6 CLEAN WATER AND SANITATION

The Sustainable Development Goals Extended Report 2022

Note: The Statistics Division of the United Nations Department of Economic and Social Affairs (UNSD) prepares the annual The Sustainable Development Goals Report, also known as the glossy report, based on storyline inputs submitted by UN international agencies in their capacity as mandated custodian agencies for the SDG indicators. However, due to space constraints, not all information received from custodian agencies is able to be included in the final glossy report. Therefore, in order to provide the general public with all information regarding the indicators, this 'Extended Report' has been prepared by UNSD. It includes all storyline contents for each indicator as provided by the custodian agencies and is unedited. For instances where the custodian agency has not submitted a storyline for an indicator, please see the custodian agency focal point information linked for further information.

Contents

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

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

Indicator 6.1.1: Proportion of population using safely managed drinking water services

Indicator 6.2.1: Proportion of population using (a) safely managed sanitation services and (b) a hand-washing facility with soap and water

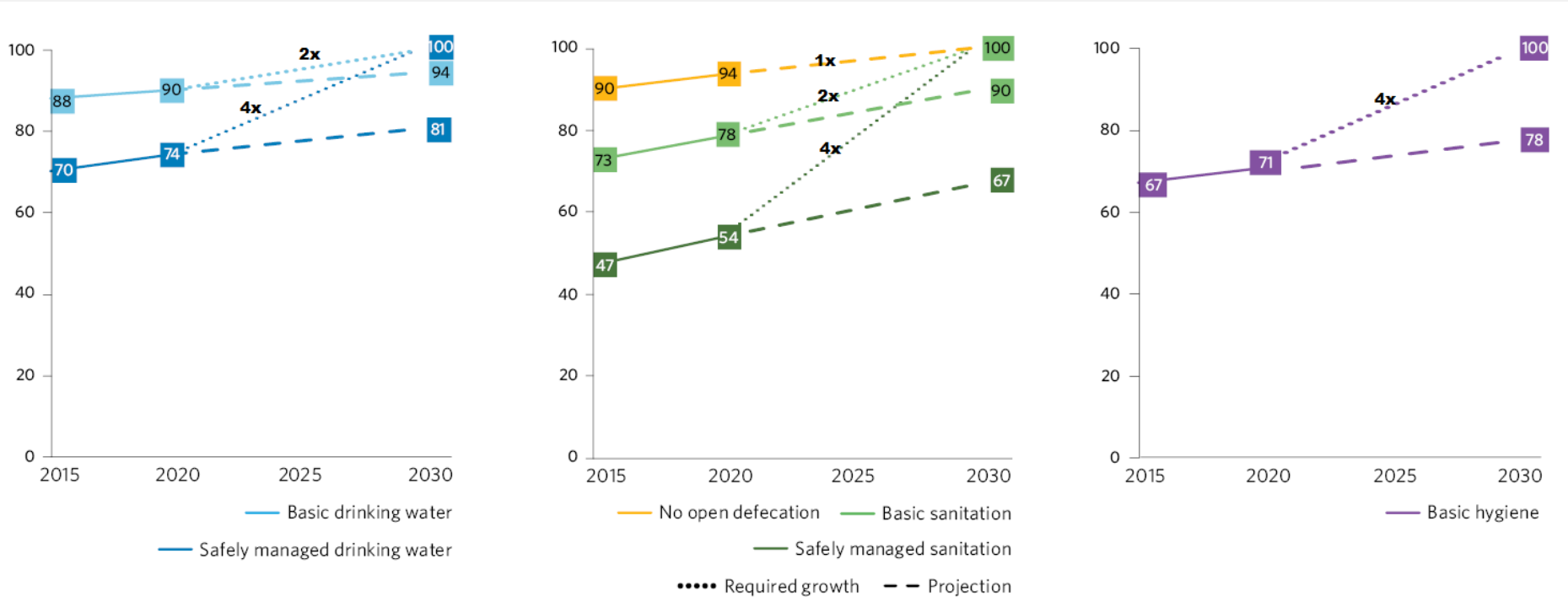
Achieving SDG WASH targets by 2030 will require a quadrupling of current rates of progress

Between 2015 and 2020, the proportion of the global population using safely managed drinking water services (footnote 1) increased from 70 to 74 percent. However, the current rate of progress would need to increase four-fold, to 2.6 percentage points per year, in order to reach universal coverage by 2030. In sub-Saharan Africa, progress has been more rapid but because of a lower baseline, rates would need to increase by 11-fold. In contrast, in Latin America and the Caribbean coverage is higher but historical rates of progress are slower, and would need to increase by 14-fold to reach universal access by 2030. If current rates of progress remain unchanged, 19 percent of the world's population (1.6 billion people) will still lack safely managed drinking water services in 2030.

The global population using safely managed sanitation services (footnote 2) increased from 47 percent in 2015 to 54 percent in 2020, more than double the rate of progress for safely managed drinking water. However, because of the lower baseline, progress would also need to increase four-fold to reach universal coverage by 2030. The fastest rates of progress were seen in Eastern and South-Eastern Asia (2.0 percentage points per year) and in Central and Southern Asia (1.7 percentage points per year). Still, these rates would need to double and triple, respectively, to reach universal access by 2030. If historical rates of progress continue, a third of the world's population (33%; 2.8 billion people) will still lack safely managed sanitation services in 2030.

Between 2015 and 2020, the population with a basic hygiene service (footnote 3) rose from 67 to 71 percent, or 0.7 percentage points per year. This means that at the start of the COVID-19 global pandemic in 2020, 2.3 billion worldwide still lacked a basic handwashing facility with soap and water at home, including 670 million with no handwashing facility at all. Over half (369m) of those with no handwashing facility lived in sub-Saharan Africa. Progress would need to increase four-fold to reach universal access by 2030; if historical rates hold, 22% of the population (1.9 billion people) will still be unable to wash their hands with soap and water at home in 2030.

Global coverage of WASH services, 2015-2020 (%), and acceleration required to achieve universal coverage by 2030



Footnote 1: Drinking water from an improved water source which is located on premises, available when needed and free from faecal and priority chemical contamination. Improved water sources include piped water, boreholes or tubewells, protected dug wells, protected springs and packaged or delivered water.

Footnote 2: Use of improved facilities which are not shared with other households and where excreta are safely disposed in situ or transported and treated off-site. Improved sanitation facilities include flush/pour flush to piped sewer system, septic tanks or pit latrines; ventilated improved pit latrines, composting toilets or pit latrines with slabs.

Footnote 3: Availability of a handwashing facility with soap and water at home.

Additional resources, press releases, etc. with links:

- Additional sources/documents: Progress on household drinking water, sanitation and hygiene 2000-2020: five years into the SDGs. Geneva: WHO. World Health Organization and United Nations Children's Fund (2021)
- Link: https://washdata.org

Storyline author(s)/contributor(s): Richard Johnston, World Health Organization; Tom Slaymaker, UNICEF

Custodian agency(ies): WHO,UNICEF

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 domestic and industrial wastewater flows safely treated

The global volumes of total and industrial wastewater generated and treated remain largely unknown.

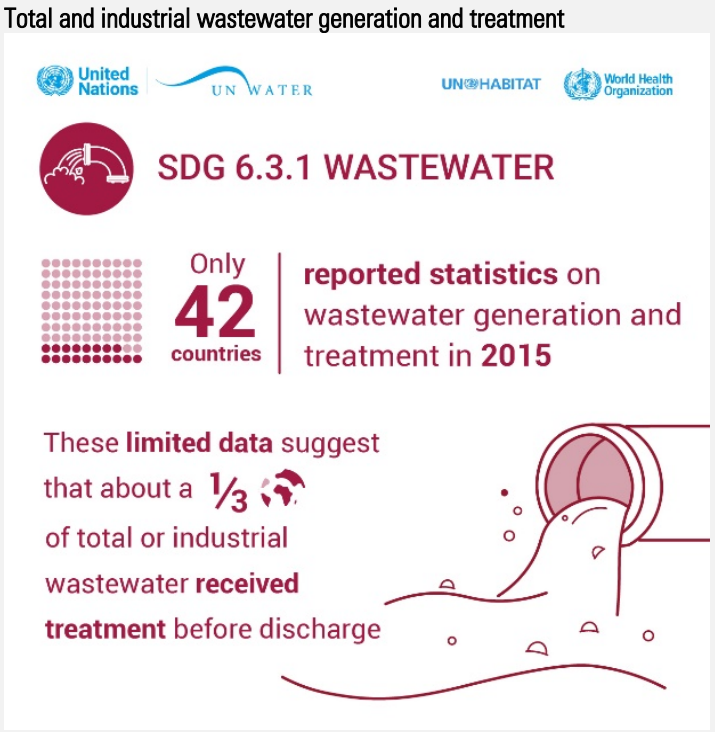
Improving wastewater management and monitoring is critically important for better protecting our limited and crucial freshwater resources from bacterial and chemical contamination, which can respectively cause outbreaks related to waterborne diseases and acute health effects. The response to the COVID-19 pandemic has also demonstrated the utility of wastewater-based disease surveillance by monitoring SARS-CoV-2 RNA in urban wastewater streams. Improving wastewater management and monitoring is however not only fundamental for protecting public health and aquatic ecosystems and biodiversity, but also for mitigating and adapting to climate change in the context of increasing water scarcity and growing urbanisation in many regions. The safe recovery and reuse of water (and nutrients) from wastewater effluents represents a major opportunity for responding to the foreseen increases in industrial, agricultural and domestic water demands. Safely treated wastewater can be used not only to increase water supplies, but also to recharge aquifers, and for supplementing environmental flows during drought.

Sustainable Development Goal (SDG) indicator 6.3.1 aims to track the percentage of wastewater flows from different point sources (households, services, industries, and agriculture) that are treated in compliance with national or local standards. The 2021 progress report showed that about a third of global total and industrial flows of wastewater were treated in 2015, among the 42 countries (covering 18 per cent of the global population) with data available on total wastewater, whereas only 14 countries (covering 4 per cent of the global population) reported on their proportion of industrial wastewater treated. As a consequence, there are yet insufficient water statistics reported to produce global and regional estimates on the proportion of total and industrial wastewater treated, including from high-income industrialised countries which in many cases have well-developed monitoring systems to determine compliance with effluent limitations.

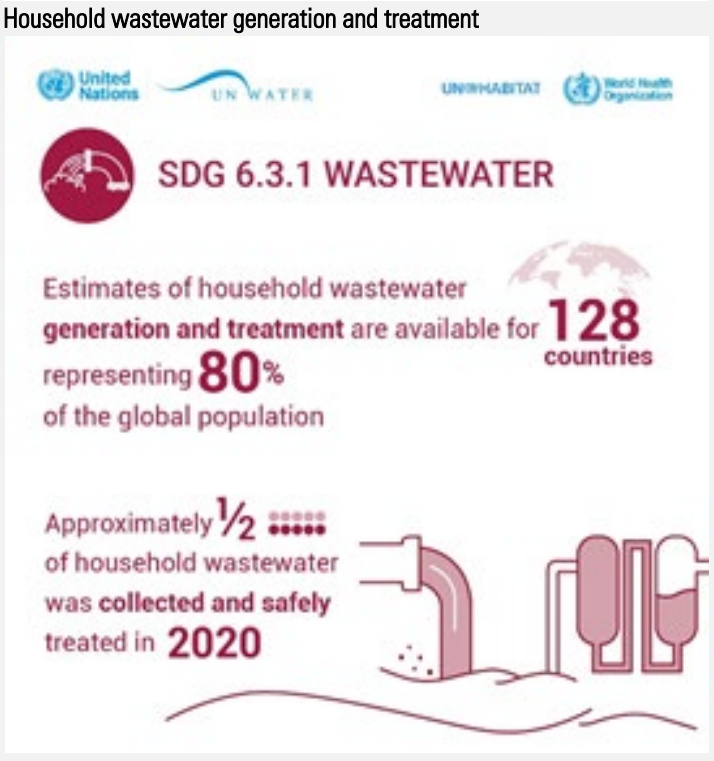
Estimates for the generation and treatment of household wastewater could be produced for 128 countries and territories in 2020 (covering 80 per cent of the global population), and , showing that nearly half (44 per cent) of household wastewater was discharged without safe treatment. Globally, 56 per cent of household wastewater flows were safely treated in 2020, with wide disparities ranging from 25 per cent to 80 per cent across the SDG regions, indicating that progress remains uneven across the globe.

An improved reporting of wastewater flows generated by sources, and treated (by level of compliance or type of treatment) is urgently required to better assess global wastewater flows and to promote sustainable and safe wastewater (reuse) strategies. Notwithstanding the data limitations, the disaggregation of data on wastewater generation by sources (according to households, services and industries) can help to identify heavy polluters and consequently, to apply the "polluter pays" principle to incentivize wastewater treatment and enforce water quality standards. It is consequently important that the results of indicator 6.3.1 monitoring and reporting improves the knowledge base for decision makers at all levels. In fact, wastewater monitoring is an essential first step for policy issues and investment decisions, to improve water resources management as well as ambient water quality. Since sanitation, wastewater and faecal sludge management are inextricably linked, monitoring and reporting on wastewater flows could rapidly benefit the entire sanitation chain and water sector.

Total and industrial wastewater generation and treatment



Household wastewater generation and treatment



Storyline author(s)/contributor(s): Florian Thevenon, UN-Habitat; Andrew Shantz, WHO; Graham Alabaster, UN-Habitat; Richard Johnston, WHO

Custodian agency(ies): WHO, UN-Habitat,UNSD

Indicator 6.3.2: Proportion of bodies of water with good ambient water quality

Over 75,000 water bodies were reported on in 2020, but over three-quarters of them were in 24 high-GDP countries. The poorest 20 countries reported on just over 1,000 water bodies. “More monitoring needed” can be an overused message, but a critically important one when people are using untreated water of unknown quality for drinking and domestic use

SDG Indicator 6.3.2 monitors the proportion of bodies of water with good ambient water quality, which is defined through national and/or sub-national water quality standards. Acceleration is needed in all world regions to define water quality standards and ensure that freshwaters are reliably assessed as a prerequisite to inform policy action.

In all world regions many water bodies are still in good condition (see figure 1). 60 per cent of water bodies assessed in 97 countries have good ambient water quality. Protection is easier than restoration, so efforts to protect these water bodies from pollution must be initiated now.

The data shows positive trends for countries with robust monitoring systems. 44 per cent of countries reporting in both 2017 and 2020 are on track to improve water quality which supports the concept that monitoring is a prerequisite for positive management action. At the same time a lack of water quality data means that over 3 billion people are at risk because the health of their freshwater ecosystems is unknown (; each dot represents a country; countries with a low GDP generally based their national reporting on fewer data).. Data on water quality from developing countries lacked detailwith the indicator calculated using relatively few measurements and without suitable environmental water quality standards. Figure 2 (bubble chart) shows the linear relationship between GDP per capita and the amount of data used to calculate the indicator score per country

There also is a lack of groundwater data (see figure 3; each orange column represents the number of water bodies reported on by approximately 20 countries). Only around 60 per cent of reporting countries included information about groundwater, which is problematic because groundwater often represents the largest share of freshwater in a country. Understanding of the hydrogeological environment, the pressures on these resources, and how to monitor them effectively is lacking in many countries.

Agriculture and untreated wastewater pose two of the greatest threats to environmental water quality globally and release excess nutrients into rivers, lakes and aquifers which damage ecosystem function. Measurements of nitrogen and phosphorus failed to meet their targets more often than the other water quality parameters of the indicator. Acceleration is needed to enhance farming management practices and improve wastewater treatment rates to protect freshwater quality, especially in regions with high population growth such as Africa.

The indicator scores reported were independent of GDP. Whether the majority of water bodies in a country were reported as “good” or “not good” quality is unrelated to GDP, with low, middle and high-income countries reporting both situations. The drivers of poor water quality are likely to be different in poor and rich countries and therefore will require specific management measures but action must be taken in all countries.

Figure 1: Proportion of bodies of water with good ambient water quality, 2017-2020

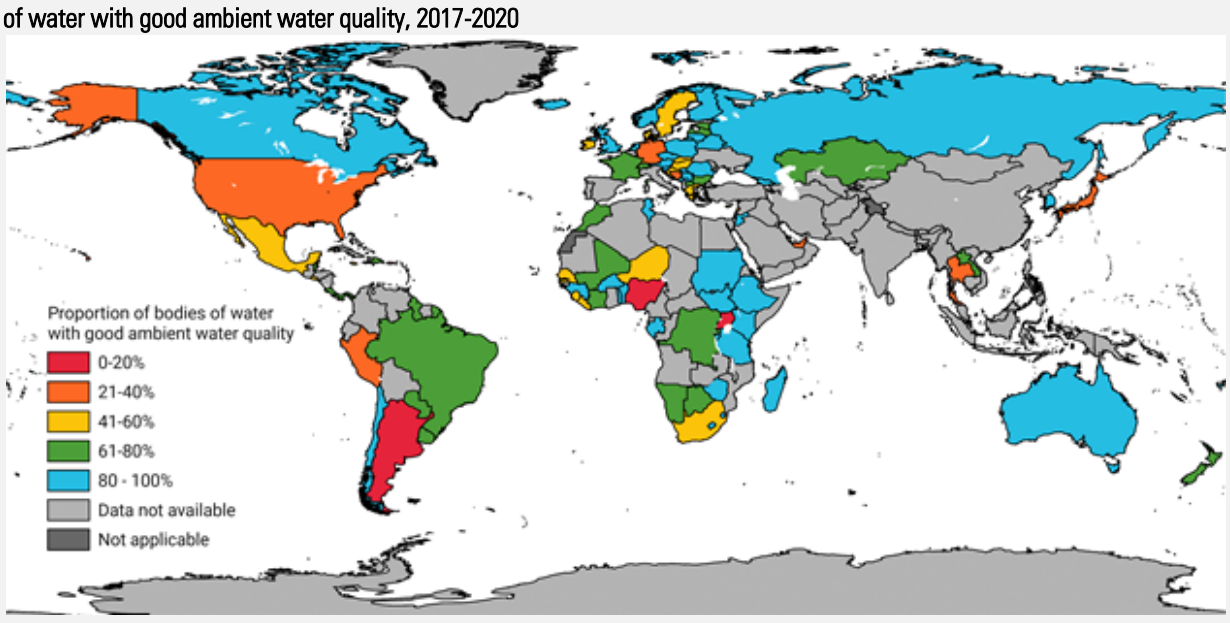


Figure 2: Number of monitoring values per country area reported by countries, compared to their gross domestic product per capita (2017-2020)

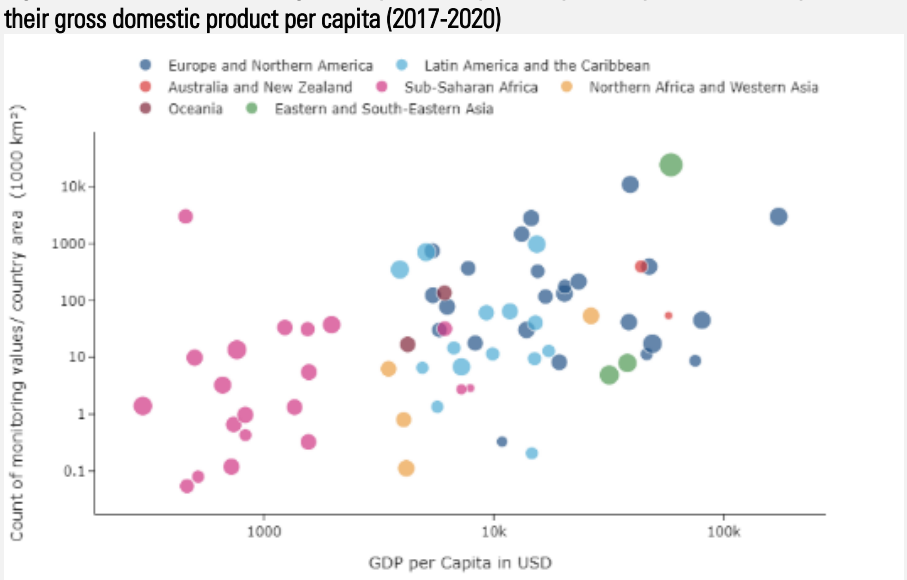
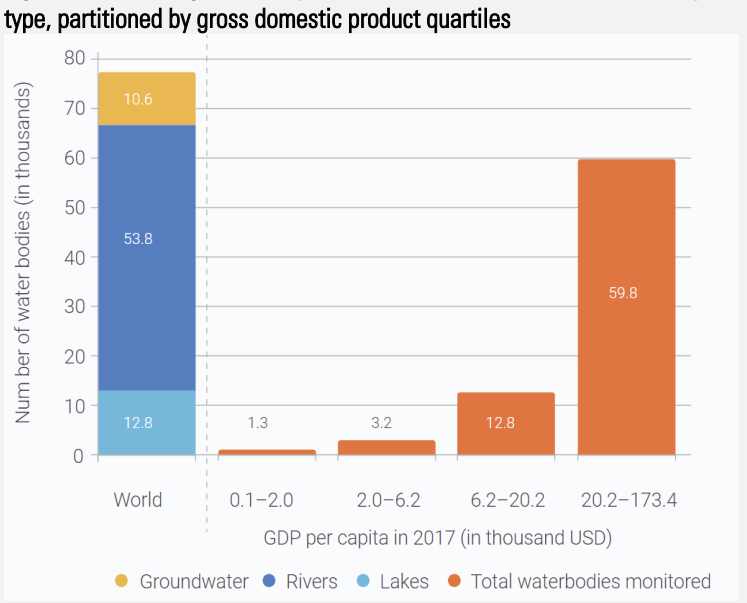


Figure 3: Monitoring efforts expressed as the number of water bodies by water body type, partitioned by gross domestic product quartiles



Additional resources, press releases, etc. with links:

- Country Story: Sierra Leone and Capacity Development: https://www.unep.org/news-and-stories/story/how-sierra-leone-taking-water-pollution
- Country Story: Liberia and Innovative Data Sources: https://communities.unep.org/download/attachments/32407814/Case%20Study_Liberia_20210128.pdf?version=1&modificationDate=1614090578668&api=v2
- 6.3.2 Support Platform: https://communities.unep.org/display/sdg632

Storyline author(s)/contributor(s): Stuart Warner, UNEP; Philipp Saile, International Center for Water Resources and Global Change, Federal Institute of Hydrology Germany; Melchior Elsler, UNEP; Kilian Christ, UNEP

Custodian agency(ies): UNEP

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

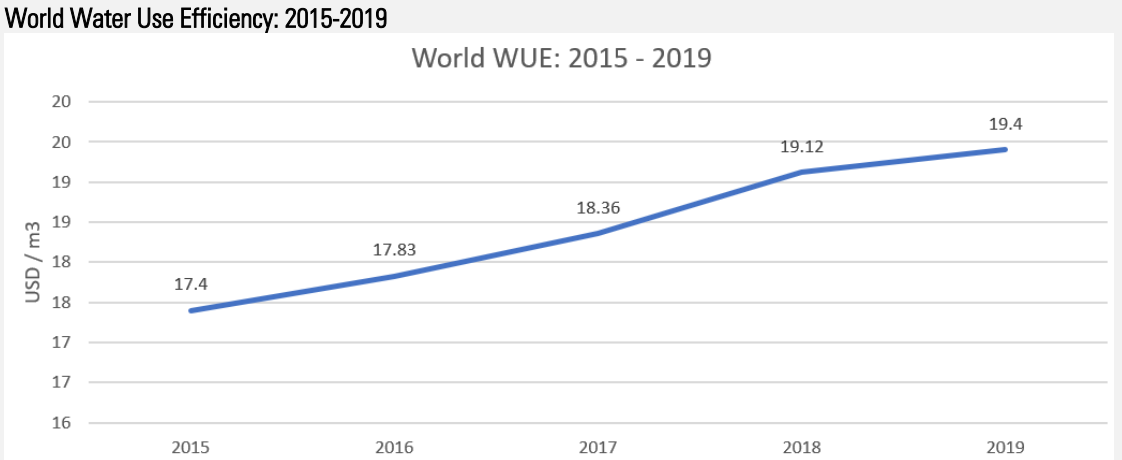
Water use efficiency rose by 12 percent from 2015 to 2019 worldwide, and the share of countries with water use efficiency equivalent to 20 USD/m3 or less decreased marginally.

Water use efficiency (WUE) rose from 17.4 USD/m3 in 2015 to 19.4 USD/m3 in 2019 worldwide, which represents a 12% efficiency increase (Figure 1). In 2019, estimates for water use efficiency range from below 3 USD/m3 in economies that depend largely on agriculture to over 50 USD/m3 in highly industrialized, service-based economies. This suggests that a country's economic structure has a direct link to its overall water use efficiency levels. Around 57% of countries presented a water use efficiency equivalent to 20 USD/m3 or less in 2019, compared to 58% in 2015 (Figure 2). However, global values hide regional differences (Figure 3). Central and Southern Asia and Eastern Asia and South-eastern Asia show the highest growth rates from 2015 to 2019, while Latin America and the Caribbean shows a decrease in WUE.

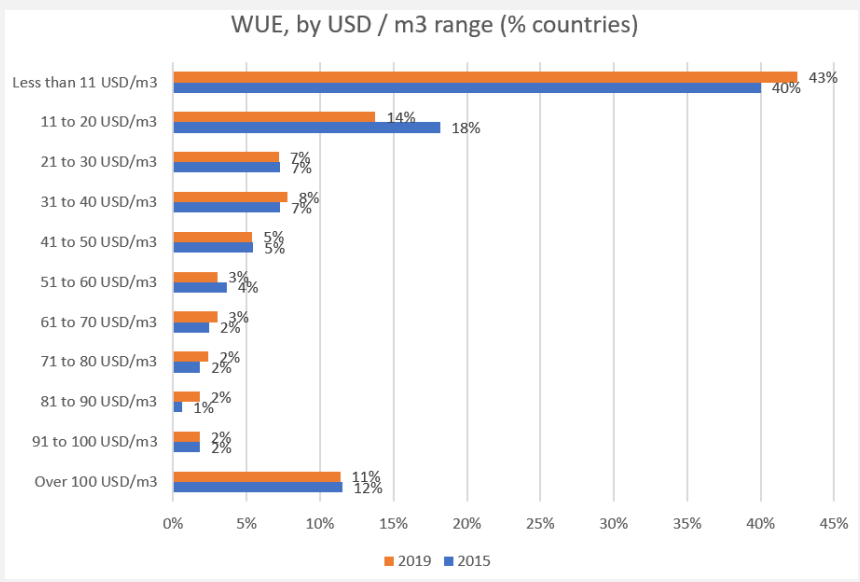
All economic sectors have seen an increase in their WUE since 2015. In 2019, the MIMEC sector has a WUE equivalent to 32.43 USD/m3, the services sector 114.02 USD/m3 and the agriculture sector 0.63 USD/m3. WUE in agriculture has increased by 12.5% from 2015, which is not far from the MIMEC sector (13%), and higher than the service sector (10%).

Increasing agricultural water productivity (quantity or value of output in relation to the quantity of water beneficially consumed) is a key intervention for improving water use efficiency, particularly in agricultural-reliant countries. Other important strategies to increase the overall water efficiency include the reduction in water losses, such as by tackling leakages in municipal distribution networks and the optimization of industrial and energy cooling processes.

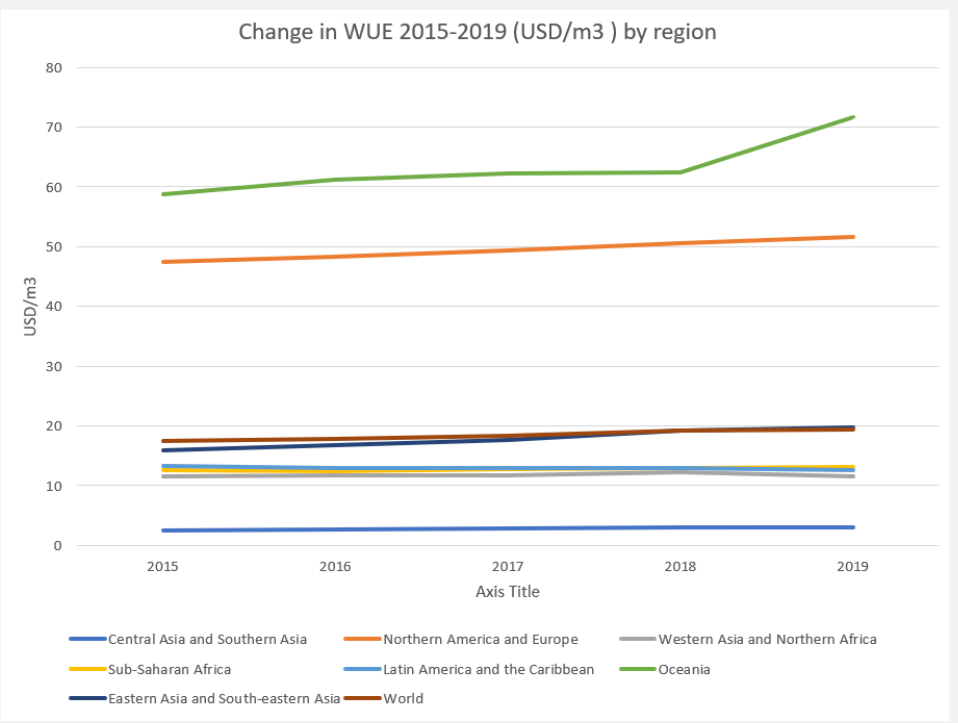
World Water Use Efficiency: 2015-2019



Water Use Efficiency by USD/m3 range (% countries)



Change in Water Use Efficiency 2015-2019 (USD/m3) by region



Additional resources, press releases, etc. with links:

- AQUASTAT – FAO's global information system on water and agriculture, https://www.fao.org/aquastat/en/
- FAO and UN Water. 2021. Progress on change in water-use efficiency. Global status and acceleration needs for SDG indicator 6.4.1, 2021. Rome. https://doi.org/10.4060/cb6413en

Custodian agency(ies): FAO

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

Water stress continues to rise in already critically affected regions

High water stress can have devastating consequences for the environment and hinder or even reverse economic and social development. At global level, SDG indicator 6.4.2 reached a safe level of 18.6 percent in 2019, but this masks substantial regional variations. In 2019, Southern Asia and Central Asia had high levels of water stress and Northern Africa had critical water stress (Figure 1). Since 2015, water stress levels have increased at global level by 0.3 percent. At regional level, the increase in the water stress level has been significant in Western Asia and Northern Africa showing an increase by 13 percent (Figure 2).

Figure 1: Water stress by geographical region and sub-region, 2019

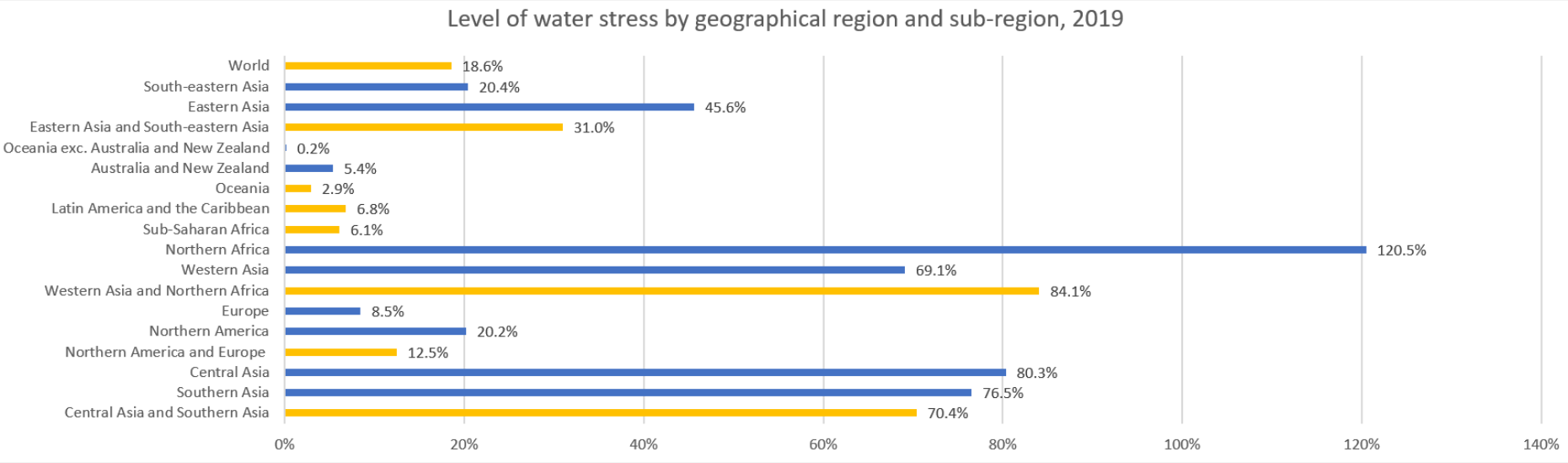
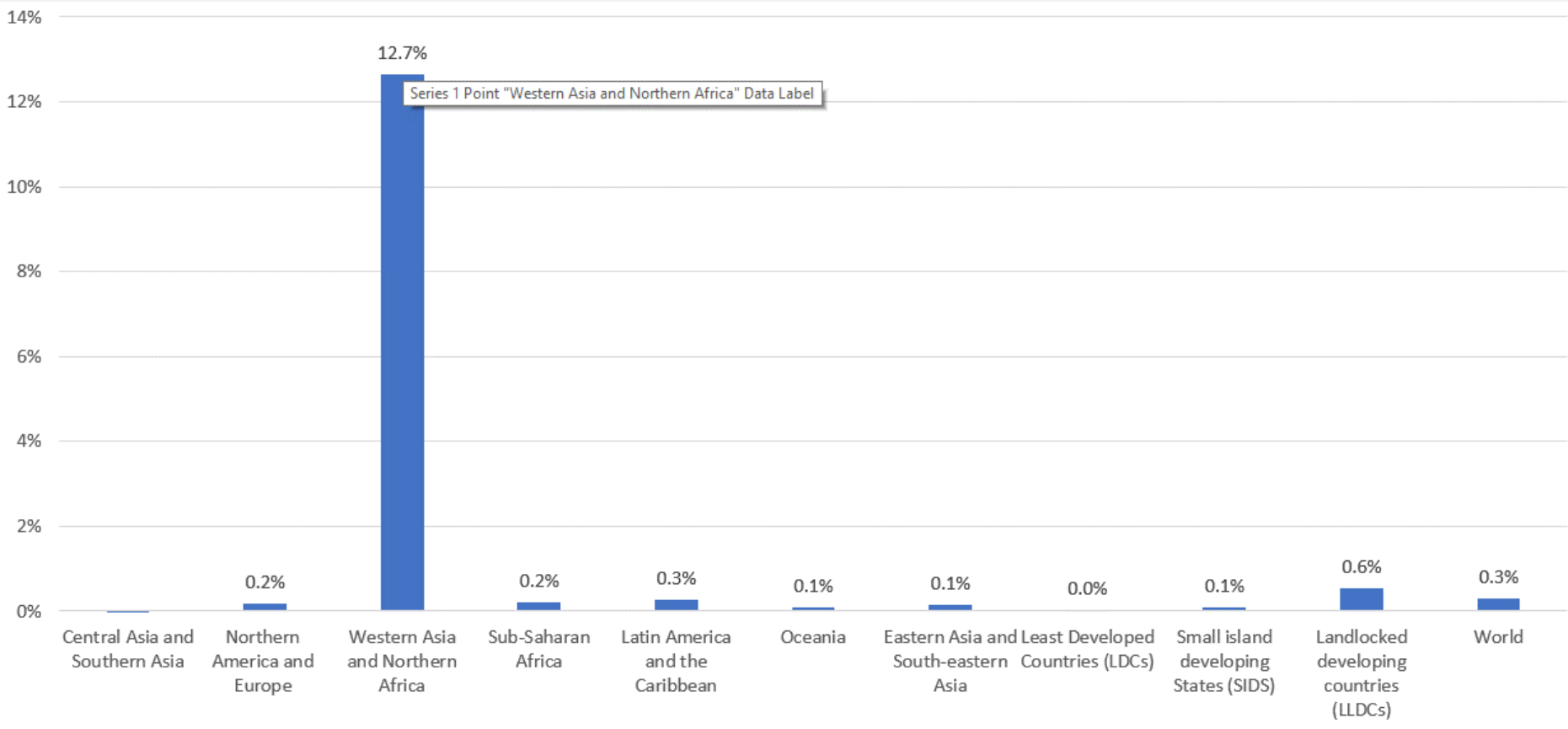


Figure 2: Water stress change 2015-2019



Additional resources, press releases, etc. with links:

- AQUASTAT – FAO's global information system on water and agriculture https://www.fao.org/aquastat/en/
- FAO and UN Water. 2021. Progress on Level of Water Stress. Global status and acceleration needs for SDG Indicator 6.4.2, 2021. Rome. https://doi.org/10.4060/cb6241en

Custodian agency(ies): FAO

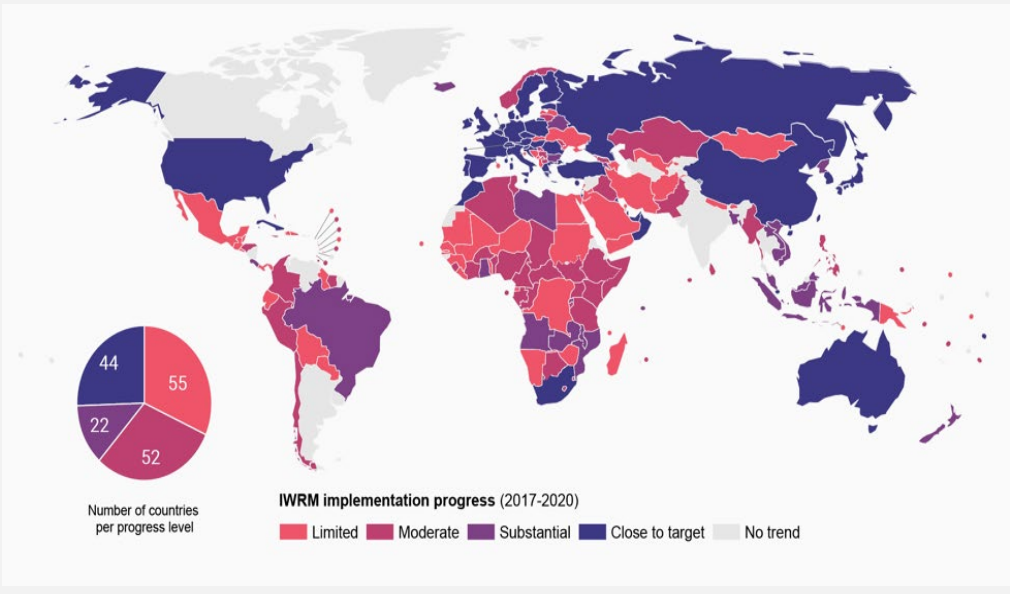
Target 6.5: By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate

Indicator 6.5.1: Degree of integrated water resources management

Integrated management of water resources is vital for achieving SDG 6 … but scaling up is badly needed

Integrated management of water resources is critical to ensure a sustainable and equitable distribution of water to meet domestic, industrial, agricultural and environmental needs – in other words to achieve all targets under SDG 6, and indeed to support water-related targets under all 16 of the other SDGs. To make this happen, the average global rate of implementation of laws, policies, data collection, cross-sector coordination and sustainable financing mechanisms – just some of the elements of sustainable water management – needs to urgently double. While there was some progress between 2017 and 2020 – from 49 to 54 out of 100 – the average rate of implementation is insufficient to meet the target. The good news is that 22 countries have proved that real and rapid progress is possible, showing that political will and adequate financing are two key enablers for success.

Progress towards full implementation of Integrated Water Resources Management (IWRM), 2017–2020



107 countries need to urgently accelerate implementation of sustainable water management. Detailed budgeted action planning, with stakeholder inputs from across sectors, can help to prioritise and coordinate efforts and resources. The SDG 6 IWRM Support Programme has helped 16 countries so far to develop IWRM Action Plans, and is working on scaling this up. While each country must identify their own priorities and pathways to make progress, some of the most commonly cited areas for improvement, across the 186 countries that have reported on their implementation of integrated water resources management include: joint planning and implementation within the water sector and across other sectors; leveraging financing, including from COVID-19 build-back-better packages and climate resilience funds; stronger basin and aquifer management, and capacity development at these levels; better collection and sharing of data and information; and inclusive participation. To support these activities, many countries make the case for needing to update their legal frameworks to reflect progressive, coordinated water management, but they also point out that this can take many years to achieve – though we only have eight years till 2030.

The 44 countries that are close to achieving the target need to sustain their efforts, since achieving and maintaining the objectives of sustainable water resources management is an ongoing process (see chart).

Acceleration is most urgently needed in South and Central America, the Caribbean, Oceania, South and Central Asia, and Central and West Africa, but further effort is still needed in all countries and regions.

Integrated management of water resources is foundational to building resilience to a changing climate (SDG 13), including the management of floods and droughts and ensuring water security for all. In the 2021 global "State of Climate Services Report" (by the World Meteorological Organization), the number one recommendation was to "invest in Integrated Resources Water Management as a solution to better manage water stress, especially in Small Island Developing States (SIDS) and Least Developed Countries (LDCs)".

The COVID-19 pandemic has had some negative impacts on water management, including delays in implementation of policies and installing monitoring stations; and reduced budgets for water sector investments. However, the pandemic has also revealed the importance of water management, most obviously to ensure a secure supply of clean water, and adequate sanitation and hygiene (WASH) (SDG targets 6.1 and 6.2). Beyond WASH, many countries and communities highlighted the importance of cross-sector coordination to increase resilience to pandemics, for example securing water for agriculture to address food supply-chain shortages (SDG 2).

Additional resources, press releases, etc. with links:

- All reports, country summaries, and results, available through the IWRM data portal: http://iwrmdataportal.unepdhi.org/; including:
  - 2021 SDG 6.5.1 status report: Executive Summary: http://iwrmdataportal.unepdhi.org/IWRMDataJsonService/Service1.svc/DownloadPublicationsReportDoc/English/SDG%206.5.1%20Global%20progress%20report%202020%20EXECUTIVE%20SUMMARY.pdf
  - 2021 SDG 6.5.1 full report: http://iwrmdataportal.unepdhi.org/IWRMDataJsonService/Service1.svc/DownloadPublicationsReportDoc/English/SDG%206.5.1%20Global%20progress%20report%202021%20full%20report.pdf
  - SDG 6.5.1 video: https://youtu.be/fKgkmXCO7h0

Storyline author(s)/contributor(s): Paul Glennie, UNEP-DHI Centre on Water and Environment; Maija Bertule, UNEP-DHI Centre on Water and Environment; Sandra Bruehlmann, Global Water Partnership; Colin Herron, Global Water Partnership; Gareth James Lloyd, UNEP-DHI Centre; Lis Mullin Bernhardt, UNEP

Custodian agency(ies): UNEP

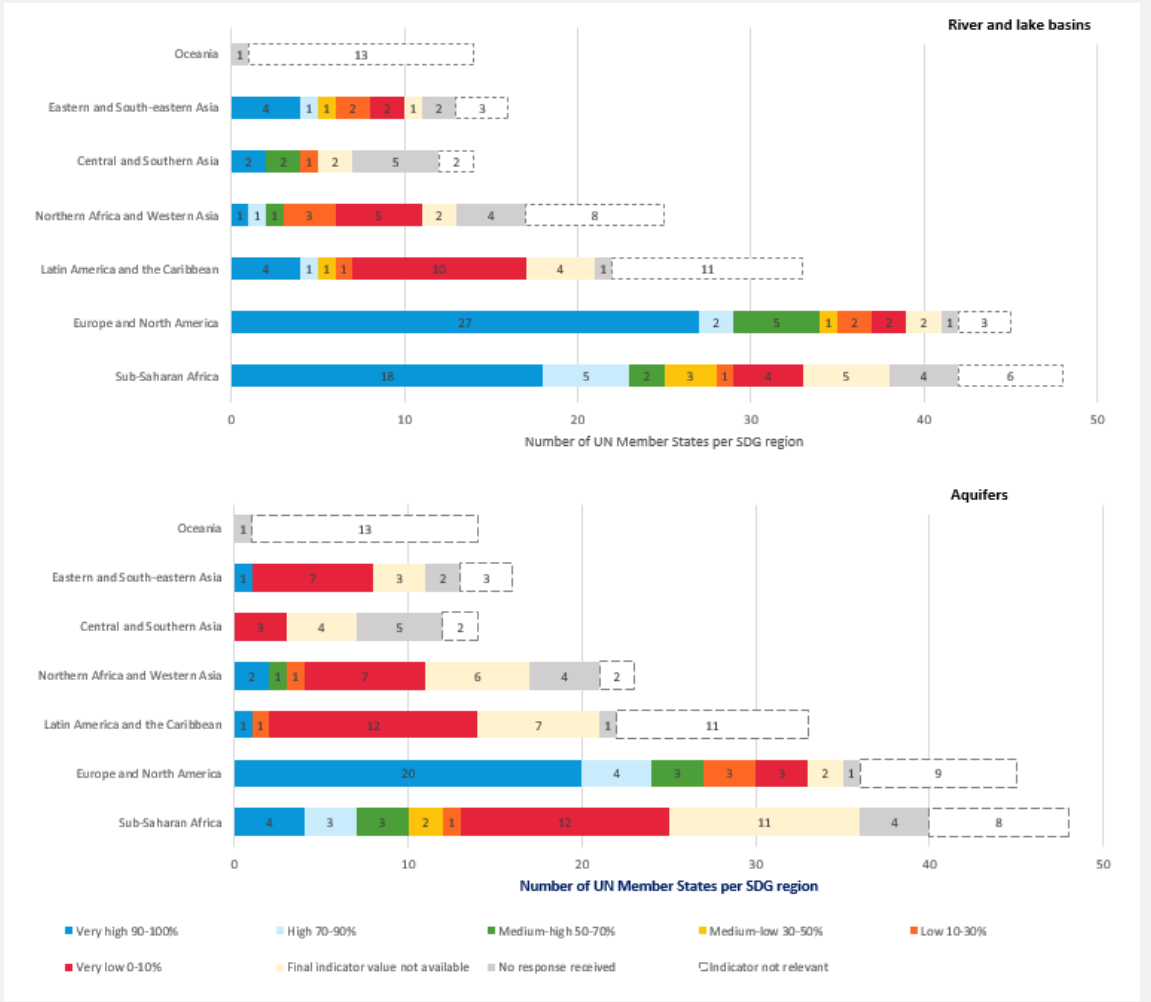
Indicator 6.5.2: Proportion of transboundary basin area with an operational arrangement for water cooperation

While some progress is evident, global efforts to ensure that all transboundary waters are covered by operational arrangements by 2030 must be upscaled and accelerated.

Ensuring operational arrangements are in place between countries sharing transboundary rivers, lakes and aquifers is an important component in making progress towards the wider goal of clean water and sanitation for all (SDG 6) by 2030, which is crucial for COVID-19 response and recovery. Additionally, cooperation over transboundary waters can support progress on other SDGs, including those related to poverty (SDG 1), hunger (SDG 2), health and wellbeing (SDG 3), energy (SDG 7), climate (SDG 13), marine and land ecosystems (SDG 14 and 15), and peace (SDG 16). For example, in 1973, Brazil and Paraguay entered into a cooperative arrangement to develop hydroelectricity from the Parana River, which led to the establishment of the Itaipu binational Commission. Through this commission, Brazil and Paraguay have benefitted from the generation of 2.6 billion Megawatts-hours of electricity since 1984. Additionally, by adopting a holistic approach, the Commission has been able to implement projects and programmes that deliver benefits across a range of SDGs, including activities related to sustainable agriculture, public health, sustainability education, gender equality, sustainable tourism, green infrastructure, and protected areas conservation.

A significant effort is needed to ensure that more transboundary rivers, lakes and aquifers worldwide can reap the types of benefits enjoyed by the aforementioned Itaipu example. Recent data shows that only 32 countries out of the 153 countries sharing transboundary waters have 90% or more of their transboundary waters covered by operational arrangements for cooperation. There are also significant regional variations. In Europe and North America, for instance, 24 out of 42 countries sharing transboundary waters have 90% or more of those waters covered by operational arrangements. However, the number of countries with operational arrangements covering 90% or more of their waters is significantly lower in Sub-Saharan Africa (five countries); North Africa and Western Asia (one country); Central, Eastern, Southern and Eastern Asia (one country); and Latin America and the Caribbean (one country).

Number of countries sharing transboundary waters in each SDG region, by level of transboundary water cooperation, for river and lake basins and aquifers, 2017–2020.



There is evidence of encouraging progress that has the potential to be upscaled. For instance, countries have adopted more than 16 cooperative arrangements in the period 2017-2020. Experience, such as the 2019 agreement between Mozambique and Zimbabwe on the Buzi River Basin, highlights the importance of having a strong global and regional enabling environment in place, such as the 2000 Revised Southern African Development Community Protocol and Shared Watercourse Systems, to develop such arrangements, as well as the need for political will, capacity development, trust building, and financial support.

The COVID-19 pandemic may have already had an impact on the ability of some countries to negotiate and adopt new arrangements for their transboundary waters, but this can only be analysed and confirmed through the next large data collection exercise in 2023. However, despite the COVID-19 pandemic, SDG 6.5.2 data gathering in 2020 has resulted in an unprecedented high response rate and managed to address some data gaps, particularly in relation to the identification and delineation of transboundary aquifers. In certain instances, the reporting has even helped trigger cooperation, such as in the case of the 2021 Declaration between Gambia, Guinea-Bissau, Mauritania, and Senegal on the Senegalo-Mauritanian Aquifer Basin. Albania, Greece, and North Macedonia's reinvigoration of the Prespa Park Coordination Committee in June 2020 is also a good example of how dormant arrangements can become operational. These types of efforts must be upscaled and accelerated in order to ensure that all transboundary waters are covered by operational arrangements by 2030.

Additional resources, press releases, etc. with links:

- UN-Water SDG 6 monitoring: https://www.sdg6monitoring.org/indicator-652
- UNECE SDG 6.5.2 webpage: https://www.unece.org/water/transboundary_water_cooperation_reporting.html
- UNESCO SDG 6.5.2 webpage: https://en.unesco.org/themes/water-security/transboundary_water_cooperation_reporting
- UNECE press release: https://unece.org/climate-change/press/countries-worldwide-must-accelerate-progress-transboundary-water-cooperation
- UNESCO press release https://en.unesco.org/news/report-progress-transboundary-water-cooperation-sdg-652-now-available-5-languages

Storyline author(s)/contributor(s): Sonja Koeppel, UNECE; Alistair Rieu-Clarke, UNECE; Sarah Tiefenauer-Linardon, UNECE; Aurélien Dumont, UNESCO; Tatiana Dmitrieva, UNESCO

Custodian agency(ies): UNESCO-IHP, UNECE

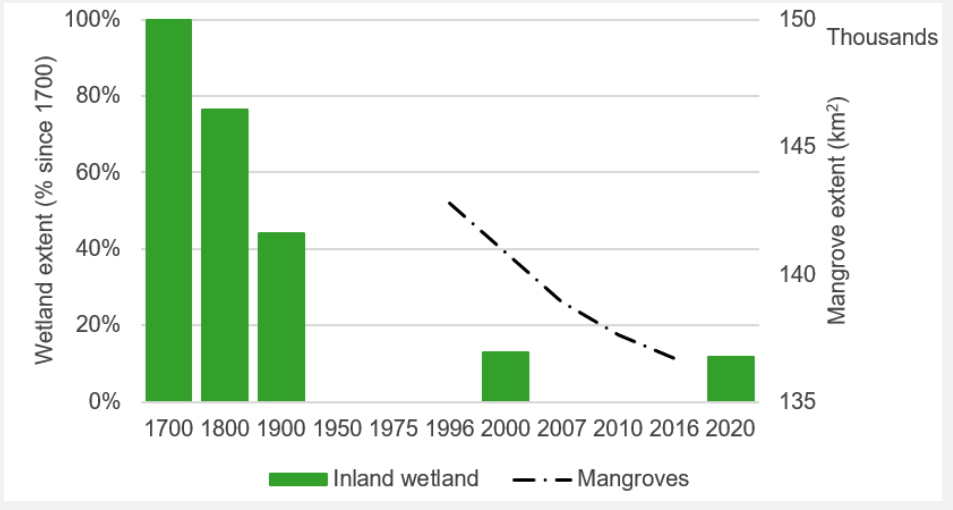
Target 6.6: By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes

Indicator 6.6.1: Change in the extent of water-related ecosystems over time

Only 15 per cent of the worlds wetlands ecosystems remain. It's time to protect and restore wetlands at scale

Wetland extent and condition continues to deteriorate globally. Wetland area continues to decline, with conversion and loss continuing in all parts of the world. Over the past three hundred years, over 85 per cent of the planet's wetlands have been lost (see chart), largely through drainage and land conversion (Hu et al., 2017), with many remaining areas degraded (Ramsar Convention Secretariat, 2016). Some wetlands are receding due to reduced flows caused by droughts and water extraction, trends that are expected to be amplified by climate change and increasing global demand for water. Since 1970, 81per cent of inland wetland-dependent species and 36 per cent of coastal and marine species have declined far more than species dependent on other biomes and an increasing number are facing extinction.

Trend of wetland extent



Wetland ecosystem services and values are increasingly used as nature-based solutions. Wetlands have always provided services to humanity, yet recognition of the scale of these benefits and the consequences of their loss is quite recent. Unsustainable use and inappropriate management of wetlands not only results in loss of ecosystem services but can bring direct risks including disease.

The most fundamental of these ecosystem services is the provision of adequate quantities and quality of water, with major health and well-being impacts where this is lacking. Wetlands also provide services related to climate change mitigation and adaptation, disaster risk reduction, fisheries (over two thirds of the world's fish harvest is linked to the health of coastal and inland wetland areas); agriculture, through the maintenance of water tables and nutrient retention in floodplains; timber production; energy resources, such as peat and plant matter; wildlife resources; transport; and recreation and tourism opportunities. Wetlands are considered the most biologically diverse of all ecosystems, 40 per cent of the world's plant and animal species live or breed in wetlands (UNFCCC, 2018).

Wetlands ecosystem services exceed terrestrial services in value. The monetary value of wetlands was recently estimated to constitute roughly 43 per cent of the value of all global ecosystems, contributing around $47 trillion per year in ecosystem services (Davidson et al., 2019). The lion's share of this value (68 per cent for inland and 89 per cent for coastal wetlands) comes from the regulating services these ecosystems provide, such as maintaining water and soil quality through filtration and nutrient cycling, as well as protecting riverbanks and coastlines from flooding and erosion. Protecting and restoring wetlands is a valuable climate change mitigation action as wetlands act as carbon sinks, absorbing greenhouse gas emissions. Peatlands have been estimated to store twice as much carbon as all of Earth's forests, while mangrove soils hold over 6 billion tons of carbon and can sequester up to 3-4 times more carbon than their terrestrial counterparts (Dargy et al 2017; WWF). Keeping wetlands 'wet' prevents emissions of methane and carbon dioxide being released from the soil into the atmosphere.

Additional resources, press releases, etc. with links:

- UNEP Freshwater Ecosystems Explorer Data Portal
- Ramsar Global Outlook on Wetlands

Storyline author(s)/contributor(s): Stuart Crane, UNEP; Maria Rivera, Ramsar Convention

Custodian agency(ies): UNEP,Ramsar

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

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

ODA for water and sanitation falls in the wake of the COVID pandemic

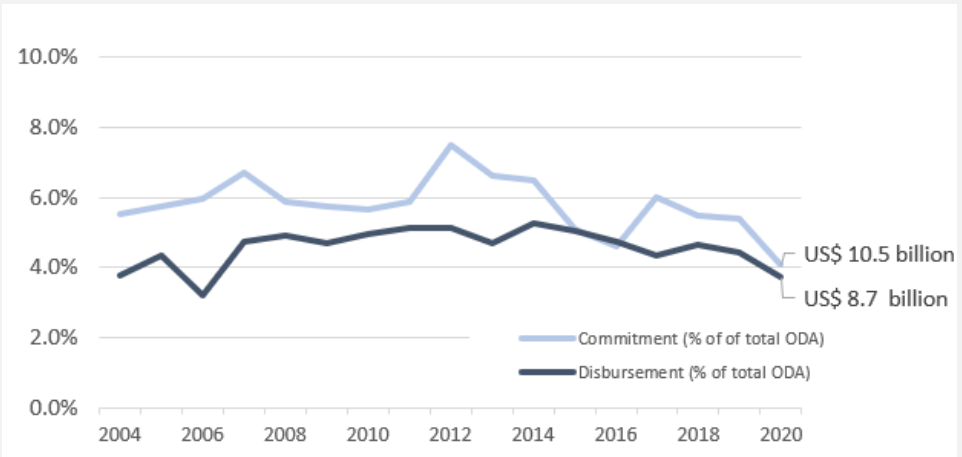
While Official Development Assistance increased overall from US$ 202 billion to US$ 246 billion from 2019 to 2020 in response to the COVID pandemic, ODA for the water sector showed a decreasing trend over the same period, with commitments falling by 11% to US$ 10.5 billion.

Since 2012, when ODA commitments to the water sector peaked at 7.6% of total ODA, the percent of total ODA commitments directed to the water sector has fallen to 4.2% in 2020. This decline may reflect a gradual de-prioritization of water and sanitation aid compared to other sectors among donors, accelerated by the COVID pandemic. As recently as 2018, water supply and sanitation was ranked fifth among 52 sectors in terms of ODA commitments, however, in 2020 its ranking dropped to 12th among all sectors. From 2019 to 2020, significant increases in aid were given to general budget support (US$ 5.2 to 16.3 billion, 211% increase); banking and financial services (US$ 4.7 to 10.9 billion, 133% increase) and basic health (US$ 9.5 to 15.5 billion, 64% increase).

Similarly, ODA disbursements for the water sector decreased 5% to US$ 8.7 billion from 2019 to 2020. For water supply and sanitation, there was a sharper decrease of 12% in ODA disbursements from US$7.6 billion to US$ 6.7 billion. The drop in disbursements in 2020 is likely due to the COVID pandemic slowing and disrupting the execution of projects, including large drinking-water and sanitation infrastructure projects. Nearly all SDG regions experienced a decrease in ODA disbursements for water supply and sanitation from 2019 to 2020. Oceania and Sub-Saharan Africa had particularly sharp decreases of 25% and 23% respectively, followed by Central Asia and Southern Asia with a drop of 15%. Only Western Asia and Northern Africa showed a small increase in disbursements of 3%, much of it due to increased aid for Egypt, Jordan, and Tunisia.

While it is possible that some COVID-related aid was used to support activities that include elements of water and sanitation, such as hand hygiene and installation of water facilities to facilitate hand-washing, it is likely to consist of only a small proportion of aid provided to developing countries for COVID response.

ODA for water sector as % of total ODA, 2004-2020



Notes:
1. This chart includes only ODA and excludes private grants
2. This chart includes, water and sanitation, agricultural water use, flood protection, and hydroelectric projects

Storyline author(s)/contributor(s): Marina Takane, World Health Organization; Mark Hoeke, World Health Organization; Yasmin Ahmad, OECD; Elena Bernaldo de Quiros, OECD

Custodian agency(ies): WHO,OECD

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

Indicator 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(ies): WHO,OECD