the environment.

Target 6.5 By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate

▶ **6.5.1 Degree of integrated water resources management implementation (0–100)**

· **Custodian agency:** UNEP
· **Example of national data sources:** National line ministries and institutions, NGOs, academia and business.
Integrated water resources management (IWRM) monitoring calls for a participatory approach in which representatives from across sectors are brought together to discuss and validate data, paving the way for coordination and collaboration beyond monitoring.

▶ **6.5.2 Proportion of transboundary basin area with an operational arrangement for water cooperation**

· **Custodian agency:** United Nations Economic Commission for Europe (UNECE) and United Nations Educational, Scientific and Cultural Organization (UNESCO)
· **Example of national data sources:** National line ministries and institutions (e.g. for water, the environment, natural resources, hydrology, geology).
Monitoring of transboundary cooperation provides impetus for countries to assess the current level of cooperation with neighbouring countries and to set targets for improved coordination.

Target 6.6 By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes

▶ **6.6.1 Change in the extent of water-related ecosystems over time**

· **Custodian agency:** UNEP
· **Example of national data sources:** Line ministries and institutions (e.g. for the environment, water, natural resources), universities and research institutions, NGOs and citizens' science initiatives (ground-based surveys), space agencies (Earth observations).
Ecosystem data help protect and conserve ecosystems and management objectives to be set.

Target 6.a By 2030, expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies

▶ **6.a.1 Amount of water- and sanitation-related official development assistance that is part of a government-coordinated spending plan**

· **Custodian agency:** WHO and Organisation for Economic · Co-operation and Development (OECD)
· **Example of national data sources:** National line ministries and institutions (e.g. for water, sanitation, the environment, health, public services, planning, finance).
Financial monitoring results in transparency and a better understanding of the financial flows in the sector, which in turn can increase efficiency and stimulate further internal and external funding.

Target 6.b Support and strengthen the participation of local communities for improving water and sanitation management

▶ **6.b.1 Proportion of local administrative units with established and operational policies and procedures for participation of local communities in water and sanitation management**

· **Custodian agency:** WHO
· **Example of national data sources:** National line ministries and institutions (e.g. for water, sanitation, the environment, health, public services, planning, finance).
Data collection stimulates active stakeholder participation, which is essential to ensure accountability and long-term sustainability of water and sanitation solutions.

Robbert Moree

Integrated Monitoring Initiative for SDG 6

Through the UN-Water Integrated Monitoring Initiative for SDG 6 (IMI-SDG6), the United Nations seeks to support countries in monitoring water- and sanitation-related issues within the framework of the 2030 Agenda for Sustainable Development, and in compiling country data to report on global progress towards SDG 6.

IMI-SDG6 brings together the United Nations organizations that are formally mandated to compile country data on the SDG 6 global indicators, and builds on ongoing efforts such as the WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP), Global Environment Monitoring System for Water (GEMS/Water), FAO's Global Information System on Water and Agriculture (AQUASTAT) and UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS).

The joint effort enables synergies across United Nations organizations as well as a harmonization of methodologies and requests for data, leading to more efficient outreach and a reduced reporting burden. At the national level, IMI-SDG6 also promotes intersectoral collaboration and consolidation of existing capacities and data across organizations.

The overarching goal of IMI-SDG6 is to accelerate the achievement of SDG 6, by increasing the availability of high-quality data for evidence-based policymaking, regulations, planning and investments at all levels.

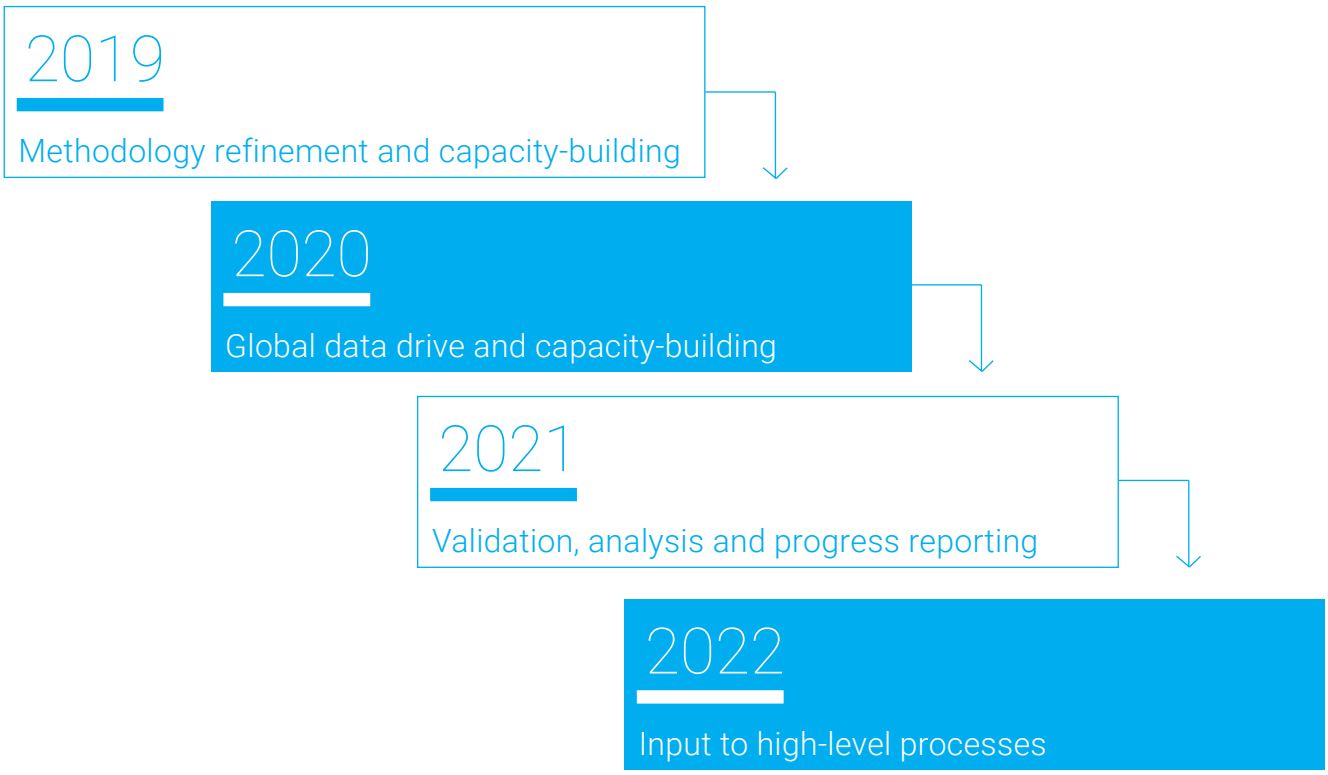
More specifically, IMI-SDG6 aims to:

1) support countries to collect, analyse and report SDG 6 data

2) support policy- and decision makers at all levels to use this data.

Result highlights from 2015–2019

- Development and in-country testing of methodologies for monitoring all indicators.
- Development of capacity-building tools.
- Baseline data collection for all indicators in up to 176 countries, with the average United Nations Member State reporting on seven out of 12 indicators.
- Direct engagement with 95 countries through bilateral engagement and regional and global workshops.
- Baseline reports for all SDG 6 indicators and a synthesis report on the overall status of SDG 6.
- SDG 6 Data Portal with data on all SDG 6 indicators and other key social, economic and environmental parameters.
- Network of overall and indicator-specific focal points in countries, compiled in an online database.



Priorities and timeline for 2019–2022

The second phase of IMI-SDG6 (2019–2022) focuses on building country capacity and ownership. While methodological refinement and global reporting will remain important, emphasis will be placed on increasing the capacities in countries to collect, report and make use of data. More specifically, the following priorities have been identified together with countries:

- There is a need to **broaden and deepen the available data** for the 11 global indicators. While some indicators have already achieved a critical mass of countries reporting, others have gaps that need to be filled to be able to perform meaningful national, regional and global analyses.

- To support the generation of data for global reporting and to ensure long-term sustainability, it is necessary to further **increase national-level capacity for SDG 6 monitoring,** ensuring that countries have the skills and people in place to collect and use data for each indicator.

- Indicator-specific capacity needs to be complemented by national and subnational **institutional processes that mainstream monitoring within ministries and link monitoring to decision-making**. This will require finding ways to harmonize the monitoring of global indicators with the monitoring of national-level indicators, while promoting **intersectoral** processes that look across and beyond SDG 6.

Support to countries

To achieve these priorities, IMI-SDG6 will provide a range of technical and institutional capacity-building support to countries. This includes written **methodologies** and **guidelines** for monitoring the global indicators as well as virtual support such as **help desks**, **webinars** and **online tutorials**. Depending on the indicator, more intensive support is also available, such as **in-country technical assistance** and **training workshops** at the national, regional and global levels. IMI-SDG6 also focuses on the development of **communities of practice** and **collaboration between countries** to encourage cross-country learning and the identification of good practices.

Data on water and sanitation are collected by a wide variety of stakeholders, across sectors and levels of government. Thanks to their involvement in the national monitoring process, countries may see a large increase in the available data. However, with multiple stakeholders, a clear institutional set-up for the monitoring process is needed, with roles and responsibilities clearly defined. To this end, IMI-SDG6 is supporting the **identification and maintenance of overall and indicator-specific focal points**, and encourages communication and coordination among these.

Learn more about all available support at [www.sdg6monitoring.org.](http://www.sdg6monitoring.org)

Resources

Websites

www.sdg6monitoring.org
www.sdg6data.org
www.unwater.org

Institutional and cross-cutting

monitoring@unwater.org

Technical

6.1.1 on drinking water
WHO/UNICEF: info@washdata.org

6.2.1 on sanitation and hygiene
WHO/UNICEF: info@washdata.org

6.3.1 on wastewater treatment
WHO/UN-Habitat: johnstonr@who.int and graham.alabaster@un.org

6.3.2 on ambient water quality
UNEP: sdg632@un.org

6.4.1 on water-use efficiency
FAO: Riccardo.Biancalani@fao.org

6.4.2 on water stress
FAO: Riccardo.Biancalani@fao.org

6.5.1 on integrated water resources management
UNEP: iwrmsdg651@un.org

6.5.2 on transboundary cooperation
UNECE/UNESCO: transboundary_water_cooperation_reporting@un.org and transboundary_water_cooperation_reporting@unesco.org

6.6.1 on water-related ecosystems
UNEP: sdg661@un.org

6.a.1 on international cooperation
WHO/OECD: Glaas@who.int

6.b.1 on stakeholder participation
WHO: Glaas@who.int

With support from:

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