UN WATER

World Health Organization

NATIONAL SYSTEMS TO SUPPORT DRINKING-WATER, SANITATION AND HYGIENE:

GLOBAL STATUS REPORT 2019

UN-WATER GLOBAL ANALYSIS AND ASSESSMENT OF SANITATION AND DRINKING-WATER

GLAAS 2019 REPORT

glaas

UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water

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CONTENTS

Figures

Tables

Sanitation policy case study boxes

FOREWORD

Sustainable Development Goal 6 (SDG 6) aims to ensure availability and sustainable management of water and sanitation for all, and to eradicate open defecation, by 2030.

But four years into the SDG effort, we see too many people in too many places still drinking contaminated water, struggling to find water to wash their hands and defecating in the open.

This need not and should not happen.

Because we also see that when countries put in place dedicated policies, when they draw up costed plans and then resource them adequately, and when they create robust institutions, they are able to deliver reliable and accessible water, sanitation and hygiene (WASH) services. The key is to take a systems approach.

Many of the 115 countries and territories surveyed by the 2018/2019 UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS) survey are taking steps to achieve SDG 6. About half of them have set targets that aim for universal WASH coverage by 2030, and there are numerous examples of governments specifically targeting open defecation, which will have a dramatic impact on public and environmental health.

At the international level, GLAAS surveyed 29 external support agencies and found that they are prioritizing a focus on WASH systems strengthening. Official development assistance (ODA) for WASH is rising, which signals the growing resolve of the international community to make progress on WASH; however, the translation of commitments into disbursements on the ground is yet to come.

But perhaps the critical finding of this report is that national governments are increasingly recognizing the importance of having a fully functioning delivery system. Many report that they are unable to implement policies and plans because they lack human and financial resources. They tell us that institutions tasked with regulatory oversight are often stretched. Detailed reporting and data are rare.

WASH is a foundation of public health and a catalyst for many areas of development. The ambition of SDG 6 is high, but every step towards better WASH services for more people is a step towards eradicating extreme poverty and improving health and well-being for all.

Dr Tedros Adhanom Ghebreyesus
Director-General
World Health Organization

Gilbert F. Houngbo
UN-Water Chair and
President of the International
Fund for Agricultural
Development

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The preparation of this report involved contributions from thousands of individuals representing all regions of the world. UN-Water and WHO would like to extend their gratitude to all those organizations and individuals that contributed to the development of the results and report – especially those who coordinated efforts and submitted information from 115 countries and territories and 29 external support agencies (ESAs).

ACRONYMS AND ABBREVIATIONS

AECID	Agencia Española de Cooperación International al Desarollo, Spain
AFD	Agence Française de Développement, France
AfDB	African Development Bank
AMCOW	African Ministers' Council on Water
ASPG	Africa Sanitation Policy Guidelines
BMGF	Bill & Melinda Gates Foundation
BMZ	Federal Ministry for Economic Cooperation and Development, Germany
DFID	Department for International Development, United Kingdom of Great Britain and Northern Ireland
DGIS	Directorate-General for International Cooperation, Netherlands
EBRD	European Bank for Reconstruction and Development
ESA	External support agency
FCFA	African financial community franc
FSM	Faecal sludge management
GDP	Gross domestic product
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit, Germany
GLAAS	Global Analysis and Assessment of Sanitation and Drinking-Water
GNI	Gross national income
IDB	Inter-American Development Bank
JICA	Japan International Cooperation Agency
JMP	WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene
JSR	Joint sector review
MDG	Millennium Development Goal
MFAT	Ministry of Foreign Affairs and Trade
MoI	Means of implementation
n	Sample size
NGO	Nongovernmental organization
NRW	Non-revenue water
O&M	Operations and maintenance
OD	Open defecation
ODA	Official development assistance
ODF	Open defecation free
OECD	Organisation for Economic Co-operation and Development
OECD-CRS	OECD Creditor Reporting System
SAG	Strategic Advisory Group
SDC	Swiss Agency for Development and Cooperation
SDG	Sustainable Development Goal
SECO	State Secretariat for Economic Affairs, Switzerland
Sida	Swedish International Development Cooperation Agency

SIWI	Stockholm International Water Institute
SusWASH	WaterAid's sustainable water, sanitation and hygiene programme
SWA	Sanitation and Water for All
TrackFin	Tracking Financing to WASH
UN	United Nations
UNC	University of North Carolina
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNICEF	United Nations Children's Fund
UNSD	United Nations Statistical Division
USAID	United States Agency for International Development
WAPT	WASH Accounts Production Tool
WASH	Water, sanitation and hygiene
WHO	World Health Organization
WSSCC	Water Supply and Sanitation Collaborative Council

UN-Water Reports

UN-Water coordinates the efforts of United Nations entities and international organizations working on water and sanitation issues. By doing so, UN-Water seeks to increase the effectiveness of the support provided to Member States in their efforts towards achieving international agreements on water and sanitation. UN-Water publications draw on the experience and expertise of UN-Water's Members and Partners.

Sustainable Development Goal 6 Synthesis Report 2018 on Water and Sanitation

The SDG 6 Synthesis Report 2018 on Water and Sanitation was published in June 2018 ahead of the High-level Political Forum on Sustainable Development where Member States reviewed SDG 6 in-depth. Representing a joint position from the United Nations family, the report offers guidance to understanding global progress on SDG 6 and its interdependencies with other goals and targets.

Sustainable Development Goal 6 Indicator Reports

This series of reports shows the progress towards targets set out in SDG 6 using the SDG global indicators. The reports are based on country data, compiled and verified by the United Nations agencies serving as custodians of each indicator.

UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS)

GLAAS is produced by the World Health Organization (WHO) on behalf of UN-Water. It provides a global update on the policy frameworks, institutional arrangements, human resource base, and international and national finance streams in support of sanitation and drinking-water. It is a substantive input into the activities of Sanitation and Water for All (SWA).

United Nations World Water Development Report

This annual report, published by UNESCO on behalf of UN-Water, represents the coherent and integrated response of the United Nations system to freshwater-related issues and emerging challenges. The theme of the report is harmonized with the theme of World Water Day (22 March) and changes annually.

Policy and Analytical Briefs

UN-Water's Policy Briefs provide short and informative policy guidance on the most pressing freshwater-related issues that draw upon the combined expertise of the United Nations system. Analytical Briefs provide an analysis of emerging issues and may serve as basis for further research, discussion and future policy guidance.

The progress report of the WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP)

This report is affiliated with UN-Water and presents the results of the global monitoring of progress towards access to safe and affordable drinking-water, and adequate and equitable sanitation and hygiene. Monitoring draws on the findings of household surveys and censuses usually supported by national statistics bureaus in accordance with international criteria and increasingly draws on national administrative and regulatory datasets.

UN-WATER PLANNED PUBLICATIONS 2019

- Update of UN-Water Policy Brief on Water and Climate Change
- UN-Water Policy Brief on the Water Conventions
- UN-Water Analytical Brief on Water Efficiency

MAIN FINDINGS

The status of water, sanitation and hygiene (WASH) systems

There is widespread recognition that sustainable and effective WASH service delivery is not only determined by the state of infrastructure, but also by complex institutional, governance and financial management systems. While a "system" may be interpreted or defined in different ways, core elements examined by the UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS) initiative include the extent to which countries develop and implement national policies and plans for WASH, conduct regular monitoring, regulate and take corrective action as needed, and coordinate these parallel processes with sufficient financial resources and support from strong national institutions.

GLAAS findings on the status of WASH systems are varied. Most countries have requisite components in place, but many countries responded that they have yet to operationalize and fully implement measures to support and strengthen their national WASH systems. GLAAS findings highlight gaps and vulnerabilities in WASH systems and the need for further strengthening to assure sustainable and effective WASH service delivery in countries.

1) Implementation of national WASH policies and plans is constrained by inadequate human and financial resources. The majority of countries have national WASH policies supported by national plans with most countries drawing evidence from regular sector performance reviews such as joint sector reviews (JSRs). While many countries estimated the cost of implementing their national WASH plans, less than 15% of countries reported having sufficient[1] financial resources to implement these plans. Overall, plans are rarely supported by the necessary financial and human resources, which hinders their implementation and intended outcomes for WASH service delivery.

2) While most countries have national standards for drinking-water and wastewater, institutions tasked with regulatory oversight for WASH service delivery are stretched and unable to undertake the required surveillance. Only 12% of countries reported that urban drinking-water surveillance is conducted at 100% of the required frequency. Fewer than one third of regulatory authorities fully publish publicly available reports for drinking-water and sanitation. Insufficient funds and insufficient human resources are often a major constraint in drinking-water and sanitation surveillance and oversight. In addition, fewer than half of regulatory authorities fully take corrective actions against nonperformers.

3) National financial systems to support decision-making should be strengthened. While most countries have financing plans for WASH, more than half of these plans are insufficiently used in decision-making. More than 75% of countries did not report disaggregated budget or expenditure data for drinking-water and sanitation, which suggests that systems for collecting comprehensive financial data in most countries may be lacking. Furthermore, fewer than half of the countries reported use of performance indicators on expenditure and cost-effectiveness, potentially limiting the ability of governments to make informed adjustments in WASH budget allocations or spending priorities.

[1] In the GLAAS 2018/2019 country survey, sufficient financial resources were defined as having more than 75% of what is needed to implement national WASH plans.

Alignment with the Sustainable Development Goals (SDGs)

GLAAS data allow an analysis of the extent to which, almost five years into the SDG period, countries have responded to the ambitious WASH targets established by the 2030 Agenda for Sustainable Development. At the global level, SDG 6 calls for universal access to WASH by 2030, but the WHO/UNICEF Joint Monitoring Programme on Water Supply, Sanitation and Hygiene (JMP) reports that, as of 2017, 2.2 billion people still lacked safely managed water, 4.2 billion lacked safely managed sanitation and 3 billion lacked access to basic handwashing facilities *(1)*. With the understanding that achieving SDG 6 will require dramatic changes by countries, the GLAAS results show encouraging signs that countries have begun efforts to align with elements of the SDGs this early in the SDG era. However, the results of these efforts, and the vast majority of WASH progress in countries, are still to come.

4) National WASH targets are increasingly reflecting SDG ambitions, aiming to provide universal coverage and reach higher levels of service. However, a dramatic increase in performance will be required to achieve these targets. GLAAS 2019 findings reveal that countries are setting targets that aim for higher levels of service such as safely managed drinking-water and sanitation. Approximately half of countries have set drinking-water targets that aim for universal coverage at levels higher than basic services by 2030. This signals that countries are extending efforts to reflect elements of the SDGs in national targets. Consequently, many countries will need to increase coverage by an annual rate beyond the fastest rates of progress ever recorded by JMP to reach their own WASH targets.

5) Large funding gaps remain between what is needed to reach WASH targets and what is available. Twenty countries and territories reported a funding gap of 61% between identified needs and available funding. This is the first time that GLAAS findings have enabled estimation of the magnitude of the shortfall. There has been a modest increase in government WASH budgets compared to the GLAAS 2016/2017 cycle; however, insufficient funding remains a serious issue for countries to achieve their national targets.

6) Countries are responding to the "leave no one behind agenda" by establishing policy measures to reach populations living in vulnerable situations. Over two thirds of countries have measures in policies and plans to reach poor populations, but less than 40% have corresponding measures for financing these efforts that are consistently applied. Approximately three quarters of countries in which open defecation[2] is still practiced are incorporating measures to address it in policies and plans, and 63% of countries[2] have established national targets to eliminate open defecation. Countries also reported that they are seeking to make WASH services affordable through policy measures and financial schemes, mostly for urban water supply. However, systems to monitor and finance these measures are not always in place, indicating that the level of implementation is insufficient.

7) External support agencies (ESAs) are increasingly aligning their objectives with the SDGs and prioritizing a focus on WASH systems strengthening. Since 2017, the majority of multiyear ESA WASH strategies have been revised with objectives that align with the 2030 Agenda. Strengthening country systems or systems approaches were rated as high priority activities in WASH among ESAs, and major themes in several ESA water/WASH strategies. Official development assistance (ODA) commitments for WASH are rising, signalling the continued resolve of the international community to make progress on WASH. There are indications of shifts in aid targeting, with aid allocated to Sub-Saharan Africa almost doubling between 2015 and 2017.

Reference

1. Progress on household drinking water, sanitation and hygiene: 2000–2017. Special focus on inequalities. New York: United Nations Children's Fund and Geneva: World Health Organization; 2019 (https://washdata.org/sites/default/files/documents/reports/2019-07/jmp-2019-wash-households.pdf, accessed 21 June 2019).

[2] Countries with open defecation rates over 2%.

GLAAS SUMMARY TABLES OF KEY INDICATORS

2018/2019

Key indicator	Urban/rural Drinking-water Percentage of countries[a]	Urban/rural Sanitation Percentage of countries[a]	Hygiene Percentage of countries[a]
Policies and plans			
Existence of national WASH policies	94% / 94%	94% / 94%	79%
Existence of national WASH implementation plans	86% / 83%	85% / 83%	73%
Developed cost estimates for WASH plan	77% / 85%	82% / 79%	60%
Conducted human resource assessments for WASH plan	51% / 46%	54% / 43%	41%
Sufficient financial resources to implement plans	13% / 12%	15% / 7%	9%
Sufficient human resources to implement plans	14% / 10%	11% / 6%	10%
National WASH targets			
Existence of national coverage targets	97% / 99%	98% / 98%	59%
Coverage targets that aim for at least basic level services	92% / 84%	66% / 59%	41%
Coverage targets that aim for safely managed services	52% / 39%	30% / 16%	—
Existence of national targets for open defecation	—	44% / 53%	—
Monitoring and regulation			
Progress towards national targets monitored through government-led process	← 79% →		
Joint sector reviews conducted	← 67% →		
Surveillance[b] conducted at 100% of required frequency	12% / 6%	11% / 6%	—
Regulatory authorities fully publish publicly accessible reports on drinking-water quality	33% / 17%	—	—
Regulatory authorities fully publish publicly accessible reports on treated wastewater flows and faecal sludge volumes	—	22% / 14%	—
Use of performance indicator on water quality	67%	—	—
Use of performance indicator on treated effluent quality	—	31%	—
Use of performance indicator for equitable service coverage	42%	26%	—
Measures to reach vulnerable populations			
Recognition of the human rights to water and sanitation in constitution	65%	62%	—
Measures to reach poor populations exist in national policies and plans	74%	69%	—
Affordability schemes exist and are widely used	38% / 29%	23% / 18%	—
Community participation procedures defined in law or policy (SDG 6.b)	79% / 81%	79% / 79%	70%

Key indicator	2016/2017	2018/2019
Finance		
Countries reporting existence of a financing plan that is consistently followed for:		
Urban/rural drinking-water	42% / 32%	36% / 32%
Urban/rural sanitation	34% / 27%	28% / 23%
Funding gap between identified needs and available funding	—	61%
Annual increase in government WASH budgets, average	4.9%	11.1%
Government WASH budget per capita (US$), average (excludes China)	8.98	9.14
Total WASH expenditure per capita (US$), average	50	39
Total WASH expenditure as a percentage of gross domestic product (GDP), average	1.3%	0.76%
Breakdown of national WASH expenditure between water/sanitation/hygiene	56% / 43% / 1%	59% / 35% / 6%
Percentage of WASH financing derived from households, average	66%	65%
Non-revenue water, average	43%	39%

Key indicator	2015	2017
External support		
Official development assistance (ODA) commitments for water and sanitation (constant 2017 US$)	7.6 billion	9.1 billion
Percentage of total aid commitments for water and sanitation	3.8%	4.6%
Aid disbursements for water and sanitation (constant 2017 US$)	6.9 billion	6.9 billion
Breakdown of water and sanitation aid commitments between water/sanitation	65% / 35%	63% / 37%
Percentage of water and sanitation aid commitments directed to basic services	25%	22%

[a] The denominator for each percentage varies based on the number of responding countries per question.
[b] Refers to wastewater surveillance for sanitation.
— Not applicable.
Sources: GLAAS 2018/2019 country and ESA surveys; GLAAS 2016/2017 country and ESA surveys; Organisation for Economic Co-operation and Development Creditor Reporting System (OECD-CRS), 2019; GDP data and average exchange rates are from the World Bank World Development Indicators database, https://databank.worldbank.org/source/world-development-indicators (accessed 5 July 2019).

CONTEXT OF THE GLAAS 2019 REPORT

Introduction

The SDGs have brought a new era of ambition and resolve to the global development agenda. WASH is very much part of this new spirit of aspiration, in recognition that globally, over 2 billion people still rely on unsafe water, and 4.2 billion use sanitation facilities that allow their excreta to leak untreated into the environment *(1)*.

The WASH targets under SDG 6[1] set an ambition of no less than universal access to drinking-water, sanitation and hygiene services, emphasizing the need to focus on the vulnerable and those left behind. The targets are unambiguous in calling for the elimination of open defecation, and for ensuring WASH services are affordable. For the first time, global targets and indicators have been established for hygiene. The SDGs also introduce new concepts such as "safely managed" drinking-water and sanitation services and encompass WASH in schools, health care facilities and households.

Universal and safely managed services require a coordinated effort by all, with governments in the lead. Evolution of the WASH sector, from an emphasis on infrastructure to a recognition that the ultimate goal is delivery of safely managed WASH services that are sustained over time, has resulted in a new focus on the country systems that help provide universal WASH. National and local governments, development partners, civil society and users are central participants in these systems and can best contribute towards achieving universal coverage when roles and responsibilities are clearly defined, and efforts are aligned. Strong systems ensure sustainability and resilience. They are the best guarantee of services for all.

Broadly speaking, the components of a WASH system include governance (legislation, policies, plans and regulatory frameworks), institutional arrangements, financing and financial systems, monitoring systems for informed assessments and reviews, and a human resource base supported by ongoing capacity development. The UN-Water GLAAS initiative led by the World Health Organization (WHO) has monitored these components of WASH systems since its pilot in 2008. Strengthening these elements complements efforts to create an enabling environment made up of the broader political and legislative framework within a country, and recognizes the importance of social, political and economic factors alongside infrastructure.

Purpose of GLAAS

The main objective of GLAAS is to monitor components of WASH systems, including governance, monitoring, finance, and human resources necessary to sustain and extend WASH services to all, and especially to the most vulnerable population groups. GLAAS collects information on WASH status and trends directly from national governments and ESAs through country and ESA surveys (see Annex 1 for a glossary of terms used, Annex 2 for information on GLAAS methodology and validation and Annex 3 for the benefits of the GLAAS process). GLAAS has recently started to dive deeper into WASH policies and as part of this work has developed sanitation policy case studies in seven countries (Annex 4). GLAAS also supports implementation of TrackFin, a methodology for tracking financing to WASH at the national level to understand how much is spent, by whom and for what in countries (Annex 5). GLAAS monitoring activities include implementation of the GLAAS biennial cycles, TrackFin implementation and evolution, and contributing to SDG 6 monitoring and reporting and related systems strengthening. WHO, through GLAAS, is a co-custodian, along with the United Nations Environment Programme (UNEP) and the Organisation for Economic Co-operation and Development (OECD), for monitoring SDG Targets 6.a and 6.b on the means of implementation.[2] Annex 6 provides further information on Targets 6.a and 6.b.

[1] "Ensure availability and sustainable management of water and sanitation for all".

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

GLAAS complements and informs other efforts across the WASH sector including the JMP and the Sanitation and Water for All (SWA) partnership. The JMP provides internationally comparable estimates of progress on drinking-water, sanitation and hygiene at the country, regional and global levels, and GLAAS helps to provide context for these estimates. For more information about GLAAS, see: http://www.who.int/water_sanitation_health/monitoring/investments/glaas/en/.

Celebrating 10 years of SWA and GLAAS

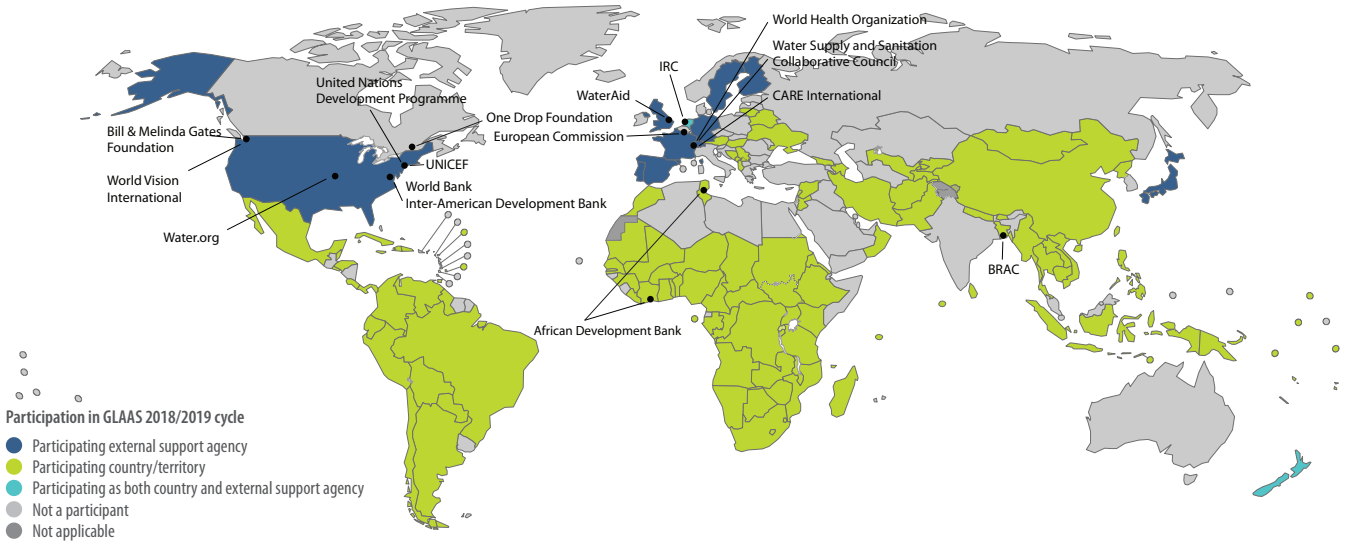
In 2008, GLAAS and SWA were created by the global community as part of an effort to strengthen and align efforts to increase access to drinking-water and sanitation. While SWA would convene partners from different constituencies at a high level, GLAAS would provide evidence on WASH governance, monitoring, human resources and finance for discussion and decision-making by those partners.

GLAAS reports have been aligned with the SWA cycles of High-Level Meetings, and WHO, through GLAAS, has played a lead role in developing the monitoring strategy for the SWA Collaborative Behaviours. The GLAAS 2019 report will be used as part of the preparatory process for the High-Level Meetings taking place in 2020.

Overview of participating countries, territories and external support agencies (ESAs)

The GLAAS 2018/2019 country survey was completed by 115 countries and territories,[3] covering a population of 4.5 billion, and representing 60% of the world's population. This includes 96% of the population of Sub-Saharan Africa[4] and 93% of the population of Least Developed Countries. The GLAAS 2018/2019 ESA survey was completed by 29 ESAs. This represents a positive trend for participation and an important increase from the 2016/2017 cycle. Data from countries, territories and ESAs used in analysis for key indicators in this report can be found in Annexes 7 and 8. Annex 9 provides a list of the thousands of individuals involved in the GLAAS 2018/2019 cycle.

One hundred and fifteen countries and territories, and 29 ESAs participated in the GLAAS 2018/2019 cycle involving thousands of individuals and hundreds of institutions.



Map production: Water, Sanitation, Hygiene and Health, WHO.
Sources: GLAAS 2018/2019 country and ESA surveys.

[3] Including three territories: Anguilla, British Virgin Islands and West Bank and Gaza Strip. The term West Bank and Gaza Strip should hereinafter be understood as referring to the occupied Palestinian territory, including east Jerusalem. Statistics in this report refer to countries or territories.

[4] Note that SDG regional groupings were used for regional analyses to ensure consistency with SDG reporting. SDG regions are based on the Standard Country or Area Codes for Statistical Use (known as M49) and are primarily based on geographical location. More information at: https://unstats.un.org/sdgs/indicators/regional-groups/.

Country, territory and ESA participation in the GLAAS 2018/2019 surveys

Countries and territories (115 total)	ESAs (29 total)
Afghanistan, Albania, Angola, Anguilla, Antigua and Barbuda, Argentina, Austria, Azerbaijan, Bangladesh, Barbados, Belarus, Belize, Benin, Bhutan, Bolivia (Plurinational State of), Bosnia and Herzegovina, Botswana, Brazil, British Virgin Islands, Burkina Faso, Burundi, Cambodia, Cameroon, Central African Republic, Chad, Chile, China, Colombia, Comoros, Congo, Costa Rica, Côte d'Ivoire, Cuba, Democratic People's Republic of Korea, Democratic Republic of the Congo, Dominican Republic, Ecuador, El Salvador, Eritrea, Eswatini, Ethiopia, Fiji, Gabon, Gambia, Georgia, Ghana, Guinea, Guyana, Haiti, Honduras, Hungary, Indonesia, Iran (Islamic Republic of), Jamaica, Jordan, Kenya, Kyrgyzstan, Lao People's Democratic Republic, Lebanon, Lesotho, Liberia, Lithuania, Madagascar, Malawi, Maldives, Mali, Marshall Islands, Mauritania, Mexico, Mongolia, Montenegro, Morocco, Mozambique, Myanmar, Namibia, Nauru, Nepal, Netherlands, New Zealand, Niger, Nigeria, Oman, Pakistan, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Sao Tome and Principe, Senegal, Serbia, Seychelles, Solomon Islands, South Africa, South Sudan, Sri Lanka, Sudan, Syrian Arab Republic, Tajikistan, Thailand, Timor-Leste, Togo, Trinidad and Tobago, Tunisia, Tuvalu, Uganda, Ukraine, United Republic of Tanzania, Uzbekistan, Vanuatu, Venezuela (Bolivarian Republic of), Viet Nam, West Bank and Gaza Strip, Zambia, Zimbabwe	African Development Bank (AfDB); Bill & Melinda Gates Foundation (BMGF); BRAC; CARE International; European Bank for Reconstruction and Development (EBRD); European Commission; Finland, Ministry for Foreign Affairs; France, Agence Française de Développement (AFD); Germany, Federal Ministry for Economic Cooperation and Development (BMZ); Inter-American Development Bank (IDB); IRC; Japan International Cooperation Agency (JICA); Netherlands, Ministry of Foreign Affairs (DGIS); New Zealand, Ministry of Foreign Affairs and Trade (MFAT); One Drop Foundation; Portugal, Camões - Institute for Cooperation and Language, I.P.; Spain, Agencia Española de Cooperación International al Desarollo (AECID); Sweden, Swedish International Development Cooperation Agency (Sida); Switzerland, Swiss Agency for Development and Cooperation (SDC) and State Secretariat for Economic Affairs (SECO); United Kingdom of Great Britain and Northern Ireland, Department for International Development (DFID); United Nations Children's Fund (UNICEF); United Nations Development Programme (UNDP); United States Agency for International Development (USAID); Water Supply and Sanitation Collaborative Council (WSSCC); Water.org; WaterAid; World Bank; World Health Organization (WHO); World Vision International

Distribution of GLAAS participating countries and territories by income group

World Bank income group[a]	GLAAS 2013/2014 (*n* = 94)	GLAAS 2016/2017 (*n* = 84)	GLAAS 2018/2019 (*n* = 115)
Low income	29%	24%	25%
Lower-middle income	37%	39%	33%
Upper-middle income	28%	32%	29%
High income	5%	5%	12%
Not available[b]	1%	0%	1%

[a] More information on World Bank classification by income can be found at: https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups.
[b] Anguilla, a British overseas territory, has not been classified within an income-level group by the World Bank.

This strong participation in GLAAS confirms a growing country interest in WASH systems as part of SDG ambitions, and increasing country awareness of the value of GLAAS data for monitoring and measuring WASH progress and informing improvements in their WASH systems. See Annex 3 for additional information on the benefits of the GLAAS process and the use of GLAAS data.

Using GLAAS data to guide development programmes

In **Botswana, Mozambique, Namibia, South Africa** and **Zimbabwe**, the USAID/Resilient Waters programme is using the GLAAS process at national level as an entry point to strengthen WASH sector activities and the enabling environment in those countries. USAID/Resilient Waters has organized gap analysis workshops in each of the countries based on their GLAAS 2018/2019 country survey submissions to inform potential programme activities that are aligned with national objectives. These workshops, building on the GLAAS process, have allowed USAID/Resilient Waters to immediately get started with stakeholder buy-in. For example, in Botswana, the GLAAS gap analysis highlighted that sanitation has lagged behind water supply, and the response from the Ministry of Land Management, Water and Sanitation Services and USAID/Resilient Waters has been to develop a Sanitation Roadmap, which will be delivered within six months of the GLAAS survey submission.

The GLAAS 2018/2019 cycle and the GLAAS 2019 report

The GLAAS 2018/2019 cycle and the GLAAS 2019 report focus on WASH systems by covering the four key areas of WASH systems (governance, monitoring, human resources and finance) with an emphasis on national WASH policies, plans and targets. Currently, there is no global mechanism for monitoring government-reported progress towards national WASH targets or assessing how countries are considering the ambitions of the SDGs in their national WASH sectors. A GLAAS spotlight on national policies, plans and targets will help fill this gap.

The GLAAS 2018/2019 country survey continues to be aligned with the SDGs and has an expanded focus on areas such as safely managed water and sanitation systems, faecal sludge management (FSM) and WASH in health care facilities and schools. The survey includes two questions to be used for SDG monitoring and reporting to the United Nations Statistical Division (UNSD). In line with the universality principle of the SDGs, the GLAAS country survey is now open to all interested countries – high-income as well as low- and middle-income. Fourteen high-income countries participated in this cycle.

The quality of information is improving with each GLAAS cycle and increasing commitment and engagement by countries and WHO regional offices. See Annex 2 for information on data quality in the 2018/2019 cycle.

WHO sanitation policy case studies

In parallel to the GLAAS 2018/2019 cycle, GLAAS has conducted case studies on policy and planning frameworks for sanitation in seven countries. In line with the thematic focus of the GLAAS 2019 report, the case studies reviewed the status and content of policies, plans and supporting frameworks for sanitation in the following countries: Bangladesh, Kenya, Mali, Nepal, Senegal, Uganda and Zambia. Boxes throughout this report feature country examples and findings from the WHO sanitation policy case studies (see also Annex 4).

CHAPTER 1

To what extent do governments support policies and plans for WASH service delivery under the SDGs?

Highlights

- **National WASH policies and plans:** Most countries reported having policies for drinking-water (94%), sanitation (94%) and hygiene (79%). The majority of countries also reported having implementation plans to support these WASH policies.
- **Resources to implement plans:** Fewer than one sixth of countries with costed WASH plans have sufficient financing to implement them. Of those that have conducted human resources assessments, less than 14% have sufficient human resources to implement plans.
- **Establishing priorities with JSRs:** Over two thirds of countries reported conducting JSRs for WASH, with 65% of countries conducting JSRs within the last two years.
- **Revising national policies:** Over 30% of countries are developing or revising national policies for sanitation or drinking-water. Countries rely on a range of information to develop policies such as national data, JSRs, and policies from other sectors and countries.

Up-to-date and effective policies and plans supported by the human and financial resources needed for implementation are critical system components for WASH service delivery. Monitoring government implementation of policies and plans is essential for holding governments accountable to users and improving WASH service delivery under the SDGs. This accountability is also a necessary component for the progressive realization of the human rights to water and sanitation *(1)*.

1.1 To what extent do governments address drinking-water and sanitation in national development plans?

National development plans are multiyear, social and economic plans that articulate the development objectives of a country. Some countries have three-year or five-year plans, while others establish longer-term visions. National development plans can be an indicator of national priorities as well as political will. The higher the profiles of drinking-water and sanitation in national development plans, the more important these issues are likely considered by the politicians in a given country. In the GLAAS 2018/2019 country survey, 107 countries reported having national development plans. When asked if national development plans address drinking-water and/or sanitation, 99% of countries with national development plans reported that they address drinking-water, and 95% reported that they address sanitation.

SANITATION POLICY CASE STUDY BOX 1.1

Sanitation in national development plans in Nepal

Since the 1950s, **Nepal** has produced five-year national development plans that establish socioeconomic objectives to be achieved by the end of the planning period. The 15th Periodic Plan (2019/2020–2024/2025) outlines key strategies to achieve middle-income country status for Nepal *(2)*. This plan includes WASH sector objectives focusing on improving public health by ensuring accessibility of reliable, affordable and safe drinking-water and sanitation facilities for all in urban, peri-urban and rural areas. It also includes maintaining a clean environment by proper management of wastewater. The plan has targeted 100% of the population to have access to improved sanitation facilities, achieve and maintain the open defecation free (ODF) status of the country, and to work progressively towards total sanitation, with at least 20% of wastewater treated and properly discharged. Total sanitation in Nepal includes the basic requirement of having access to a toilet as well as additional considerations such as handwashing, safe drinking-water, safe food and an overall clean environment in the community.

Source: WHO 2018/2019 sanitation policy case studies.

1.2 To what extent have governments established national policies and implementation plans for WASH?

National policies for drinking-water, sanitation and hygiene are important for establishing priority issues, guidelines and objectives for the sector. To support policies, governments often formulate national plans[1] for drinking-water, sanitation and hygiene that detail how policies should be implemented. Plans may assign responsibilities to government ministries and stakeholders, establish minimum requirements and timelines for implementing the policy, and allocate human and financial resources. The glossary in Annex 1 provides definitions used in the GLAAS 2018/2019 country survey and this report.

GLAAS 2018/2019 country survey results show that 94% of countries reported having national policies for drinking-water and sanitation, and 79% reported having policies for hygiene.[2] The majority of countries also have national plans for drinking-water, sanitation and hygiene.

Climate resilience and adaptation for WASH in policies and plans

Governments and ESAs are taking initiatives to prioritize and strengthen climate resilience in WASH. For urban and rural drinking-water, 64 and 65 countries, respectively, indicated that their policies or plans address climate resilience of WASH technologies and management systems. For urban and rural sanitation, 56 and 43 countries, respectively, indicated that climate resilience is addressed in policies or plans. GLAAS findings also show that ESAs are prioritizing climate change adaptation in their WASH strategies and activities. Of the ESAs that responded to the GLAAS 2018/2019 ESA survey, over half noted that climate change adaptation is a high or very high priority in their WASH strategies and/or activities.

Sources: GLAAS 2018/2019 country and ESA surveys.

SANITATION POLICY CASE STUDY BOX 1.2

Alignment of policies and plans for sanitation in Kenya

Some countries have a specific sanitation strategy or plan that carefully aligns to an existing sanitation policy in the country. For example, the **Kenya** Environmental Sanitation and Hygiene Strategic Framework, 2016–2020 of the Ministry of Health is a plan that corresponds to the Kenya Environmental Sanitation and Hygiene Policy and provides the framework for its implementation *(3,4)*. Closely aligning with the Kenya Environmental Sanitation and Hygiene Policy, the Kenya Environmental Sanitation and Hygiene Strategic Framework addresses urban and rural areas as well as institutional WASH. The two documents often have similar, if not the same, language and are aligned with the same vision, mission and goal.

- Vision: ". . . a clean healthy and economically prosperous Kenya free from sanitation and hygiene related diseases".
- Mission: ". . . to ensure that all Kenyans have sustainable access to highest attainable standards of sanitation, clean and healthy environment".
- Goal: ". . . to ensure universal access to improved sanitation, clean and healthy environment by 2030".

Source: WHO 2018/2019 sanitation policy case studies.

[1] Some countries use plans and strategies interchangeably. Some plans are sector-wide plans, while others are specific to a certain sub-sector. See Annex 1 for glossary of terms.

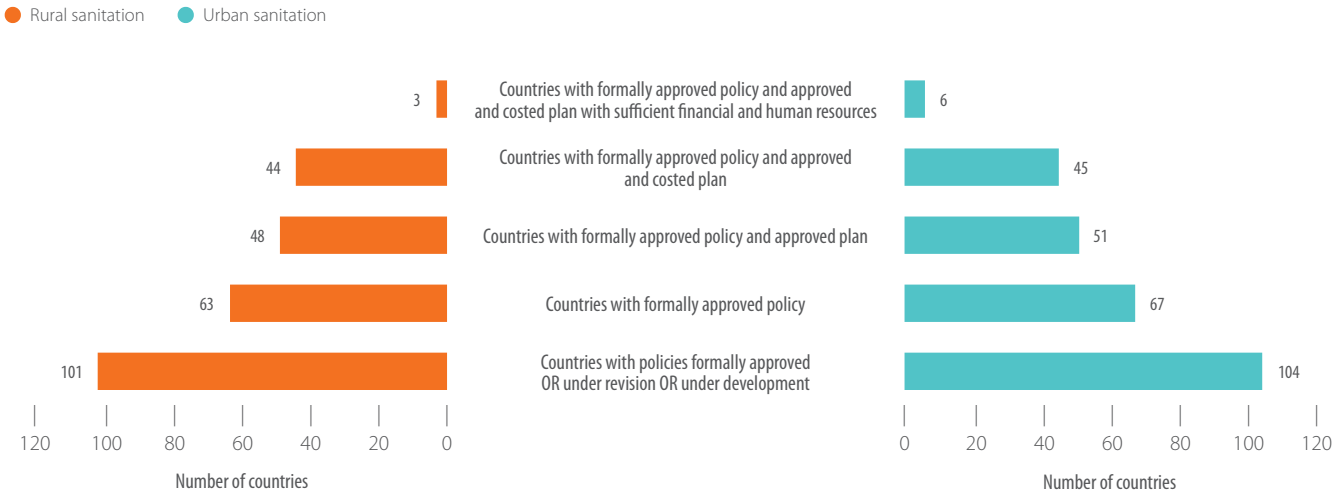
[2] This means that policies are formally approved or undergoing revisions, but that the country has indicated a policy exists for the subsector.

1.3 To what extent are policies supported by plans with sufficient financial and human resources?

Having policies or plans approved or under development or revision does not guarantee strong and sustainable WASH systems in a country. Figure 1.1 shows the number of countries with policies and approved, costed plans for sanitation with sufficient financial and human resources.[3] Out of 104 respondent countries, only six reported having all elements (approved policy, approved plan, sufficient financial and human resources for the plan) in place for urban sanitation, and only three out of 101 countries for rural sanitation. Similar results were found for policies and plans for drinking-water. For most countries, the sufficiency of financial and human resources is a major barrier to fully implementing WASH plans.

For both urban and rural sanitation, very few countries reported having approved policies supported by plans with sufficient financial and human resources.

Figure 1.1 Number of countries reporting formally approved sanitation policies supported by resourced plans



Source: GLAAS 2018/2019 country survey.

Costing and financial sufficiency for WASH plans

The implementation of national WASH plans to achieve agreed policy objectives requires the allocation of adequate financing, which is based on overall plan cost estimates. GLAAS 2018/2019 data indicate that over 77% of countries have developed cost estimates for implementation of sanitation and/or drinking-water plans, and 60% of countries have developed cost estimates for implementation of hygiene plans.

However, beyond costing their plans, less than 15% of countries reported that they have sufficient financing to actually implement their plans.[4] Table 1.1 presents an overview of costed plans and financial sufficiency per subsector. With so few countries having sufficient financial resources to implement plans, the findings suggest the need for countries to carefully prioritize financial allocations to WASH as well as improve resource mobilization for WASH. Chapter 3 discusses additional data on financial sufficiency and financing.

[3] In the GLAAS 2018/2019 country survey, sufficient financial and human resources were defined as having more than 75% of what is needed to implement national WASH plans.

[4] The GLAAS 2018/2019 country survey asked countries if national plans had been supported by adequate financing to implement the plan, and countries responded as having either (i) less than 50% of what is needed; (ii) between 50% and 75% of what is needed; or (iii) more than 75% of what is needed.

Table 1.1 Number and percentage of countries with national WASH plans that have been costed and supported by sufficient financial resources

Subsector	Number of countries with national plans	Percentage of countries with national plans that have been costed	Percentage of countries with costed plans reporting sufficient finance to implement plan[a]
Urban sanitation	94	82%	15%
Rural sanitation	90	79%	7%
Urban drinking-water	95	77%	13%
Rural drinking-water	91	85%	12%
Hygiene	80	60%	9%

[a] In the GLAAS 2018/2019 country survey, sufficient finance was defined as having more than 75% of what is needed to implement national WASH plans.
Source: GLAAS 2018/2019 country survey.

Of those countries with costed national WASH plans, fewer than one sixth have sufficient finance to implement their plans.

Human resource assessments and sufficiency of human resources for WASH plans

The number of countries reporting that they have conducted human resource needs assessments for their national WASH plans is considerably lower than the number of countries reporting that they have costed their plans. For example, as shown in Table 1.2, only 43% of countries with rural sanitation plans indicated that they have conducted accompanying human resources assessments.

GLAAS 2018/2019 data also indicate that a large majority of countries lack sufficient human resources to implement national WASH plans.[5] Only 6% of countries that conducted human resource assessments reported having more than 75% of the needed human resources to implement rural sanitation plans.

Table 1.2 Number and percentage of countries with national WASH plans that have conducted human resource assessments for the plan, and supported the plan with sufficient human resources

Subsector	Number of countries with national plans	Percentage of countries that have conducted human resource assessments for plans	Percentage of countries that have assessed human resources for plans and reported having sufficient human resources to implement plan[a]
Urban sanitation	94	54%	11%
Rural sanitation	90	43%	6%
Urban drinking-water	95	51%	14%
Rural drinking-water	91	46%	10%
Hygiene	80	41%	10%

[a] In the GLAAS 2018/2019 country survey, sufficient human resources was defined as having more than 75% of what is needed to implement national WASH plans.
Source: GLAAS 2018/2019 country survey.

Of those countries with national WASH plans, less than 54% conducted human resource assessments for their plans.

The GLAAS 2018/2019 findings indicate that human resources to implement WASH plans are more likely to be insufficient in rural areas than in urban areas. Consistent with findings from previous GLAAS country surveys, reasons cited by responding countries include that skilled workers do not want to live and work in rural areas.

While many countries have WASH training programmes or institutions to build in-country human resource capacity, GLAAS findings show that the majority of countries (62% of 106 countries) reported that these programmes are only partially sufficient or not sufficient *(5)*.[6]

[5] As with financial resources, the GLAAS 2018/2019 country survey asked countries if national plans had been supported by adequate human resources to implement the plan, and countries responded as having either (i) less than 50% of what is needed; (ii) between 50% and 75% of what is needed; or (iii) more than 75% of what is needed.

[6] Earlier work by the International Water Association has shown that most countries have a mismatch between the professional, technical and vocational training offered for WASH and the actual needs in WASH systems and services *(5)*.

Addressing human resources gaps with WASH training programmes

The following presents some examples of WASH training programmes and institutions reported by countries.

- **Albania** has a robust set of focused WASH training programmes mandated by national guidelines on "the establishment and implementation of national programmes and certification based on testing, in the sector of water supply and sewerage, collection, removal and treatment of wastewater". The training programmes are implemented across multiple agencies and ministries.
- **Botswana** has a strong set of training programmes and degree opportunities linked to WASH – covering technical and health-related aspects – but notes that the content is often not structured to incorporate current technology; and that there are insufficiencies.
- **Ecuador** has established Water Schools across the country focused on WASH skills development, as well as a consortium of public universities and nongovernmental organizations (NGOs) dedicated to training in drinking-water supply and sanitation.

Source: GLAAS 2018/2019 country survey.

1.4 How are governments developing or revising national policies and plans for WASH?

Establishing priority actions through JSRs

Sector performance reviews, or JSRs, often result in priority actions initiating the development or revision of policies and plans for WASH, the establishment or revision of national targets or performance indicators, and/or the establishment or reorganization of institutions for WASH. Sixty-seven per cent of countries reported conducting JSRs for WASH. Sixty-five per cent of countries conducting JSRs had their most recent review within the last two years, and an additional 19% had their most recent review within the last two to four years.

Over two thirds of countries conduct JSRs for WASH, often resulting in priority actions for the sector.

The impact of JSRs in countries

Almost all countries conducting JSRs (93%) reported that priority actions, such as commitments, key actions and recommendations, were set by the review process. The following presents a few examples of the impact and outcomes of JSRs.

- **Benin**: Implementation of the recommendation related to the study on the Integrated Capacity-Building Plan resulting from the 2012 sectoral review made it possible to overhaul the organizational chart. This allowed for adjusting human resources and required skills distribution among groups at national and regional levels.
- **Burundi**: Outcomes of the JSR included definition and harmonization of indicators for monitoring the performance of the WASH sector, improvement of WASH sector planning and programming mechanisms, improvement of management mechanisms of public water services and development of the National Sanitation Policy and Water Code.
- **Liberia**: In 2018, the JSR called for the closing of institutional gaps and bringing together the fragmented WASH sector by creating a self-contained Ministry of Water Resources and Sanitation. The result was the formation and institutionalization of a WASH Commission.

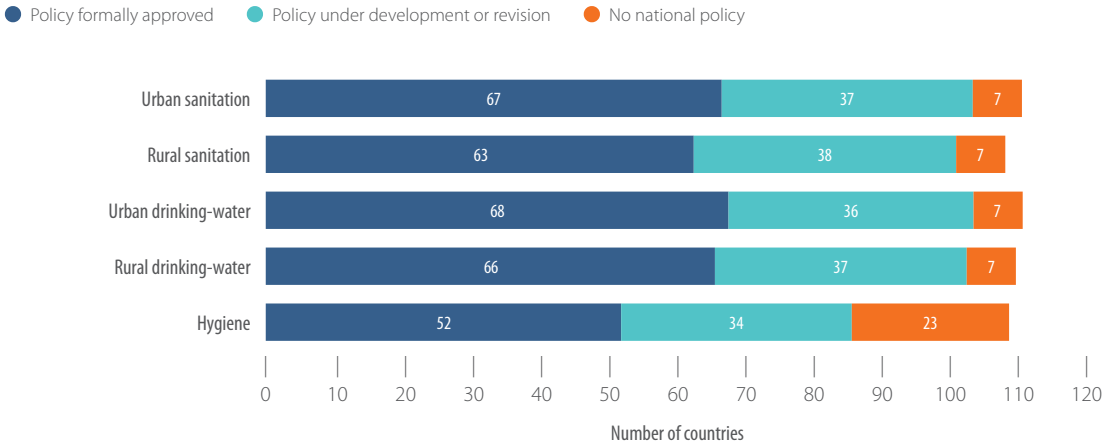
Source: GLAAS 2018/2019 country survey.

Status of countries developing or revising national WASH policies and incorporating the SDGs

GLAAS data indicate that many governments are in the process of developing or revising their national policies or plans for WASH. Figure 1.2 shows the number of countries with policies under development or undergoing revision by subsector.

Over 30% of countries are developing or revising policies for drinking-water, sanitation or hygiene.

Figure 1.2 Number of countries with policies under development or undergoing revision



Source: GLAAS 2018/2019 country survey.

Through revision processes, many countries have incorporated the ambitions of the SDGs into national WASH policies and plans. GLAAS data show that most countries indicated that their national WASH policies or plans address safely managed services. For drinking-water, over 80% of countries responded that their urban and rural policy or plan addresses safely managed services. For sanitation, the urban policies or plans of 86 of 111 countries (77%) and the rural policies or plans of 76 of 109 countries (70%) address safely managed services.

Most countries indicated that their national WASH policies or plans address safely managed services.

SANITATION POLICY CASE STUDY BOX 1.3

Incorporating the SDGs into Senegal's sanitation policy

The vision of the latest sanitation policy in **Senegal** (2016–2025) explicitly seeks to contribute to the achievement of the SDGs to ensure universal access to drinking-water and sanitation by 2030 while ensuring integrated water resources management *(6)*. The policy singles out SDG 6 focus areas including: (i) household access to sustainable sanitation, (ii) management of wastewater and rainwater and (iii) elimination of open defecation. In 2017, Senegal completed a national household survey focused on WASH in order to establish a reliable baseline reference on water and sanitation within the SDG context. The Sanitation and Rainwater Management Programme (PAGEP) is aligned with the sanitation objectives of SDG 6. The programme is centred on the development of sustainable sanitation systems in urban, peri-urban and rural areas including gender-sensitive sanitation facilities in schools and health centres, and reducing open defecation to ultimately achieve its elimination. Linking to other SDGs, the programme pays particular attention to climate change and gender equity in the conception, realization and management of sanitation systems.

Source: WHO 2018/2019 sanitation policy case studies.

Processes for developing WASH policies

While countries have different processes for developing policies, there are some similarities across countries. Common elements of the policy development processes include designating responsibility for policy development – often by establishing a working group or hiring a consultant – reviewing evidence for the policy, having the policy endorsed at the necessary level of government and making the final version public.

When asked about challenges encountered in developing WASH policies, many countries stated similar obstacles such as a lack of data or inconsistent data, insufficient financing and human resources to undertake policy work, and difficulty in coordinating stakeholders and balancing competing priorities.

Use of information to inform policy development

When asked what information was consulted while developing WASH policies, countries indicated they refer to policies from other sectors and other countries as well as information from national constitutions and laws, national development plans, data from censuses and household surveys, service coverage data, JSRs, annual reports and international guidelines.

Countries use a wide range of information in policy development including data from censuses and household surveys, international commitments, JSRs and policies from other sectors and countries.

Role of the public in policy development

Transparent and accountable policy development requires the public to take a role. Engagement of the public in such processes also contributes to SDG Target 6.b, which aims to support and strengthen the participation of local communities in improving water and sanitation management. Annex 6 gives further details on SDG Target 6.b.

GLAAS data reveal that the public is often engaged in policy development through consultations and workshops, frequently represented by civil society organizations and NGOs. The mechanisms for public involvement vary from informal mechanisms to formal mechanisms that are defined in law. Some examples provided by responding countries on how the public has been involved in developing WASH policies are provided below.

- **Brazil**: Public participation in the four-year revisions of the national plan for basic sanitation took place with the participation of civil society, supply companies, associations related to the WASH sector, academia and representatives of the health sector.
- **Chad**: The public is represented by water point management committees, associations of water users (drinking-water supply) and sanitation and hygiene committees. These groups gather and share information for the development and updating of policies.
- **Lao People's Democratic Republic**: The Lao Youth Union, the Lao Women's Union and the Lao Trade Union members represent the public and directly participate in developing and revising policies.
- **Trinidad and Tobago**: The Water and Sewage Authority has a community outreach programme for consultation. Members of the public review and give comments at live consultations at urban centres and regional corporations, and documents are posted on websites and in newspapers for comment.
- **Uzbekistan**: During their development, regulatory documents are posted on the official state website for discussion by the general public and all interested parties.

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CHAPTER 2

How are countries addressing safely managed services and other new elements of the SDGs in national WASH targets?

Highlights

- **National target-setting process**: While most countries conduct baseline analyses and include stakeholders in their target-setting processes, less than 60% conduct human resource needs assessments when setting national targets.
- **Targets**: Most countries have national drinking-water coverage targets that aim for higher levels of service such as water quality and accessibility of water on premises. In contrast, fewer than one third of countries explicitly reference elements of safely managed sanitation in their national sanitation coverage targets.
- **Data availability to monitor progress:** The majority of countries reported assessing progress towards national targets on an annual basis; however, fewer than one half of responding countries reported current coverage data for their targets. This could be due in part to insufficient human resources. Only 10% of countries indicated sufficient human resources to monitor progress towards national targets.
- **Progress towards targets**: Based on historical rates of progress, many national targets for safely managed sanitation may be difficult to achieve within the target timeframe. For 16 out of 29 countries, rates of change needed to achieve basic and limited urban sanitation coverage targets exceed the fastest rates of progress ever recorded by JMP.

Achieving SDG 6 – and reducing waterborne disease (expressed in SDG Targets 3.3 and 3.9) – will require dramatic improvements to the quality and ambition of WASH service delivery. One way to work towards these improvements and ambitions is through national targets. National targets set out governments' ambitions and objectives for WASH. While the SDGs set global, aspirational goals, they also give countries the flexibility to adapt to national priorities and contexts, allowing each government to determine how to integrate global targets into national policies and planning.

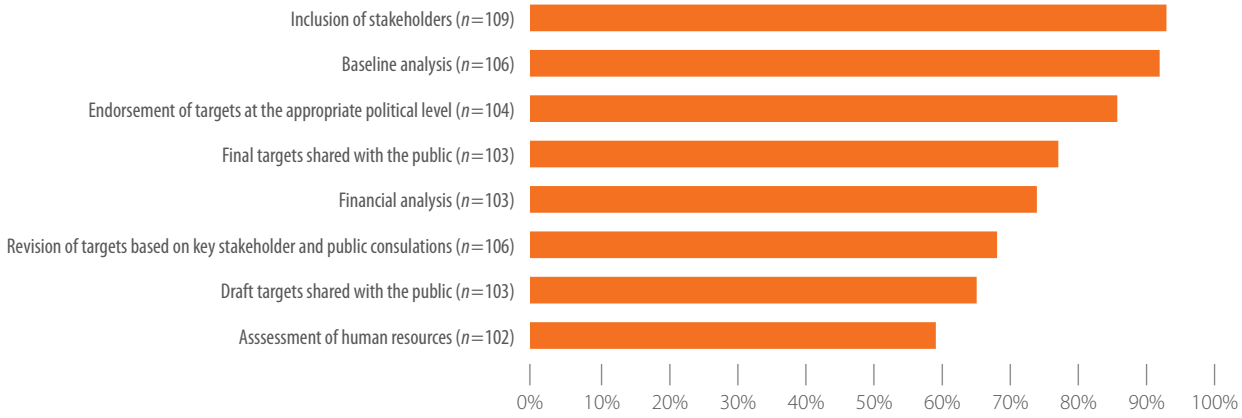
2.1 How are governments setting national WASH targets?

GLAAS 2018/2019 data indicate that most countries have national targets in terms of the coverage of WASH services they want to achieve. However, GLAAS findings reveal that in-country processes for setting targets vary from country to country and by WASH subsector.

When asked what elements they incorporated into their target-setting process, for sanitation and drinking-water the majority of responding countries noted including key stakeholders, conducting a baseline analysis and/or a financial analysis, assessing human resource needs, revising targets after public consultation, receiving appropriate level political endorsement and sharing final targets with the public, including key stakeholders. Figure 2.1 presents the percentage of countries that included these different elements for establishing national drinking-water targets.

Assessment of human resources was the least common element reported by countries to be included in their target-setting process. Including stakeholders and conducting a baseline analysis were the most common elements.

Figure 2.1 Elements incorporated in the target-setting process for drinking-water, percentage of countries



Source: GLAAS 2018/2019 country survey.

However, a different picture emerges when looking at all the target-setting elements in combination. Just over one third of countries included all the elements listed in Figure 2.1 in their target-setting process for sanitation and for drinking-water. Around one quarter of countries incorporate all these elements in their target-setting process for hygiene, WASH in schools and WASH in health care facilities. GLAAS 2018/2019 country survey results suggest that more remains to be done to strengthen the overall target-setting process, especially when considering all the elements together.

The role of institutions in target setting

Across GLAAS respondent countries, national target setting for WASH was most often led by the line ministry or by a number of ministries across the different subsectors. Many countries noted more than one ministry as the lead; common lead ministries include ministries of water and sanitation, health, local government and the environment. Water and sanitation utilities also sometimes played a lead role. For example, in **Liberia**, the Liberia Water and Sewer Corporation is the lead for urban water and sanitation targets and a line ministry sets rural targets. Countries such as **Dominican Republic** and **Indonesia** cited lead ministries or agencies that focus on overall national development such as ministries of economic development, while others such as **El Salvador** cited a mix of ministries that lead national target setting for WASH.

Source: GLAAS 2018/2019 country survey.

2.2 What targets have countries set for drinking-water, sanitation and hygiene under the SDGs?

Globally, and through the JMP, the SDGs for drinking-water (Target 6.1) and sanitation (Target 6.2) will be measured by the criteria of safely managed services. The JMP assesses safely managed drinking-water as water that is microbially and chemically safe, available when needed and accessible. Safely managed sanitation services must ensure that human waste is contained and treated, whether through reticulated sewage systems or contained on site in pit latrines or septic tanks.

Indicators for safely managed drinking-water and safely managed sanitation are now established in global monitoring and are represented as new higher rungs on the JMP monitoring ladders.[1] The JMP continues to measure incremental and equitable progress for all service levels including the lower rungs on the ladders. Additionally, hygiene is a new indicator for the SDGs, so

[1] More information and definitions for the JMP monitoring ladders for WASH services available at: https://washdata.org/monitoring. The levels within the monitoring ladders are also defined in Tables 2.2 and 2.4.

national hygiene coverage is now monitored globally. The JMP assesses basic hygiene as the proportion of the population with handwashing facilities with soap and water at home.

Table 2.1 SDG 6 and Targets 6.1 and 6.2 with indicators

SDG 6: Ensure availability and sustainable management of water and sanitation for all	
Target 6.1 By 2030, achieve universal and equitable access to safe and affordable drinking-water for all	**Indicator 6.1.1** Proportion of population using safely managed drinking-water services
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 6.2.1** Proportion of population using safely managed sanitation services, including a handwashing facility with soap and water

Source: *(1)*.

WHO, through the GLAAS initiative, has a role to support SDG monitoring of Targets 6.1 and 6.2 by presenting findings on national targets that are being set by governments under the SDGs, by assessing alignment with JMP service ladders and by summarizing country-reported progress towards national targets.

National coverage targets for drinking-water

Using target indicator descriptions and definitions provided by countries in the GLAAS 2018/2019 country survey, national targets were assessed against the JMP service ladder and categorized as corresponding to either safely managed drinking-water, basic drinking-water, or limited drinking-water services. Some countries reported basic targets that included some, but not all, of the elements of safely managed drinking-water. Therefore, an additional category "basic+" was defined to capture targets that had all the elements of the basic level and also included at least one element of safely managed services.[2]

Most countries are setting targets that reach beyond basic services, with drinking-water targets aiming for higher levels of service.

Table 2.2 Urban and rural drinking-water coverage targets – how do targeted services align with the JMP service ladder?

Category	Target classification criteria	Examples of national standards and indicators used to monitor national targets	Number of countries (percentage)	
			Urban ($n = 90^a$)	Rural ($n = 90^a$)
Safely managed	The target calls for drinking-water from an improved source[b] that is located on premises, and **all of the following:** water is accessible on premises AND water is available when needed AND water supplied is free from contamination.	**South Africa:** Percentage of population with access to improved drinking-water supply. Includes piped (tap) water inside dwelling/institution and piped (tap) water inside yards. Minimum of 25 L per person, 24 hours per day availability, free from contamination according to South Africa National Standard 241 specifying the quality of acceptable drinking-water.	47 (52%)	35 (39%)
Basic+ (number of countries with basic and one or more elements of safely managed incorporated in their target)	The target calls for drinking-water from an improved source, provided collection time is not more than 30 minutes for a round trip, including queuing, **and one or two of the following:** water is accessible on premises OR water is available when needed OR water supplied is free from contamination.	**Myanmar:** Access to potable water supplies and improved water for other domestic uses. In accordance with the National Drinking-Water Quality Standards (2014), water that meets water quality standards and is safe to drink with or without treatment. Maximum distance to source: 200 m one way.	23 (26%)	32 (36%)
Basic	The target calls for drinking-water from an improved source, provided collection time is not more than 30 minutes for a round trip, including queuing.	**Eswatini:** Percentage of rural population with access to improved drinking-water supply (within 200 m).	13 (14%)	8 (9%)
Limited	The target calls for drinking-water from an improved source for which collection time exceeds 30 minutes for a round trip, including queuing.	**Lesotho:** Percentage of rural population with access to improved drinking-water supply (piped, borehole or protected spring water) without an indicator for maximum collection time.	5 (6%)	13 (14%)
None	Countries that do not have a national target for drinking-water.		2 (2%)	2 (2%)

[a] Twenty-five countries for urban and 25 countries for rural either did not respond to the question or did not provide enough information to categorize their national targets.
[b] Global JMP indicators define improved drinking-water sources as those that have the potential to deliver safe water by nature of their design and construction. These include piped supplies (such as households with tap water in their dwelling, yard, or plot, or public standpoints) and non-piped supplies (such as boreholes, protected wells, springs, rainwater and packaged or delivered water). JMP definitions available at: https://washdata.org/.
Source: GLAAS 2018/2019 country survey.

[2] Elements of safely managed drinking-water are: (i) water is accessible on premises, (ii) water is available when needed, and (iii) water supplied is free from contamination.

Table 2.2 presents an overview of the national drinking-water targets that were categorized. For urban drinking-water, approximately half of countries set national targets that correspond with the criteria for safely managed services, and an additional 26% corresponding to the basic+ level, indicating that the majority of countries (78%) have targets that included service criteria for higher levels of service. For rural drinking-water, there were fewer countries that set targets at the safely managed level, but a similar proportion (75%) included higher levels of service. Most countries set targets that were at least basic levels of service (92% for urban, 84% for rural); only a small number of countries reported national targets at the limited level. While several countries reported targets for both safely managed and basic level services, it was not possible to do a systematic analysis of countries that have both due to how the question was asked in the GLAAS 2018/2019 country survey. Countries were asked to provide detailed information for only one coverage target per subsector.

Table 2.3 summarizes the incorporation of service-level criteria for safely managed services into national coverage targets for drinking-water. The results indicate that countries have prioritized water being accessible on premises and water being free from contamination for inclusion in their targets. However, as the effects of climate change are expected to decrease the availability of water, national planning processes to enhance climate resilience may need to increasingly take availability into consideration.

Countries are prioritizing water quality and accessibility of water on premises rather than availability when needed.

Table 2.3 Number and percentage of countries incorporating service-level criteria for higher levels of service in urban and rural drinking-water coverage targets

Element of safely managed drinking-water considered in coverage target	Examples of national standards and indicators used to monitor national targets	Number of countries (percentage)	
		Urban ($n=70^a$)	Rural ($n=67^a$)
Drinking-water from an improved source, provided collection time is not more than 30 minutes for a round trip, including queuing, and **water supplied is free from contamination.**	**Madagascar**: Compliance with physio-chemical and bacteriological parameters.	63 (90%)	56 (84%)
Drinking-water from an improved source, **and water is accessible on premises.**	**Pakistan**: Water source within the compounds of households.	60 (86%)	53 (79%)
Drinking-water from an improved source, provided collection time is not more than 30 minutes for a round trip, including queuing, and **water is available when needed.**	**Viet Nam**: 120 L per person, available 24 hours per day, some cities range from 12 to 18 hours per day.	47 (67%)	50 (75%)

[a] Number of countries with targets aligned to safely managed services, or to basic services with at least one element of safely managed services.
Source: GLAAS 2018/2019 country survey.

Timeframes for drinking-water targets at safely managed and basic+ levels

Thirty-three of 70 countries (47%) with targets for urban or rural drinking-water at safely managed or basic+ service levels aim for universal coverage by 2030. Of the remaining, 28 countries have established interim targets for the year 2025 or before, particularly for rural targets.

National coverage targets for sanitation

Using target descriptions provided by countries in the GLAAS 2018/2019 country survey, national sanitation targets were assessed against the JMP service ladder and categorized as corresponding to either safely managed sanitation, basic sanitation or limited sanitation.[3] Table 2.4 presents an overview of categorized national sanitation coverage targets.

Most national sanitation targets have yet to explicitly reference elements of safely managed sanitation that require safe management of excreta on site (for example in latrines and septic tanks, with accompanying FSM) and effective wastewater treatment for off-site systems. Only 27 of 88 countries (31%) indicated they have urban sanitation coverage targets that referenced these elements. This was even lower for rural areas; only 14 out of 87 countries (16%) had such rural sanitation coverage targets.

More than one third of countries (32 of 88) reported urban sanitation coverage targets that can be classified as aiming for basic sanitation services. For rural sanitation, over 40% of countries (37 of 87) have basic sanitation coverage targets. It appears that most countries are prioritizing the attainment of basic and limited sanitation services over setting national targets aiming for higher levels of service, particularly in rural areas. In comparison, close to three quarters of countries are taking on board at least

[3] Safely managed services are defined as use of improved facilities and incorporation of collection/off-site treatment and/or in situ treatment of faecal sludge. Basic services are defined as use of improved facilities, but with no mention of excreta management. Limited services are defined as use of improved facilities, but facilities covered may be shared among households.

one of the safely managed service criteria for both urban and rural drinking-water. This may reflect the lower levels of sanitation coverage compared to drinking-water, indicating a need to catch up on basic sanitation services.

Most national sanitation targets do not yet include elements of safe excreta management; the majority of countries are setting sanitation targets at the basic and limited service levels.

Table 2.4 Urban and rural sanitation coverage targets – how do targeted services align with the JMP ladder?

Category	Target classification criteria	Examples of national standards and indicators used to monitor national targets	Number of countries (percentage)	
			Urban ($n=90$[a])	Rural ($n=87$[a])
Safely managed service	**Access to improved facilities:**[b] The target calls for the population to have access to improved facilities that are not shared, and which incorporate collection/off-site treatment and/or in situ treatment of faecal sludge within the stated coverage target.	**Bhutan**: Percentage of population with access to safely managed sanitation facilities, [with residuals] safely disposed of in situ or transported and treated off site.	11 (12%)	5 (6%)
	Connected to a sewer network:[c] The target calls for the percentage of the population connected to a sewer network, with reference to treatment or treatment facilities within the target.	**Serbia**: Connection to the public sewage system. Use of safely managed sanitation services including wastewater collection and treatment services.	16 (18%)	9 (10%)
Basic	**Access to improved facilities**: The target calls for a population with access to improved facilities that are not shared, and where faecal sludge collection, treatment and disposal are not referenced within the stated coverage target.	**Honduras**: Percentage of urban population with access to improved sanitation. The country indicated that the rural target does not include elements of residuals management.	27 (30%)	31 (36%)
	Connected to a sewer network: The target calls for the percentage of the population connected to a sewer network, however, there is no reference to treatment or treatment facilities in the target.	**Maldives**: Percentage of population with access to improved sewerage facilities/access to sewerage network systems. The country indicated that targets do not include elements of residuals management.	5 (6%)	6 (7%)
Limited (shared facilities)	**Access to improved facilities**: The target calls for population with access to improved sanitation that may be shared, and where faecal sludge collection, treatment and disposal are not referenced within the stated coverage target.	**Eritrea**: Proportion of population using improved sanitation. Facility types include public toilets and individual toilets. The country indicated that "shared facilities" were included in the definition of coverage.	28 (31%)	35 (40%)
None	Countries that do not have a national coverage target for sanitation.		3 (3%)	1 (1%)

[a] Twenty-five countries for urban and 28 countries for rural either did not respond to the question or did not provide enough information to categorize their national targets.
[b] Global JMP indicators define improved sanitation facilities as those designed to hygienically separate excreta from human contact. These include flush and pour flush toilets connected to sewers, flush and pour flush toilets or latrines connected to septic tanks or pits, ventilated improved pit latrines, pit latrines with slabs, and composting toilets, including twin pit latrines and container-based systems. JMP definitions available at: https://washdata.org/.
[c] For the purpose of this analysis, "connection to a sewer network" does not necessarily equate with safely managed services. Either specific references to the treatment of residuals in the definition of the target or reported high coverage levels of safely managed sanitation services (as reported by JMP) were assessed to classify "connection to a sewer network" targets as safely managed or basic services.
Source: GLAAS 2018/2019 country survey.

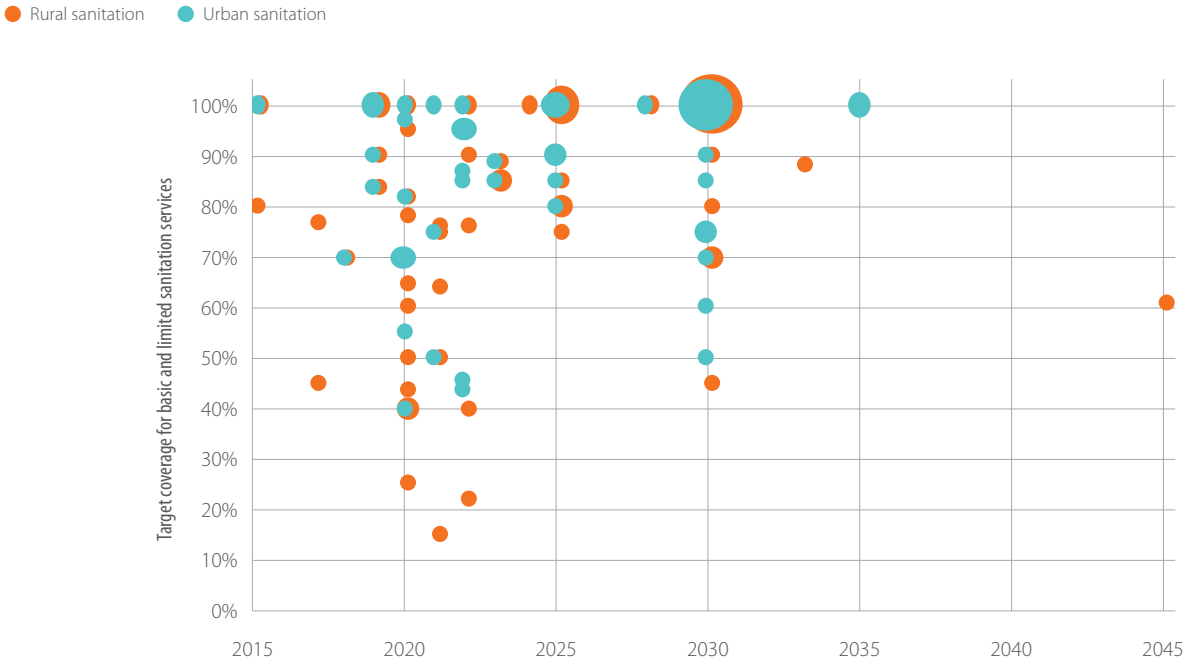
Timeframes for sanitation targets at basic and limited levels

Figure 2.2 presents target values against the timeframe by which countries aim to achieve their basic and limited[4] sanitation targets. Of the 60 countries with urban coverage targets corresponding to basic or limited sanitation, 24 countries (40%) have coverage targets for universal improved (basic or limited) sanitation facilities by no later than 2035.[5] Most countries have not set universal access targets for sanitation even at the basic or limited service level for 2030. However, most countries with targets less than 100% coverage have interim targets for the year 2025 or before. Seven countries have established targets for 2030 that are less than universal coverage for basic or limited services.[6]

[4] The JMP service ladders exclude shared sanitation facilities from the basic service level; however, the WHO Sanitation and Health Guidelines state that "Shared and public toilet facilities that safely contain excreta can be promoted for households as an incremental step when individual household facilities are not feasible".
[5] Two countries have 100% targets after 2030.
[6] Chad, Côte d'Ivoire, Haiti, Niger, Papua New Guinea, Sao Tome and Principe, and Zambia.

Only one third of countries have set universal coverage targets for basic or limited sanitation by 2030.

Figure 2.2 Basic and limited coverage targets versus timeframe for urban and rural sanitation (*n*=54 urban, 66 rural)



Note: Bubble size represents the number of countries with the same target and timeframe (for example, 10 countries indicated coverage targets of 100% for urban sanitation in 2030).
Source: GLAAS 2018/2019 country survey.

National coverage targets for hygiene

GLAAS 2018/2019 findings indicate that over 40% of countries reported having national hygiene coverage targets that align with the SDG indicator 6.2.1 on the proportion of the population with a handwashing facility with soap and water at home. Equally as many countries do not have a national target for hygiene. Table 2.5 presents a summary of the types of hygiene coverage targets that countries have established, as well as providing some examples of the types of targets.

Over 40% of countries have yet to set a national coverage target for hygiene.

Table 2.5 National hygiene coverage targets and alignment with SDG 6 (*n*=93)

Category	Target classification criteria	Examples of national standards and indicators used to monitor national targets	Number of countries (percentage)
Basic	The target calls for handwashing facilities on premises with soap and water.	**Nigeria**: Percentage of population with handwashing facilities with soap on premises.	38 (41%)
Other	The target calls for other types of hygiene targets, such as those specific to WASH in schools, health care facilities, food service, hygiene promotion or hygiene practices.	**Jamaica**: Percentage of food handling establishments that should have handwashing facilities including soap and running water. **Pakistan**: Percentage of population having access to health and hygiene promotion activities. **Togo**: Percentage of population washing their hands with soap at critical moments.	17 (18%)
None	Countries that do not have a national coverage target for hygiene.		38 (41%)

Source: GLAAS 2018/2019 country survey.

Targets on safe menstrual hygiene management

In addition to coverage targets for hygiene, one third of 76 responding countries and territories identified targets for safe menstrual hygiene management. For example, **Ethiopia** aims for 100% of women to be practicing safe menstrual hygiene management by 2020; **Ghana** has a target for 100% of schools to have changing rooms for adolescent girls with soap and running water by 2030; **Niger** aims for 50% of students to have access to sanitary towels by 2020; and **West Bank and Gaza Strip** aims for 85% of its population to have access to safe menstrual hygiene management by 2022.

Source: GLAAS 2018/2019 country survey.

Policies and national targets for WASH in schools

As with safely managed criteria and hygiene, WASH in schools has gained greater prominence as part of SDG 6 on achieving water and sanitation for all in all settings and is also closely linked to SDG 4 on education. According to the GLAAS 2018/2019 country survey results, 95 of 107 countries (88%) have included WASH in schools in a national WASH policy or plan. Maldives noted that its WASH in Schools Policy was developed with input from schoolchildren, their parents and school management.

In addition to including WASH in schools in WASH policies and plans, countries also have specific targets for drinking-water, sanitation and hygiene in schools. Forty four of 96 responding countries (46%) indicated that they have targets for each of these subsectors in schools. Targets vary from providing basic services to safely managed services. Other example targets for WASH in schools are presented below.

- **Ukraine** aims to increase the number of preschools and general education institutions connected to wastewater and sewage systems by 25% as compared to current levels by 2020.
- **United Republic of Tanzania** aims to reach 3 500 schools with sanitation clubs and rehabilitated latrines, including handwashing facilities and menstrual hygiene facilities, by 2021.

Source: GLAAS 2018/2019 country survey.

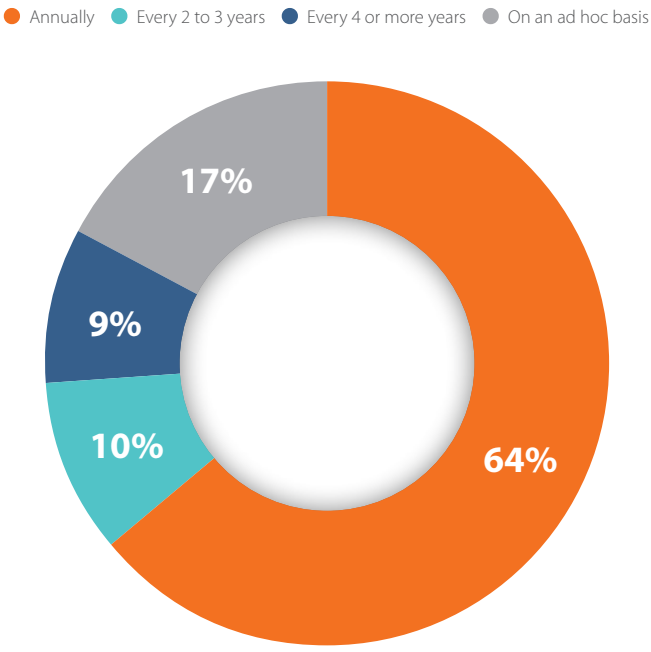
2.3 How often are governments monitoring national WASH targets and what progress is needed to achieve them?

Monitoring national WASH targets

The achievement of national targets requires adequate monitoring, with data that track progress towards national targets. GLAAS findings indicate that 85 of 107 responding countries (79%) have government-led processes for monitoring and validating progress towards national targets. However, only 11 of 106 responding countries (10%) indicated that they have sufficient human resources to monitor progress towards national targets.[7] Sixty-three of 98 responding countries (64%) indicated that progress towards national targets is assessed annually, while 17% of countries have no regular process for assessing progress (Fig. 2.3).

Two thirds of countries reported assessing progress towards national targets on an annual basis.

Figure 2.3 Percentage of countries assessing progress towards national targets on an annual basis (*n*=98)



Source: GLAAS 2018/2019 country survey.

Progress needed to achieve national WASH coverage targets

In the GLAAS 2018/2019 cycle, participating countries reported national data on their progress towards national targets for drinking-water and sanitation coverage. While the JMP provides internationally comparable estimates on Targets 6.1 and 6.2 based on the global service ladders, countries may have national coverage targets that do not align exactly with the rungs on the global service ladders or use national indicators that differ from the global indicators reported by the JMP. As adapting SDGs to national contexts is a key component of the 2030 Agenda, the GLAAS initiative aims to fill a gap in assessing country-reported progress towards national targets. The analysis of country-reported progress below focuses on targets on safely managed services for urban drinking-water and targets at the basic or limited level for urban sanitation, as these were the service levels for which the most data were available.

[7] In the GLAAS 2018/2019 country survey, sufficient human resources was defined as more than 75% of what is needed to monitor national targets.

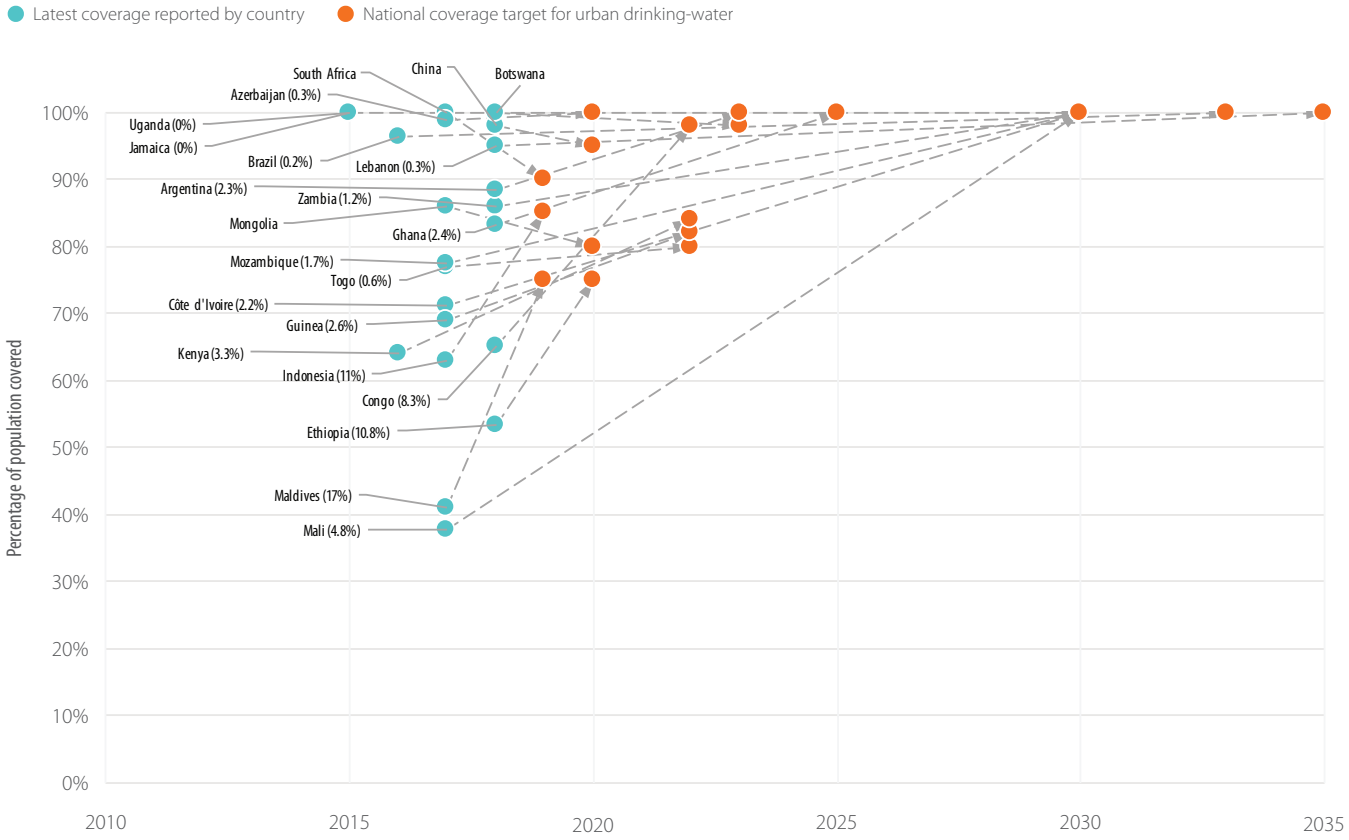
Progress on drinking-water targets

Of the 47 countries that reported having urban drinking-water targets that measured progress towards safely managed drinking-water supply, only 22 reported national data in the GLAAS 2018/2019 country survey on current coverage levels. Figure 2.4 compares current coverage to national targets and allows analysis of the rate of change needed to achieve them.

The average annual rate of progress needed to reach targets for safely managed urban drinking-water service targets ranges from less than one percentage point to as much as 17 percentage points per year. As a point of comparison, the maximum current rate of annual progress achieved is 2.7 percentage points per year.[8] Only nine countries globally achieved rates of change greater than one percentage point per year *(2)*.

Six of 22 countries need to increase coverage by more than 2.7 percentage points per year to achieve their national coverage targets for safely managed urban drinking-water services.

Figure 2.4 Progress required in urban drinking-water coverage to reach national targets for safely managed drinking-water



Notes: Percentages in parentheses after country names indicate the annual rate of change needed to reach target. Countries with no percentage shown reported a coverage rate greater than the target value.
Source: GLAAS 2018/2019 country survey.

For urban drinking-water, only nine out of 18 countries (50%) with targets that measure coverage of basic or limited drinking-water services were able to provide current progress data towards their targets. Analysis on rates of progress is not included here due to the small number of countries that provided data.

[8] As recorded by JMP, 2019. Achieved by Afghanistan between 2000 and 2017 for access to basic urban drinking-water. JMP estimates are based on linear regression, and therefore may not adequately capture large changes in coverage over a short period of time.

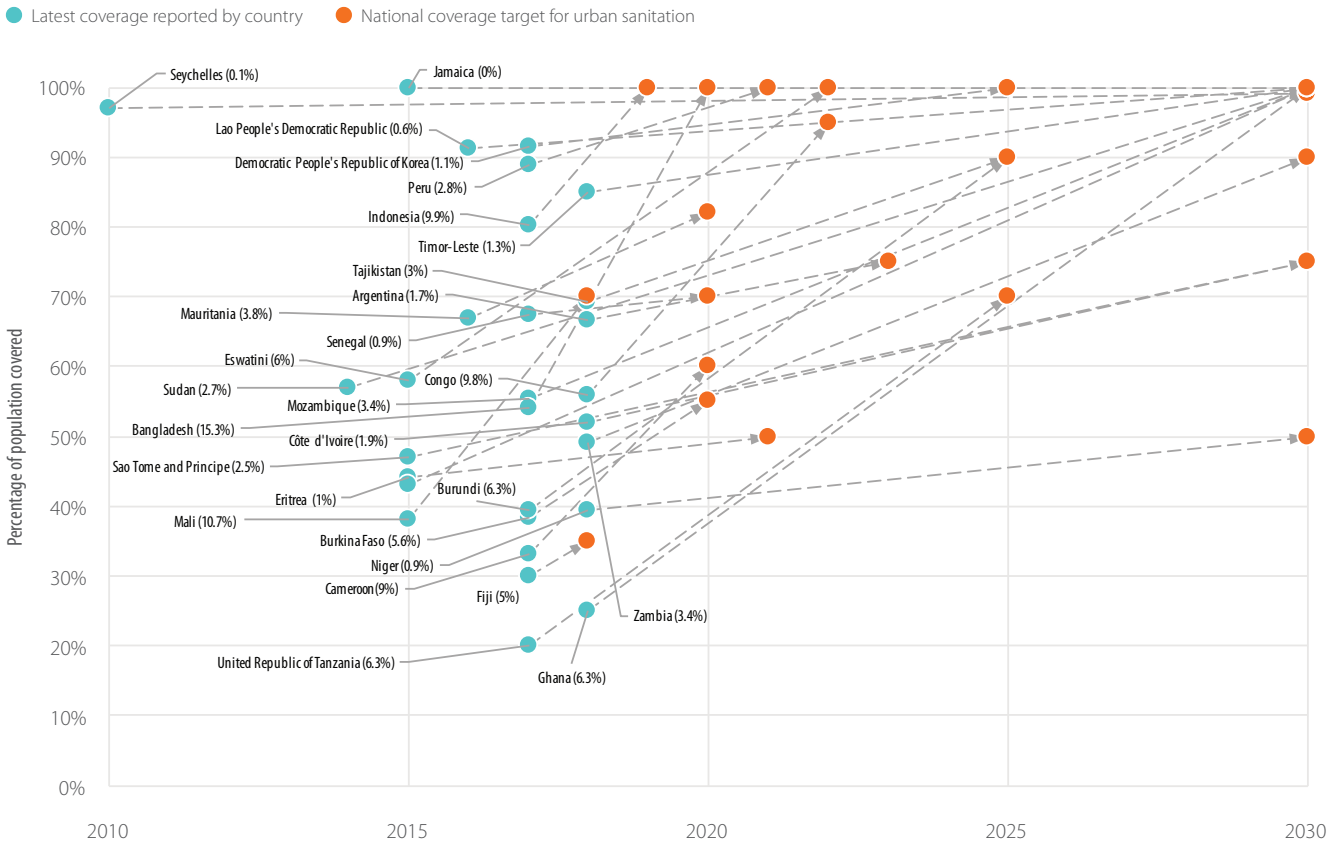
Progress on sanitation targets

For urban sanitation, 30 of 59 countries (51%) with targets that measure coverage of basic or limited sanitation services were able to provide current progress data towards their targets. Figure 2.5 shows country-reported coverage against national targets for urban basic or limited sanitation. Insufficient data were available to analyse safely managed urban sanitation services.

The rate of progress anticipated to reach national coverage targets for basic sanitation services ranges from zero percentage points (targets have already been attained) to 15 percentage points increased coverage per year. The maximum annual rate of change achieved between 2000 and 2017 has been 2.9 percentage points per year, and 22 countries globally achieved rates of change greater than one percentage point per year.[9]

Sixteen of 29 countries need to increase coverage by more than 2.9 percentage points per year to achieve their national urban coverage targets for basic and limited sanitation services.

Figure 2.5 Progress required in urban sanitation coverage to achieve national targets for basic and limited services



Notes: Percentages in parentheses after country names indicate the annual rate of change needed to reach target. Eritrea noted an urban sanitation coverage value of 65% in 2010, which is higher than the 2022 coverage target value. Thus, the chart shows the more recent urban sanitation coverage estimate reported in the JMP (44% in 2015). Also, not shown is South Africa, which indicated 93% urban sanitation coverage for 2017 exceeding its 2019 target of 90% coverage.
Source: GLAAS 2018/2019 country survey.

[9] As recorded by JMP, 2019. Achieved by Cambodia between 2000 and 2017 for access to basic urban sanitation. JMP estimates are based on linear regression, and therefore may not adequately capture large changes in coverage over a short period of time.

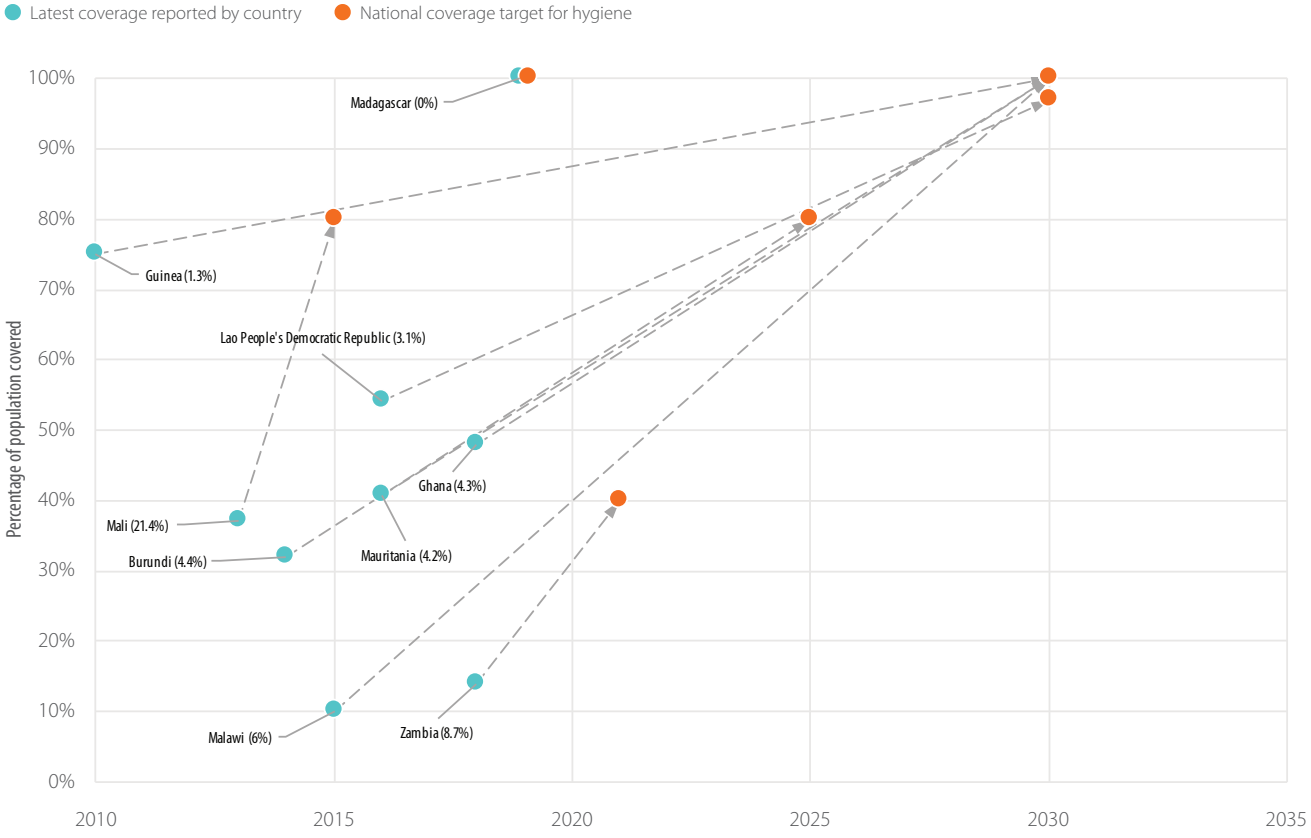
Progress on hygiene targets

The SDGs have taken on hygiene as a new frontier in recognition of the importance of monitoring hygiene, which is closely linked to health and sanitation. Out of the 38 countries that reported having basic hygiene targets, only nine could provide data on current coverage for this target. Figure 2.6 compares reported country coverage against national targets.

The rate of progress needed to reach basic hygiene targets for these nine countries ranges from one percentage point to as much as 21 percentage points per year. Since hygiene indicators were not monitored under the Millennium Development Goals (MDGs), it is not possible to compare historical rates of progress with progress needed to reach targets for hygiene.

The rate of progress needed to reach basic hygiene targets ranges from 1 to 21 percentage points per year.

Figure 2.6 Progress required in basic hygiene coverage to achieve national targets



Note: Percentages in parentheses after country names indicate the annual rate of change needed to reach target.
Source: GLAAS 2018/2019 country survey.

Highlight on WASH in health care facilities

Universal access to WASH in health care facilities is an important aspect of leaving no one behind in SDG 6 and also fundamental to achieving SDG 3 (good health and well-being). Global targets to reduce maternal mortality, end preventable newborn deaths and provide quality universal health coverage will not be met unless all health care facilities have basic WASH services.

The new JMP WASH in health care facilities: Global baseline report 2019 reveals that WASH in health care facilities is very poor *(3)*. One in four health care facilities lack basic water services, and one in five have no sanitation service – affecting 2 billion and 1.5 billion people, respectively. Furthermore, two in five health care facilities have neither hand hygiene facilities at points of care nor systems to segregate waste. Substandard WASH in health care facilities increases infection risks, contributes to the spread of antimicrobial resistance and undermines delivery of safe and quality care, especially at the time of childbirth.

To track progress towards global WASH in health care facilities targets and effectively support countries, it is important to understand the policy environment and stakeholder-accountability mechanisms in place to maintain and support access to WASH in health care facilities.

Global action and commitments to improve WASH in health care facilities

In 2018, the United Nations (UN) Secretary-General António Guterres issued a global call to action on WASH in health care facilities, encouraging all UN agencies, Member States and partners to do more to improve WASH services in all health care facilities. Since then, global targets have been set and are being tracked, in part through GLAAS data. A collaborative knowledge portal[a] has been established to share standards, tools and lessons learnt. Based on country actions and learning, WHO and UNICEF have published global guidance on the practical steps to solve this crisis *(4)*. In 2019, a World Health Assembly resolution was approved by 194 countries on WASH in health care facilities at the World Health Assembly calling for greater commitment including developing national roadmaps and setting and tracking targets *(5)*.

[a] Knowledge portal: www.washinhcf.org

WASH in health care facilities in national policies and plans

GLAAS 2018/2019 findings indicate that 103 of 110 responding countries (94%) included WASH in health care facilities in a national policy or plan.[10] Of those, four out of five countries included measures for the rehabilitation of broken or disused water or sanitation facilities. However, many of these plans are not specific to WASH in health care facilities and may not provide sufficient detail for analyses to enable systematic strengthening and implementation of standards, monitoring or financing.

SANITATION POLICY CASE STUDY BOX 2.1

Addressing WASH in health care facilities in Bangladesh

In December 2017, **Bangladesh** held its first national workshop on WASH in health care facilities. The workshop identified key challenges that need to be addressed jointly by the health and WASH sectors. These included the variation of WASH in health care facilities throughout the country, poor hygiene practices resulting in the spread of infectious diseases and sepsis, and the storage and disposal of health care waste. It was noted that Bangladesh does not have a specific strategy or action plan for addressing the outlined challenges. As a result of the workshop, a steering committee was established to support the development of standards and strategies for WASH in health care facilities. Bangladesh has drafted the National Strategy for WASH in Healthcare Facilities and Framework for Action 2018-2022, which is undergoing formal approval. Likewise, national standards for WASH in community clinics have been developed and published to support the implementation of the strategy. In addition, the refugee crisis in Cox's Bazar, which currently hosts over 1 million individuals and over 200 health care facilities, has accelerated use of standards and tools to improve WASH in health care facilities that are now being rolled out to all of Bangladesh *(6)*.

Source: WHO 2018/2019 sanitation policy case studies.

[10] The GLAAS 2018/2019 country survey asked countries to mark "yes" or "no" if WASH in health care facilities was included in any national policy or plan. This entails that the 94% of countries do not necessarily have separate or specific policies for WASH in health care facilities, but rather that WASH in health care facilities may be included in national WASH policies or plans, or national health policies or plans.

National targets for WASH in health care facilities

WHO and UNICEF have set two primary targets for WASH in health care facilities *(4)*. The first target aims for 60% of all health care facilities globally and in each SDG region to have at least basic WASH services by the year 2022, with an end target of 100% by 2030. In countries where basic services have already been achieved, the second global target calls for 80% of these countries to achieve higher levels of WASH services in health care facilities by 2030.

In the GLAAS 2018/2019 country survey, only 47 countries reported that they have national targets for drinking-water, sanitation and hygiene in health care facilities, of which approximately half are in Sub-Saharan Africa. Some of these countries have targets for universal coverage for WASH in health care facilities. For example, Burundi aims for 100% of health care facilities to have handwashing devices with soap by 2030. Other countries have interim targets that may be revised and replaced throughout the SDG period. For example, Dominican Republic aims to reach 90% of health care facilities with basic on-site sanitation facilities designed for patients by 2020. In a number of countries, targets have been set at 100% within very short timeframes (2–3 years) and would require increased coverage of 30 to 40 percentage points per year in order to meet targets. Moreover, only eight of 69 responding countries (12%) reported having more than 75% of the funds needed to reach targets for WASH in health care facilities.

Systems to monitor and review WASH in health care facilities

The JMP WASH in health care facilities: Global baseline report 2019 highlighted insufficient national data on drinking-water, sanitation, hygiene and health care waste management in health care facilities *(3)*. For example, data to make regional estimates of hygiene in health care facilities were insufficient in four of eight SDG regions.

GLAAS 2018/2019 findings show that 48 of 71 countries (65%) that conduct JSRs reported including WASH in health care facilities in their review. Some countries reported conducting national assessments specific to WASH in health care facilities. For example, Lebanon noted the Assessment of Water, Sanitation and Hygiene in Healthcare Facilities in Eastern Mediterranean Region and Liberia reported the use of a specific WASH in health care survey.

Only one third of countries (41 of 107) reported that data on health care facilities needing WASH improvements were readily available and used for decision-making in the health sector. Therefore, although most countries have established policy measures to rehabilitate WASH in health care facilities, it seems the majority of countries do not have the data needed to identify and prioritize the facilities most in need. These results, along with the World Health Assembly resolution *(5)* and guidance on practical steps *(4)*, support the importance of developing achievable targets and an implementable national roadmap, of strengthening national monitoring systems to better track progress in meeting national targets, and of prioritizing investments.

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CHAPTER 3

Are there adequate financial resources and systems for WASH?

Highlights

- **Funding gaps:** Cost estimates from 20 countries and territories reveal a funding gap of 61% between identified needs and available funding.
- **Financing plans:** While over 75% of countries reported the existence of financing plans for WASH, more than half of these plans are insufficiently implemented.
- **WASH expenditures:** The average annual per capita WASH expenditure among 54 countries is US$ 31.
- **Cost recovery:** A majority of countries recover less than 80% of operations and maintenance (O&M) costs from tariffs.
- **Funding sources:** Data from 35 countries show that households contribute two thirds of total WASH expenditures.

The cost to reach SDG Targets 6.1 and 6.2 has been estimated at US$ 114 billion per year, with capital investment needs alone three times higher than current investment levels *(1)*. New quantitative data from countries responding to the GLAAS 2018/2019 survey confirm that available financing is insufficient to meet national targets for WASH.

As part of the overall system upon which WASH service provision relies, it is important that financing is planned, monitored and reviewed at regular intervals. Institutions with the mandate to provide or oversee services should have the capacity to develop cost estimates for sector plans, mobilize resources, establish periodic budgets and recover costs as needed.

3.1 Are there adequate financial resources for WASH?

As discussed in Chapter 1, less than 15% of countries reported adequate financing to implement national WASH plans. In addition to financial sufficiency for plans, countries were also requested to estimate whether financing allocated to WASH is sufficient[1] to reach national targets (which may extend beyond current WASH planning cycles). Summary results indicate that over 80% of countries reported insufficient financing to meet their national WASH targets (Table 3.1), as well as targets for WASH in health care facilities and schools.

[1] In the GLAAS 2018/2019 country survey, sufficient finance was defined as more than 75% of what is needed to meet national targets.

Table 3.1 Is financing allocated to WASH sufficient to meet national targets?

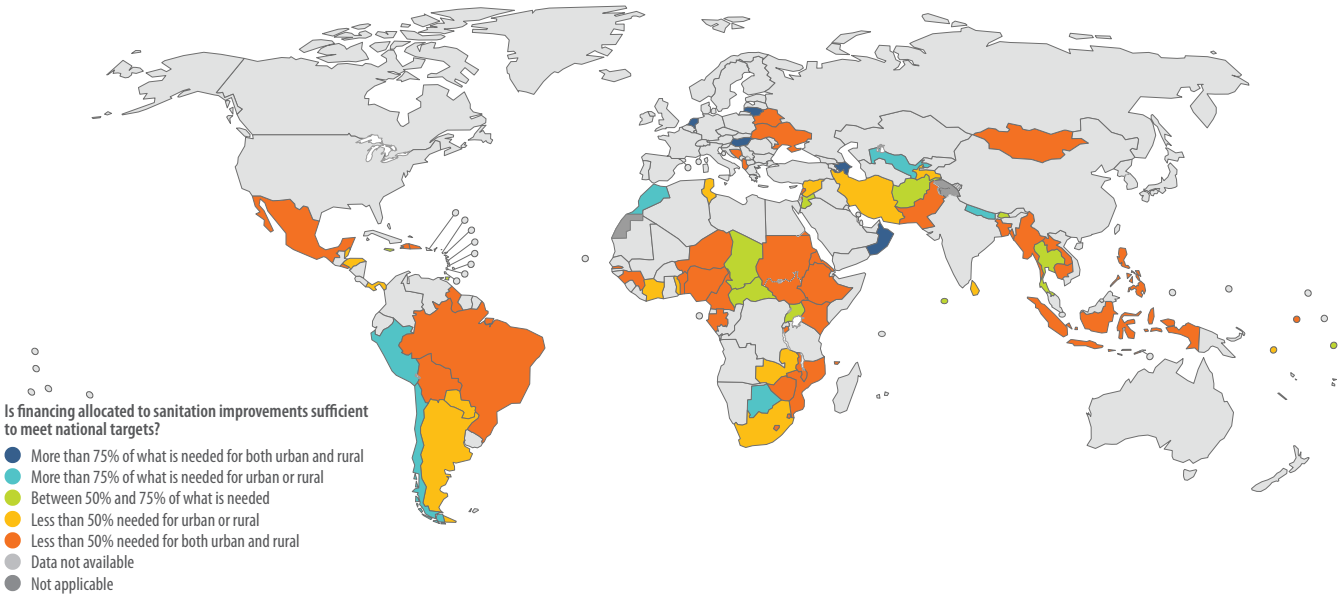
WASH area	Percentage of countries reporting sufficient finance[a]
Urban/rural drinking-water (*n*=78)	21% / 15%
Urban/rural sanitation (*n*=74)	14% / 8%
Hygiene (*n*=67)	4%
WASH in health care facilities (*n*=69)	12%
WASH in schools (*n*=71)	8%

[a] In the GLAAS 2018/2019 country survey, sufficient finance was defined as more than 75% of what is needed to meet national targets.
Source: GLAAS 2018/2019 country survey.

It should be noted that country estimates of financial sufficiency are based on national coverage targets and service levels, many of which, as presented in Chapter 2, do not fully consider all the elements of safely managed services (accessibility, availability, quality and FSM). The reported sufficiency of financing to reach national targets in the GLAAS 2018/2019 survey is similar to the results from the GLAAS 2016/2017 country survey.[2]

A lack of sufficient resources to meet sanitation targets is reported in all SDG regions (Fig. 3.1).

Figure 3.1 Level of sufficiency of financial resources allocated to sanitation to meet national targets (*n*=74)



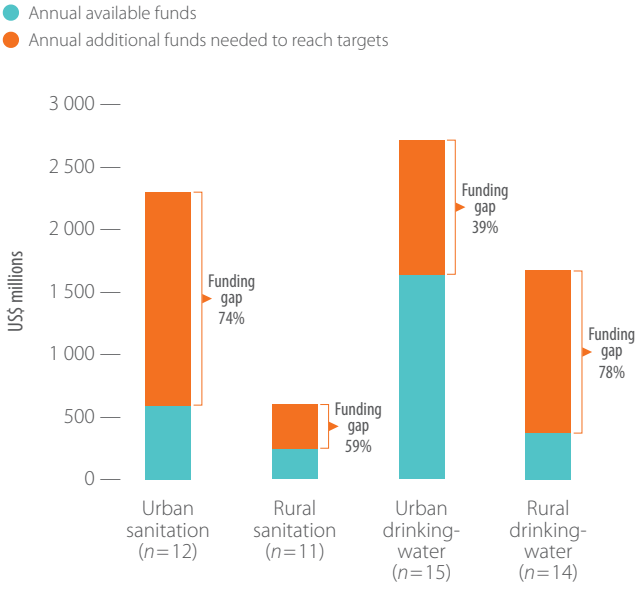
Map production: Water, Sanitation, Hygiene and Health, WHO.
Source: GLAAS 2018/2019 country survey.

In addition to the country estimates of financial sufficiency, 20 countries and territories[3] (17%) were able to report quantitative funding gaps by subsector based on specific needs estimates and available funding (Fig. 3.2). Estimates of national needs came from national development plans, national sector strategies, master plans and performance reports.

Quantitative data from 20 countries and territories reveal a WASH funding gap of 61% between identified needs and available financing for WASH.

For these 20 countries, it was estimated that US$ 7.4 billion was needed per year to reach national targets for WASH, while US$ 2.9 billion per year was available. The resulting funding gap of 61% across these countries provides some confirmation of previously modelled estimates indicating that capital investment needs are three times higher than current investment levels *(1)*.

Figure 3.2 Available funds versus funds needed to reach national targets (per year)



Source: GLAAS 2018/2019 country survey.

[2] See Chapter 2 for a discussion of universal coverage targets and incorporation of safely managed elements in national targets.

[3] Afghanistan, Burundi, Burkina Faso, Bangladesh, Côte d'Ivoire, Costa Rica, Cuba, Ecuador, Ghana, Guinea, Haiti, Lebanon, Madagascar, Mauritania, Mongolia, Senegal, Togo, United Republic of Tanzania, Viet Nam and West Bank and Gaza Strip.

Funding gaps: National cost estimates for WASH plans and actual expenditures

In **Mali**, the National Plan for Access to Drinking-Water adopted in 2004 estimated that approximately 40 billion African financial community francs (FCFA) (US$ 69 million) would be needed per year from 2005 to 2015 to reach the MDG target for drinking-water (infrastructure and support investments only). TrackFin results showed that an average of only 20 billion FCFA (US$ 34 million) was mobilized annually for infrastructure from 2012 to 2015, representing 50% of the funds required *(2)*. To improve the situation, Mali is updating its national WASH policies to set targets and objectives to integrate the SDGs and update WASH development plans accordingly.

Burkina Faso's National Plan for Access to Drinking-Water and Sanitation estimated financing needs of 190 billion FCFA (US$ 326 million) from 2013 to 2015. Total investment and support expenditures during that time period, based on results from TrackFin, were just over 152 billion FCFA (US$ 261 million), approximately 80% of the forecasted needs *(3)*. While still 38 billion FCFA (US$ 64 million) short, this helped the country to reach the MDG target for drinking-water. WASH plans for 2016–2030 aim to mobilize annually for the first five years an estimated 136 billion FCFA (US$ 234 million), covering mainly investment and support costs. As the average annual investment and support expenditure from 2013 to 2015 was just over 50 billion FCFA (US$ 86 million), funding to be mobilized from all actors needs to increase by 268% for the period 2016–2020 compared to the expenditures of the 2013–2015 period.

For **Senegal** to achieve its WASH objectives in its 2017 Sector Development Policy Letter, estimated financial needs are more than 1 800 billion FCFA (US$ 3.1 billion) for the period 2016–2025, an average of 180 billion FCFA (US$ 310 million) per year *(4)*. In comparison, current levels of expenditures for similar budget lines, based on TrackFin estimates for the year 2016, were around 82 billion FCFA (US$ 140 million) *(5)*. Therefore, more than double the level of funding for WASH (+119%) would be required for the new period.

3.2 Are there systems in place to track financial flows for WASH?

The availability of financial data and capacity to track expenditures can provide insights to improve the performance and cost-effectiveness of WASH service delivery, as well as identify resource needs throughout the service chain and in different regions of a country. Sources of WASH financial data and expenditure information include financing plans discussing investments and O&M, government budgets and expenditure reports, donor reports, utility financial statements, capital investment programmes, procurement systems and systems that collect data on other metrics such as household expenses. The availability of financial information was cited by countries as relatively good, with 73% and 66% of countries indicating data are available, analysed and used (at least partially) for decisions regarding resource allocation for drinking-water and sanitation, respectively.

Financing plans for WASH

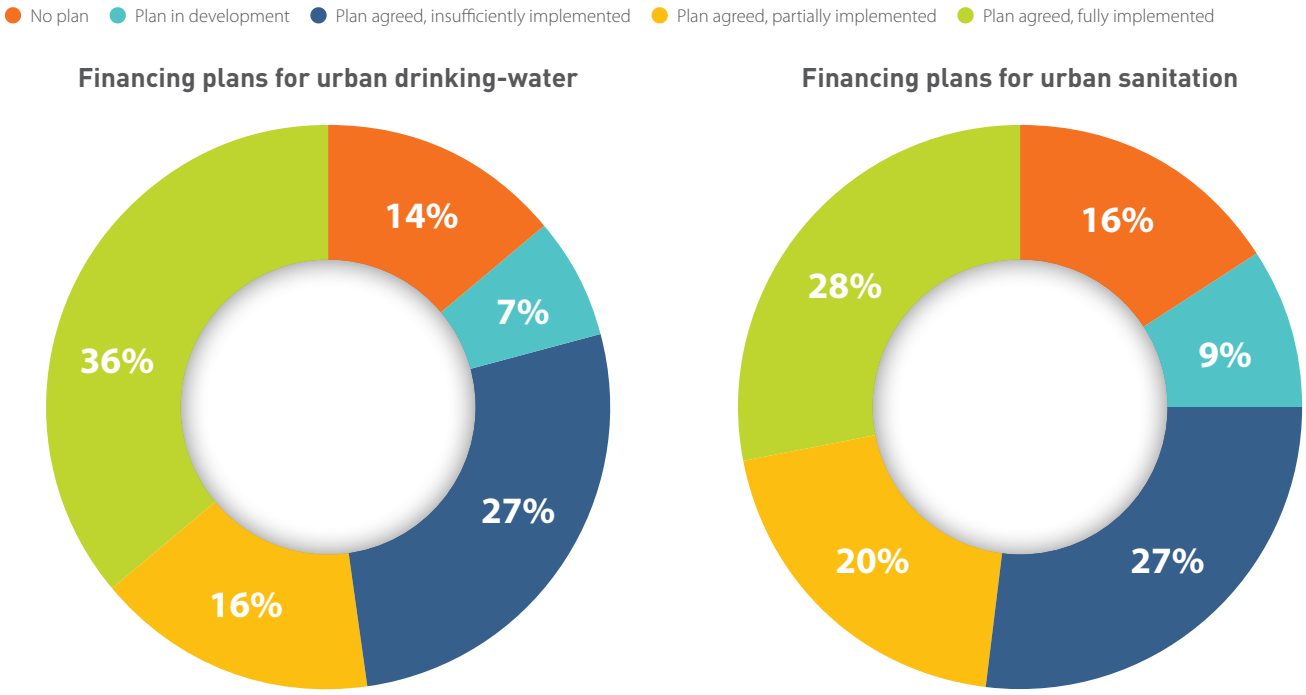
In the GLAAS 2018/2019 country survey, respondents were asked to indicate whether the government has developed a medium- to long-term financing plan that is linked to national strategies for WASH, and which clearly assesses the available sources of finance and strategies for financing future needs.

Survey results show that 79% and 75% of countries cited the existence of a financing plan for drinking-water and sanitation, respectively. However, the proportion of countries with financing plans that have been defined and agreed, and which are consistently used[4] is much lower (36% and 28% for urban drinking-water and urban sanitation, respectively) (Fig. 3.3). Financing plans for rural areas were found to have similar results. Overall, 23% of countries reported having developed financing plans that are agreed and consistently used in decisions for all WASH subsectors.

[4] In the GLAAS 2018/2019 country survey, agreed and consistently used in decisions is defined as: A strategic financing plan has been developed for the WASH subsector/area that establishes or identifies financial needs, budget allocations, sources of funds, and activities necessary to achieve plan goals. Budget allocations/expenditures and planned/implemented activities are monitored consistently, while adjustments in plan activities are made accordingly based on a periodic assessment of capacity and progress. Financing gaps have been identified and actions to reduce such gaps are planned and monitored.

While over 75% of countries reported the existence of financing plans for WASH, more than half of these plans are insufficiently implemented.

Figure 3.3 Existence and use of financing plans for urban drinking-water and urban sanitation (*n*=105)



Source: GLAAS 2018/2019 country survey.

Financing plans can take different forms, and countries reported using different types of WASH investment plans and budget frameworks. Over one half of countries (54%) reported the existence of a comprehensive sector development plan, national action plan, water agenda or similar sector planning document that guides investment planning (Table 3.2). Additionally, GLAAS 2018/2019 data indicate that these plans may be closely linked to a strategic financial planning process on investment needs, sources of financing and strategies for financing future needs.

Table 3.2 Type of financial planning/framework for WASH (*n*=108)

Financial planning framework used for WASH	Percentage of countries
Sector development or investment plans/agenda	54%
National annual budgeting process	22%
Multiyear/medium-term budget/expenditure framework	4%
Other (such as tariff law/policy)	3%
No financing plan	18%

Source: GLAAS 2018/2019 country survey.

Over one half of countries (54%) reported using sector development or action plans to identify investment needs, financing sources and strategies for future financing.

SANITATION POLICY CASE STUDY BOX 3.1

Sanitation in Uganda's Strategic Sector Investment Plan

The government of **Uganda**, through its Ministry of Water and Environment, recently finalized a Strategic Sector Investment Plan for the period 2018–2030 *(6)*. Within the plan, sector funding requirements are assessed to meet 2030 targets for the water and environment sectors, as well as allocation of limited resources to maximize performance, as measured by 24 indicators – 18 of which are directly related to the SDGs. Indicators for sanitation are presented below.

- Basic sanitation: Percentage of the population using an improved sanitation facility not shared with other households.
- Safely managed sanitation: Percentage of the population using safely managed sanitation services.

The plan notes, "Given the large achievement gaps currently facing the sanitation subsector, a substantial increase in funding is necessary to reach 2030 targets, particularly for safely managed sanitation". Investments for sanitation included in the sector investment model include: wastewater treatment, FSM, sewerage O&M, wastewater treatment O&M, basic sanitation campaigns and safe sanitation campaigns.

The process of developing the investment plan was inclusive, with all the stakeholders in the WASH sector participating, and was based on the various targets set for the WASH sector.

Source: WHO 2018/2019 sanitation policy case studies.

Estimating costs for Myanmar's Investment Plan

In **Myanmar**, the investment plan is based on a life-cycle-cost approach. It estimated investment requirements and funding availability from government, development partners and other sources, and financing gaps. It attempted to generate comprehensive estimates of funding requirements by including both capital and recurrent costs. Capital expenditures were further divided into hardware (equipment and facilities) and software (such as training, technical assistance and preparation). Various techniques were used to estimate expenditure requirements. In some instances, calculations were straightforward. In other cases, in particular with facilities and equipment that have finite lives, the estimation process was more complex.

Source: GLAAS 2018/2019 country survey.

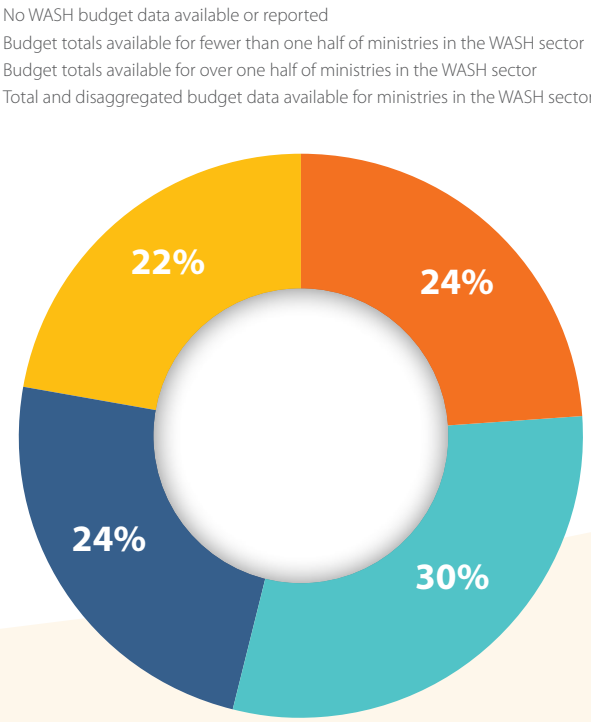
Availability of budget data and expenditure reports, and use of performance indicators

An effective financial system relies on evidence to inform decisions, including budget and expenditure data as well as financial performance indicators.

Most countries and territories lack a system for collecting comprehensive WASH budget data.

Only 22% of countries and territories provided total and disaggregated WASH budget data for drinking-water and sanitation (Fig. 3.4). This shows that a system for collecting comprehensive WASH budget data may be lacking in most countries and territories. Fragmentation of sector roles among ministries and institutions, and the complexities of extracting information on drinking-water and sanitation from broader ministry budget line items, were reported as limiting factors.

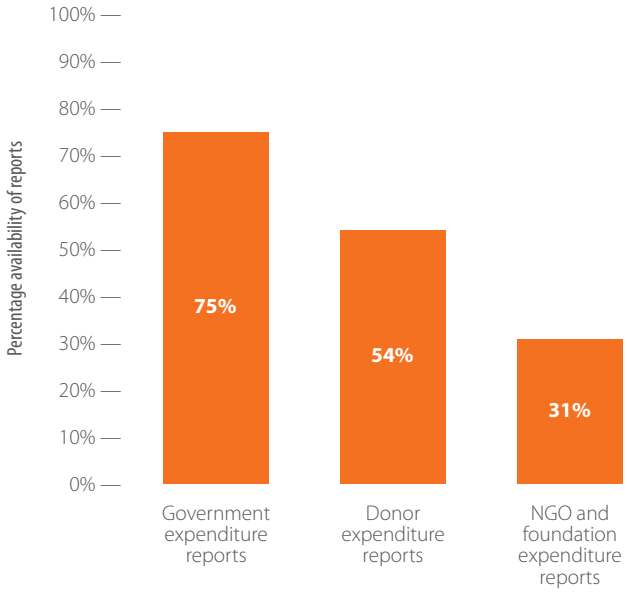
Figure 3.4 Availability of WASH budget data (*n*=115)



Source: GLAAS 2018/2019 country survey.

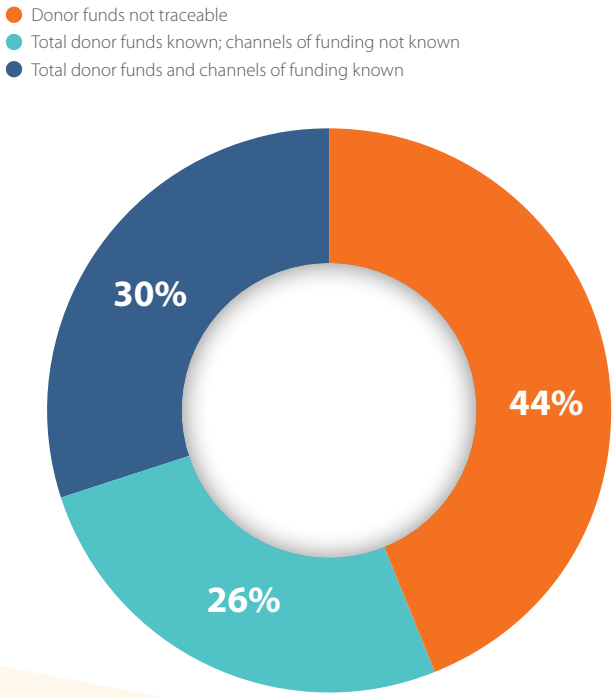
Fewer than half of countries reported that expenditure reports from donors, NGOs and foundations were publicly available and easily accessible.

Figure 3.5 Availability of expenditure reports (*n*=102)



Source: GLAAS 2018/2019 country survey.

Figure 3.6 Ability to track donor funds (*n*=112)



Source: GLAAS 2018/2019 country survey.

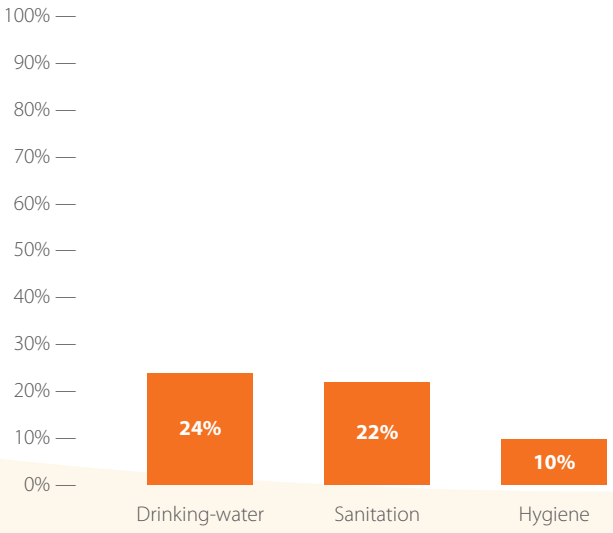
Governments may have difficulties in tracking WASH expenditures due to the unavailability of expenditure reports from the various stakeholders engaged in WASH activities (Fig. 3.5).

While donor expenditure reports may not be readily available, the GLAAS survey results show that a majority (56%) of governments are able to track overall donor flows (Fig. 3.6). Additionally, nearly one third (30%) of countries reported information on donor funding disaggregated by different funding channels. Channels of funding may include:

- funding provided for specific expenditures or lines in the national budget channelled through the treasury, including basket funding;
- funding provided for specific expenditures or lines in the national budget not channelled through the treasury;
- direct funding to the sector not through the national budget or treasury; and
- general budget support, with funds channelled through the treasury.

Disaggregated data on expenditure for drinking-water, sanitation and hygiene are not readily available for most countries. While over 50 countries provided aggregate expenditure data for WASH, only one half of those reporting provided data disaggregated by subsector (Fig. 3.7).

Figure 3.7 Percentage of countries and territories reporting WASH subsector expenditure (*n*=115)



Note: Five countries provided disaggregated expenditure data in GLAAS based on TrackFin results (Burkina Faso, Kenya, Madagascar, Mali and Senegal).
Source: GLAAS 2018/2019 country survey.

To improve tracking of financial flows, WHO has developed a detailed methodology for tracking financing to WASH and developing national WASH accounts known as TrackFin. Currently, 15 countries have initiated TrackFin to gain a better understanding of financial flows to WASH (see Annex 5 for additional information). Countries responding to the GLAAS 2018/2019 country survey were not expected to undertake an intensive study as outlined in the TrackFin methodology. However, calculating estimated expenditures involves similar types of estimation methods and draws on some of the same suggested data sources.

GLAAS survey results show that fewer than half of responding countries track performance using financial indicators for expenditure and cost-effectiveness (Table 3.3). Financial performance indicators were reportedly used by more countries for drinking-water supply than for sanitation services, with performance indicators on expenditures being most common. The most commonly cited indicator for expenditures was the ratio of funds spent to funds allocated for the sector.

Fewer than half of countries reported using financial performance indicators against established baseline data for drinking-water and sanitation.

Table 3.3 Percentage of countries reporting use of financial performance indicators for sanitation and drinking-water and most commonly cited indicators

Type of performance indicator	Percentage of countries reporting use of performance indicator against established baseline data	Most commonly cited indicators
Drinking-water		
Expenditure ($n = 105$)	44%	Ratio of funds spent versus funds allocated
Cost-effectiveness ($n = 103$)	29%	Costs per capita, O&M costs, costs per unit volume
Sanitation		
Expenditure ($n = 104$)	30%	Ratio of funds spent versus funds allocated
Cost-effectiveness ($n = 105$)	15%	Costs for levels of service, O%M costs, costs per unit volume treated

Source: GLAAS 2018/2019 country survey.

3.3 Are governments increasing the availability of funds for WASH?

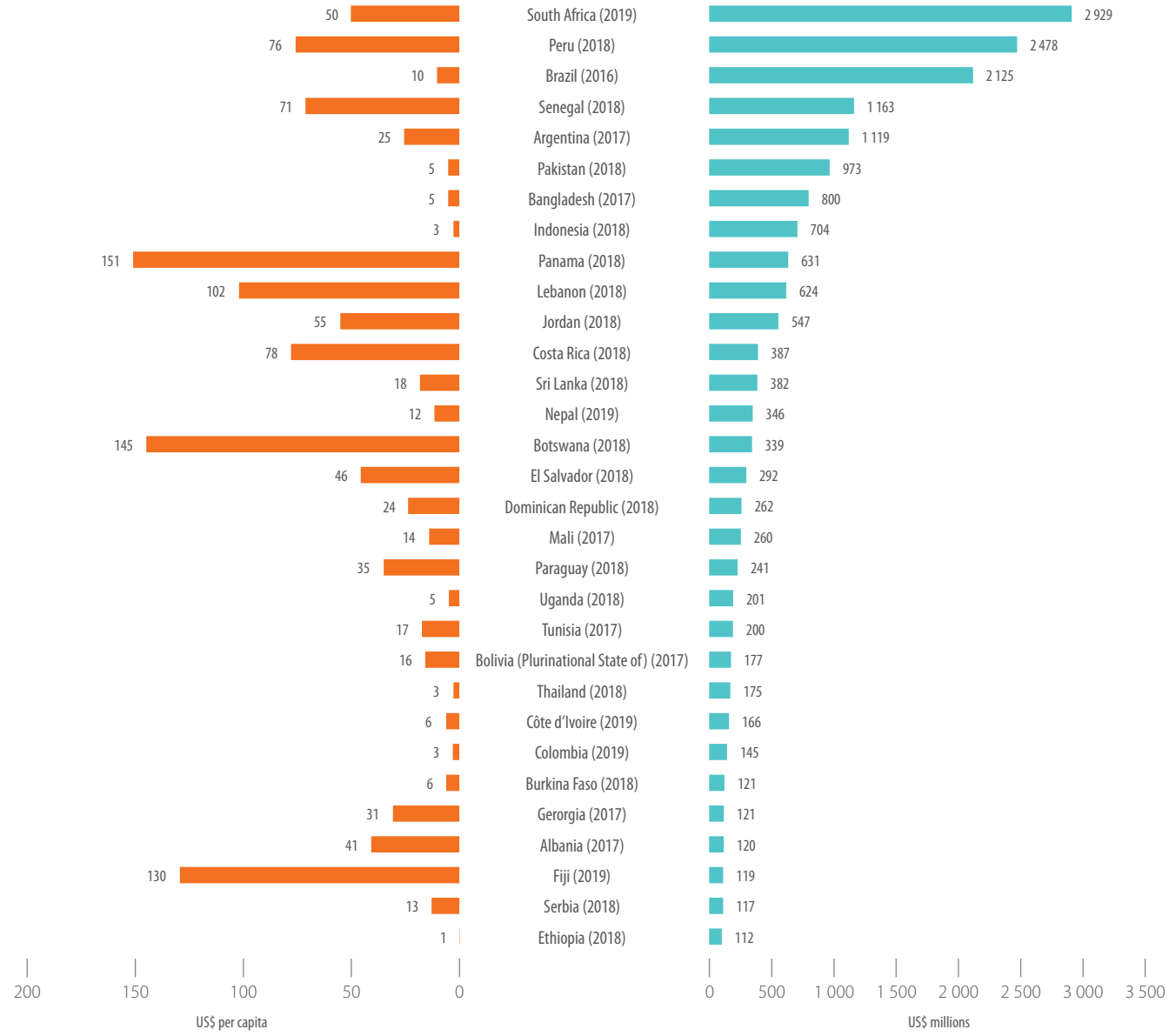
Government budgets for WASH

The GLAAS 2018/2019 country survey requested respondents to provide the most recent annual line ministry budgets for WASH. This allows the level of public funds being allocated to WASH as well as historical budget trends to be determined, which can be indicators of the priority given to the WASH sector. Data from the GLAAS 2016/2017 and 2018/2019 cycles suggest that government budgets for WASH are increasing in many countries. However, they have notably declined in some countries as well.

Sixty countries were able to provide GLAAS with information on their WASH-specific government budgets. Annual budgets ranged from almost US$ 3 billion in South Africa, to less than US$ 1 million in some small countries. Overall, the reported average WASH budget per capita for these 60 countries was US$ 9 and ranged from US$ 1 to US$ 150 (Fig. 3.8).

More than US$ 19 billion was budgeted for WASH in 60 countries, representing a population of 2 billion.

Figure 3.8 Reported WASH budgets by most recent fiscal year (US$ per capita and US$ millions) (*n*=60)



Notes: An additional 29 countries reported national WASH budgets of under US$ 100 million. China (not shown on the chart) reported a US$ 1.1 billion WASH budget for 2018 for one government institution supporting rural drinking-water. Due to lack of data from other government institutions involved in WASH, China was not included in the chart or totals above.
Source: GLAAS 2018/2019 country survey.

While the quantity of financial data has improved with each successive GLAAS cycle, it is important to note that:

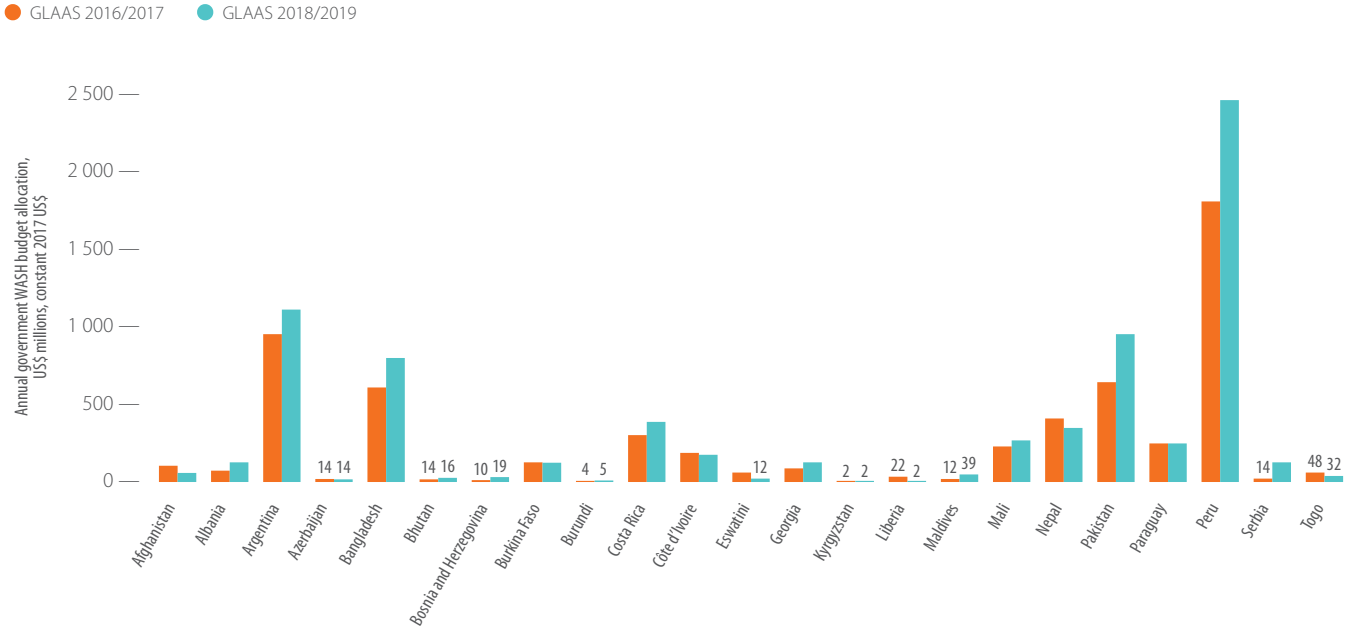
- some countries reported budgets for just a few ministries and institutions and not for all agencies involved in WASH;
- a few countries reported only a collective budget for all WASH;
- WASH budget allocations may be underreported due to the lack of disaggregated budgets for certain ministries; and
- WASH budget allocations may show some variability among countries depending on whether countries included activities beyond drinking-water and sanitation service provision and hygiene promotion, such as water resources and waste management.

Trend data on national WASH budgets are limited, with 24 countries providing comparable WASH budget data between the GLAAS 2018/2019 cycle and the previous GLAAS cycle in 2016/2017 (Fig. 3.9). The average annual rate of budget increase for these 24 countries is 11.1% after adjusting for inflation with local price indexes and applying constant currency exchange rates. Fifteen countries reported budget increases, while nine countries reported budget decreases.

Maintaining comparable WASH budget data across the years is difficult due to the varying levels of budget data availability. Several respondent countries provided WASH budget data from differing key WASH ministries in the GLAAS 2016/2017 and the GLAAS 2018/2019 cycles, rendering these data incomparable between the two cycles, despite reporting budget data for both cycles.

Government WASH budgets are increasing at an average rate of 11.1% per year.

Figure 3.9 Reported government WASH budgets (US$ millions, constant 2017 US$)



Sources: GLAAS 2016/2017 and 2018/2019 country surveys.

The data on national budgets, though limited, indicate that more governments have increased their WASH budgets (in many cases considerably) than the number of governments that have decreased them. Examples of budget increases are presented below.

- In **Pakistan**, provincial budgets for WASH rose from 63 billion to 101 billion Pakistani rupees (US$ 645 million to US$ 954 million) from fiscal year 2016 to fiscal year 2018.

- In **Peru**, central government WASH budgets rose from 1.4 billion Peruvian soles to 2.7 billion soles (US$ 518 million to US$ 1 billion), regional government WASH budgets rose from 363 million soles to 538 million soles (US$ 134 million to US$ 199 million) and local government WASH budgets rose from 3.8 billion soles to 4.8 billion soles (US$ 1.4 billion to US$ 1.8 billion) from 2015 to 2018.

Reductions in national WASH budgets were reported in nine out of 24 respondent countries (38%). Examples of budget decreases are presented below.

- In **Brazil**, sharp reductions in the national water budgets were reported between 2014 and 2016, particularly for the Ministry of National Integration, which works to formulate national development policy and develop water infrastructure. This ministry's WASH budget was reduced from over 5 billion Brazilian reais to 184 million reais (US$ 2.2 billion to US$ 52 million) from 2014 to 2016 due to political and economic factors, as reported in Brazil's GLAAS 2018/2019 country survey response. Other Brazilian ministries received similar large budget reductions for water over this time period. During the same time period, Brazil's overall water budget declined from 12.2 billion reais to 7.4 billion reais (US$ 9.2 billion to US$ 2.1 billion). Additionally, since Brazil has historically included items not usually considered as WASH such as drainage, solid waste management and water resource management in its reported water budgets, it is not included in the budget comparison in Figure 3.9.

- In **Burkina Faso**, the Ministry of Water and Sanitation reported a WASH budget reduction from 26.4 billion FCFA to 19 billion FCFA (US$ 45 million to US$ 32 million) from 2017 to 2018, which was offset by increased budgets of ONEA, the national water utility, from 44.4 billion FCFA to 50.9 billion FCFA (US$ 76 million to US$ 87 million).

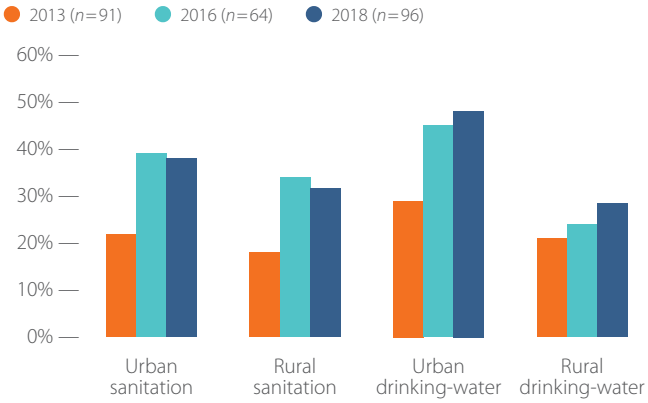
While WASH budgets may be increasing, governments may be limited in their spending by how well budget allocations can be absorbed by the relevant ministries. Twenty countries were able to report on the estimated percentage of domestic capital commitments utilized, which averaged only 62% for urban and rural drinking-water supply and sanitation.

Cost recovery

In the GLAAS 2018/2019 country survey, respondents were asked to provide information on whether O&M is covered by tariffs or household contributions for each WASH subsector. Over one half of responding countries indicated that user tariffs were insufficient[5] to recover O&M costs (Fig. 3.10). Moreover, despite policies and regulation regarding coverage of O&M costs by user fees in some countries, and even though tariff structures that maintain affordability for low-income populations exist, many service providers and communities continue to struggle balancing the recovery of costs and affordable tariffs for services.

Over half of responding countries indicated that tariffs are insufficient to recover 80% of O&M costs.

Figure 3.10 Percentage of countries indicating that more than 80% of O&M costs are covered by tariffs



Sources: GLAAS 2013/2014, 2016/2017 and 2018/2019 country surveys.

While GLAAS results indicate low cost recovery, especially in rural areas, several countries reported that cost recovery rates can differ greatly within countries from municipality to municipality, and by subsector. For example, in Cambodia, urban drinking-water supply systems are mostly built and operated by private individuals with full cost recovery, but urban sanitation systems consist of wastewater treatment plants, constructed with external support and with no clear strategy for cost recovery.

Use of national or local government funds to subsidize insufficient cost recovery was the approach most often cited by GLAAS 2018/2019 country survey respondents. For instance, in Botswana, O&M costs are covered through a cross subsidy whereby government users are charged a higher tariff to balance out lower tariffs charged to the public.

Reducing non-revenue water (NRW)

A World Bank study in 2016 estimated annual NRW at 32 billion cubic metres globally, equivalent to an economic value of over US$3 billion per year *(7,8)*. These losses are confirmed by the latest data received from 57 countries participating in the GLAAS 2018/2019 country survey. Twenty-six of the 57 responding countries reported an average of over 40% NRW for their three largest water providers, and two countries reported over 70% NRW. These losses have a high cost, thus reducing availability of funds for maintenance or further investments.

[5] Defined here as less than 80% recovery of O&M costs.

3.4 What are the main sources of financing for WASH?

Estimating national WASH expenditures requires information and coordination among the many different WASH sector institutions and levels of government, service providers, NGOs and development partners.

In the GLAAS 2018/2019 country survey, respondents were asked to provide WASH expenditures for the most recent available fiscal year. Where information was available, countries further categorized these expenditures by revenue source (including households, government and external sources such as donors and NGOs) and by subsector (drinking-water, sanitation and hygiene). Funds derived from repayable financing sources were also requested, though these were not disaggregated between repayable financing for public utilities versus financing borrowed by national governments.

WASH expenditures

Fifty-four countries reported an estimated annual aggregate WASH expenditure of US$ 60 billion including capital, O&M and support costs. These 54 countries represent a population of nearly 1.9 billion, and an annual average of US$ 31 WASH expenditure per capita inclusive of public expenditure and expenditures by households. Table 3.4 presents these data alongside expenditure data from previous GLAAS cycles.

A comparison of all GLAAS country respondents from each cycle shown in Table 3.4 suggests that annual WASH expenditures have remained relatively stable on a per capita basis over the past several years. This conclusion is supported by the analysis of a common set of 32 countries that responded to both the GLAAS 2016/2017 and 2018/2019 country surveys with total WASH expenditure data (Table 3.5).

While data on total WASH expenditures and their sources were received from 54 countries (out of 115 respondents), there was a wide variation in the details provided due to challenges in obtaining information from all sources of funding for WASH. For example, only 35 countries could provide estimated data on household contributions, which give a more complete picture of WASH financing in a country.

Table 3.4 Estimated WASH expenditures[a]

Indicator	2013/2014 *(expenditure year range 2012–2014)*	2016/2017 *(expenditure year range 2013–2017)*	2018/2019 *(expenditure year range 2015–2018)*
Number of respondent countries	34	48	54
Total reported expenditure (US$ millions)	39 777	51 621	59 993
Population represented (millions)	1 094	1 591	1 911
Annual WASH expenditure per capita (US$)	36	32	31
Annual WASH expenditure (as a percentage of GDP[b])	0.86%	0.73%	0.76%

[a] Expenditures that are sourced from government, external support and household contributions.
[b] Information on GDP was sourced from the World Development Indicators (World Bank), which derive estimates using World Bank and OECD national accounts data.
Sources: GLAAS 2013/2014, 2016/2017 and 2018/2019 country surveys.

Table 3.5 Trends in estimated WASH expenditures[a]

Indicator	2016/2017 *(expenditure year range 2013–2017)*	2018/2019 *(expenditure year range 2015–2018)*
Number of respondent countries[b]	32	32
Total reported expenditure (US$ millions)	44 403	43 846
Population represented (millions)	1 195	1 246
Annual WASH expenditure per capita (US$)	37	35
Annual WASH expenditure (as a percentage of GDP[c])	0.84%	0.92%[d]

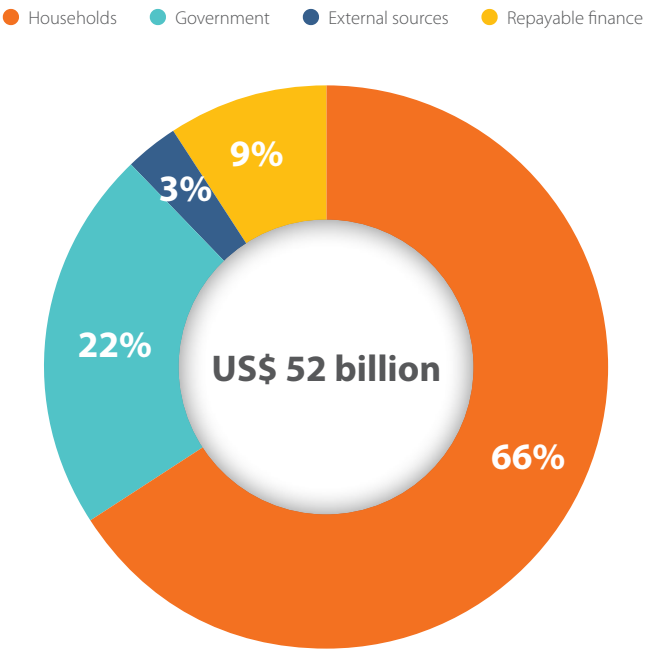
[a] Expenditures that are sourced from government, external support and household contributions.
[b] Albania, Argentina, Azerbaijan, Bangladesh, Benin, Bhutan, Bosnia and Herzegovina, Brazil, Burkina Faso, Colombia, Costa Rica, Dominican Republic, Georgia, Honduras, Jamaica, Kenya, Kyrgyzstan, Lesotho, Madagascar, Mali, Mozambique, Nepal, Nigeria, Pakistan, Paraguay, Peru, Serbia, Solomon Islands, South Africa, South Sudan and Zambia.
[c] Information on GDP was sourced from the World Development Indicators (World Bank), which derive estimates using World Bank and OECD national accounts data.
[d] Brazil and Nigeria were reported to have over 20% decreases in GDP over the expenditure periods reported, leading to a higher percentage of WASH expenditure per capita in the 2018/2019 GLAAS data versus the 2016/2017 GLAAS data, despite lower overall WASH expenditures.
Sources: GLAAS 2016/2017 and 2018/2019 country surveys.

Sources of financing for WASH

In the GLAAS 2018/2019 country survey, 35 countries, representing 1.3 billion people, were able to categorize their WASH expenditures by all revenue sources, including households, government, external sources (donors and international/national NGOs) and repayable financing. The proportion of WASH expenditure derived from household sources was 66% of the US$ 52 billion in total WASH expenditure for these countries (Fig. 3.11). Annual per capita expenditure for WASH from household contributions in these 35 countries was calculated at US$ 26.

Household contributions to WASH expenditure comprise 66% of WASH expenditures for 35 countries.

Figure 3.11 Sources of finance for WASH (*n*=35)



Source: GLAAS 2018/2019 country survey.

It is likely that household contributions are underreported, as comprehensive data were not always available. Data on utility tariffs may be readily available in many countries; however, a full picture of out-of-pocket household expenditures is difficult to obtain. In addition, aggregation of household expenditures for WASH at the national level is not commonly performed, nor are centralized information systems used. Household contributions are thus estimates in many cases and may not be fully comparable. For instance, in Pakistan, tariff and household out-of-pocket data have been calculated from a national household sample survey, while in Argentina, household estimates are derived from utility financial reports.

The challenge of tracking household expenditures in Eswatini

In **Eswatini**, there is a gap in documentation of funding sourced from households for out-of-pocket expenditure for self-supply of WASH services. Even though tariffs are publicly known, there is no documentation that enables this information to be reported. The respective departments in the Ministries of Health (Department of Environmental Health) and Natural Resources (Department of Water Affairs) may have information on the household contributions towards water supply and sanitation projects, but to date, this information has not been compiled.

Source: GLAAS 2018/2019 country survey.

Table 3.6 summarizes the breakdown of country expenditures by source over the past three GLAAS cycles for all countries reporting comprehensive expenditure data. The number of countries with data available has increased, but the data suggest little change in the proportional share of financing from each WASH financing source as compared to previous GLAAS cycles. Each cycle indicates that two thirds or more of WASH expenditures are made by households, and nearly one quarter by governments. While Table 3.6 presents data from all countries that responded with expenditure data in the country surveys, an analysis of 21 countries that responded to both the GLAAS 2016/2017 and the GLAAS 2018/2019 country surveys yielded a similar result.

Table 3.6 Breakdown of country WASH financing sources 2014, 2017 and 2019 for respondent countries

Indicator	2013/2014 *(expenditure year range 2011–2013)*	2016/2017 *(expenditure year range 2013–2017)*	2018/2019 *(expenditure year range 2016–2018)*
Number of countries	19	25	35
Total expenditure (US$ millions, constant 2017 US$)	38 532	43 557	52 196
Percentage from households	73%	66%	66%
Percentage from government	13%	24%	22%
Percentage from external sources: international public transfers (grants only) and voluntary transfers (NGOs and foundations)	14%	2%	3%
Percentage from repayable finance		8%	9%

Note: Includes countries that provided total WASH expenditure data and information on household sources of revenue for each survey cycle.
Sources: GLAAS 2013/2014, 2016/2017 and 2018/2019 country surveys.

Figure 3.12 provides a breakdown of WASH expenditure per capita and as a percentage of national GDP. The figure illustrates lower average per capita WASH expenditures for countries in low- and lower-middle-income categories as compared to upper-middle- and high-income countries. The figure also illustrates the higher proportion of WASH expenditure as compared to GDP for low- and lower-middle-income countries.

Average annual WASH expenditure is reported at US$ 39 per capita and 0.82% of GDP for 35 countries.

Figure 3.12 Total WASH expenditure as a percentage of GDP and per capita (35 countries with a total population of 1.3 billion)

Note: Countries with an asterisk reported TrackFin data in their country survey response.
Source: GLAAS 2018/2019 country survey.

Government sector spending and external contributions

Fifty-one of 115 countries and territories provided estimates of expenditure for WASH originating from government budget allocations, external sources such as ODA and grants, and repayable finance. A breakdown of these sources is presented separately from household sources due to lack of complete data on the latter. These 51 countries represent a population of 1.9 billion and reported over US$ 24 billion in WASH financing (excluding household sources) in the most recent year for which data were available.

Government sources comprise two thirds of non-household WASH expenditure in 51 countries.

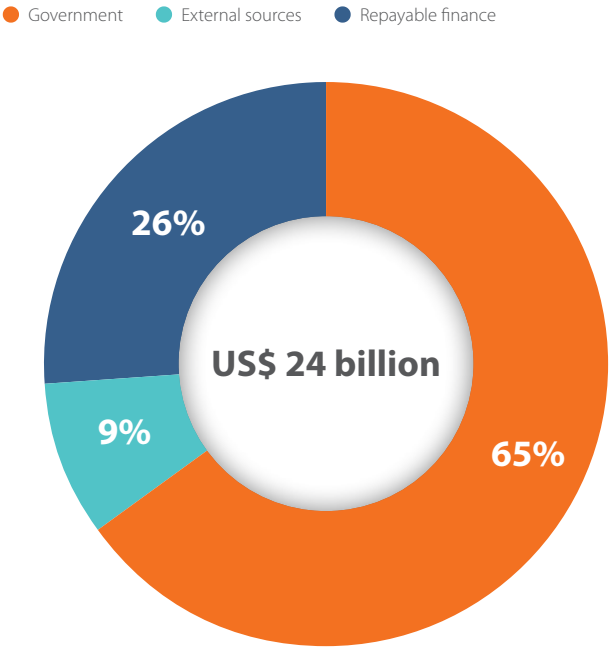
Excluding household sources, national annual WASH expenditure averaged US$ 13 per capita for the 51 countries. Notably, government sources comprised two thirds of the non-household WASH expenditures (Fig. 3.13).

Government expenditure data are based on various sources of information, primarily from ministry of finance expenditure reports, budget execution documents, sector performance reports and line ministry data. It is acknowledged that for some countries, government expenditure on WASH is underreported due to difficulties in obtaining information from the various institutions with WASH activities. Underreporting can be due to missing data for one or more WASH subsectors, incomplete data from local governments or the lack of disaggregated WASH expenditure data at some national ministries.

Sanitation versus drinking-water expenditures

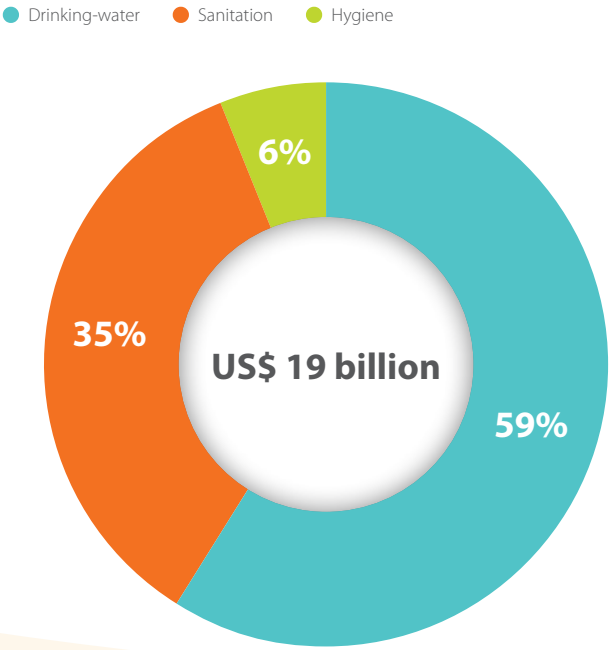
GLAAS has reported disaggregated drinking-water and sanitation expenditures since 2010, illustrating that on a global level, government and external expenditures on sanitation were typically one half those for drinking-water. The GLAAS 2016/2017 country survey data suggested that non-household expenditures for sanitation had risen to 43% of total expenditures on WASH. However, data from the GLAAS 2018/19 survey show that this figure has since declined to 35% of total WASH expenditure (Fig. 3.14).

Figure 3.13 Breakdown of non-household sources of WASH expenditure (*n*=51)



Source: GLAAS 2018/2019 country survey.

Figure 3.14 Expenditures for sanitation versus drinking-water, non-household WASH expenditure (*n*=33)



Source: GLAAS 2018/2019 country survey.

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CHAPTER 4

Do countries have systems in place for regulation and surveillance of WASH services?

Highlights

- **Regulatory authorities:** While most countries have regulatory authorities in place, less than 40% of countries reported that regulatory authorities fully publish publicly accessible reports on drinking-water quality and the quality of service delivery. For treated wastewater flows and faecal sludge volumes, the share is less than 25%.
- **Drinking-water quality surveillance**: In urban areas, only 12% of countries reported having drinking-water surveillance taking place with 100% of the required frequency. In rural areas, only 6% of countries reported surveillance occurring with 100% of the required frequency.
- **Sanitation standards**: Only 21% of countries have regulatory authorities to set and monitor FSM standards in urban areas, and 14% of countries have them for rural areas. Forty per cent of respondent countries reported having regulatory authorities that can set standards for the design, construction and use of wastewater treatment plants and sewers in urban areas.
- **Use of key performance indicators**: While a majority of countries use a performance indicator for water quality, fewer countries have indicators for the quality of service and the functionality of systems. Few countries track key performance indicators for sanitation.
- **Tariff reviews**: Seventy-two per cent of respondent countries have regulatory authorities that are responsible for setting tariffs for urban drinking-water, and 67% of countries have authorities that are responsible for setting urban sanitation tariffs.

Assurance that utilities and communities consistently deliver quality WASH services is dependent on governments establishing systems of oversight and support. Strong national institutions are necessary to carry out surveillance and ensure compliance and support through regulation.

4.1 Are systems in place for drinking-water regulation and surveillance?

The functions of drinking-water regulatory authorities

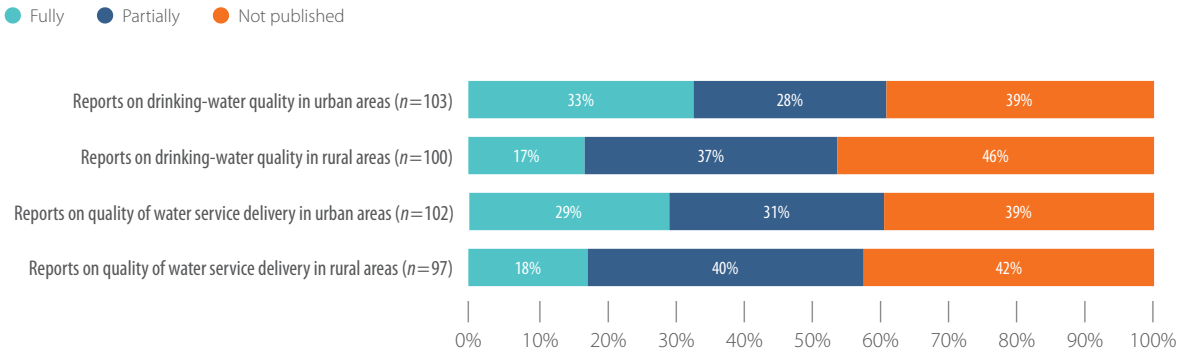
In urban areas, 85% of countries reported having regulatory authorities to oversee drinking-water quality and 80% reported having regulatory authorities to oversee service coverage and other aspects of the service delivery quality for drinking-water. However, existence of regulatory authorities does not necessarily indicate that they are sufficiently resourced and able to deliver on their mandates.

Most countries have regulatory authorities to oversee drinking-water quality, service coverage and service delivery quality in urban areas.

For transparency and accountability in WASH systems, regulatory authorities need to be able to independently publish publicly accessible reports and take corrective action against nonperformers. The majority of GLAAS 2018/2019 respondent countries reported that regulatory authorities for drinking-water were able to report findings without gaining clearance or permission from government institutions responsible for service provision. However, having this ability does not necessarily translate into reports being publicly accessible. For drinking-water quality and the quality of service delivery in urban areas, only one third of countries have regulatory authorities that fully publish publicly accessible reports, and this number falls to 17% for rural areas (Fig. 4.1). The lack of publicly accessible reports undermines transparency and makes it more difficult for the public to hold service providers and regulatory authorities accountable.

Fewer than one third of countries have regulatory authorities that fully publish publicly accessible reports on drinking-water quality and the quality of water service delivery.

Figure 4.1 Percentage of countries with regulatory authorities that publish publicly accessible reports on drinking-water quality and quality of service delivery in urban and rural areas



Source: GLAAS 2018/2019 country survey.

The ability to take corrective action against nonperformers is an indicator of the strength of a regulatory authority's mandate and its ability to elicit improvements and stimulate progress towards higher levels of services. Forty-three per cent of respondent countries reported that drinking-water regulatory authorities fully take corrective action against nonperformers in urban areas; this number falls to 34% for rural areas.

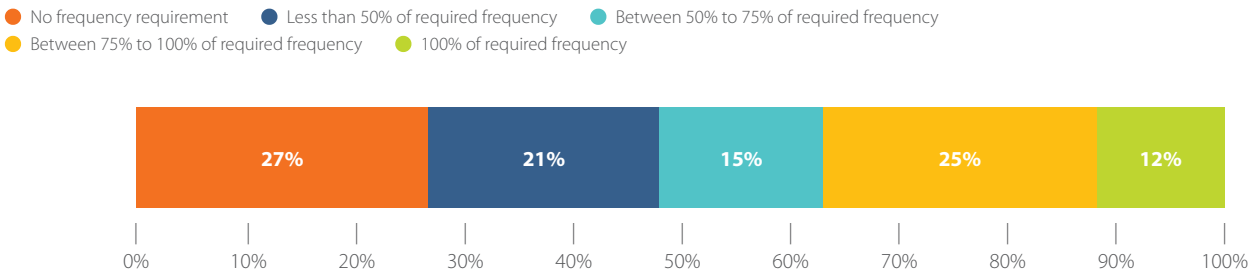
For urban and rural drinking-water, 43% and 34%, respectively, of countries reported that regulatory authorities fully take corrective action against nonperformers.

Drinking-water surveillance

Surveillance is required to understand how services are being delivered and assess the quality of service delivery, including quality of drinking-water. Almost 90% of respondent countries reported having formal instruments (such as regulations and/or standards) for drinking-water that include drinking-water quality surveillance requirements. However, GLAAS data show there is a gap between the surveillance mandated and how often surveillance takes place. For urban areas, only 12% of countries reported that surveillance is undertaken at 100% of the required frequency and 21% of respondent countries noted that surveillance happens less than 50% of the required frequency (Fig. 4.2). In rural areas, only 6% of countries reported surveillance occurring at 100% of the required frequency.

In urban areas, only 12% of countries reported having drinking-water surveillance that is undertaken at 100% of the required frequency.

Figure 4.2 Frequency of independent drinking-water surveillance in practice compared to requirements in surveillance mandated for urban drinking-water (*n*=104)



Source: GLAAS 2018/2019 country survey.

One of the reasons for the lack of drinking-water surveillance is a lack of human resources. Fifty per cent of respondent countries noted they have less than 50% of the human resources needed to conduct drinking-water surveillance in urban areas. For rural areas, the situation is worse: 66% of countries noted they have less than 50% of the human resources base needed.

Major constraints for the surveillance of drinking-water in urban and rural areas include insufficient funds and insufficient human resources.

The costs associated with drinking-water surveillance also present a challenge for countries. Eighty-one per cent of respondent countries cited insufficient funds for surveillance in rural areas as a major constraint and 68% cited insufficient funds as a major constraint for urban surveillance. While the costs for undertaking regular drinking-water surveillance are a fraction of the costs required for developing drinking-water infrastructure, it is still an issue for countries to support regular surveillance when allocating resources. A 2017 study by the Aquaya Institute found that "monitoring microbial quality of all improved water sources in sub-Saharan Africa would cost US$ 16.0 million per year, which is minimal in comparison to the projected annual capital costs of achieving SDG 6.1 of safe water for all (US$ 15.8 billion)" *(1)*.

Use of performance indicators for the quality of drinking-water services

Performance indicators are another key aspect of monitoring the system for providing drinking-water services. While a majority of countries use a performance indicator for water quality, fewer have indicators for the quality of service and the functionality of systems (Table 4.1).

Two thirds of countries indicate the use of a key performance indicator for water quality; only four in 10 countries use performance indicators for service quality and functionality of systems.

Table 4.1 Percentage of countries reporting use of performance indicators on the quality of drinking-water services

Type of service performance indicator	Percentage of countries reporting use of an established indicator[a]
Service quality (*n*=109)	41%
Functionality of systems (for example working/non-working infrastructure, asset management) (*n*=106)	40%
Water quality (*n*=108)	67%

[a] Established means that indicators are agreed upon and tracked against established baseline data.
Source: GLAAS 2018/2019 country survey.

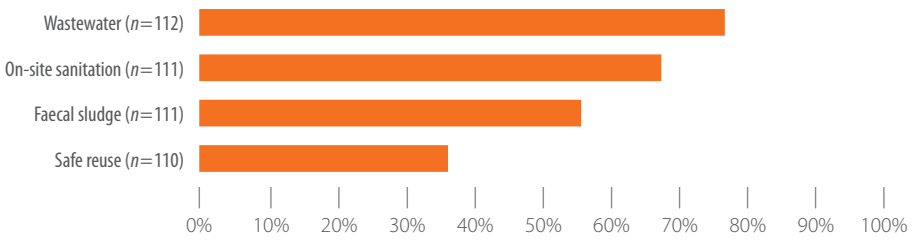
4.2 Are systems in place for sanitation regulation and surveillance, including wastewater treatment and FSM?

National standards for sanitation

Compared to drinking-water quality standards, fewer countries have formal national standards in place for sanitation and wastewater treatment. While 77% of countries have a formal national standard for wastewater treatment, only 36% of countries have a standard for safe reuse of wastewater/excreta for agriculture and other productive purposes (Fig. 4.3). To have safely managed sanitation in all contexts, it is important to have regulations and standards that cover both sewered and non-sewered sanitation and take the entire sanitation service chain[1] into consideration. The WHO Guidelines on Sanitation and Health recommend to "regulate service quality for all steps in the sanitation service chain, based on public health risk assessment and management" *(2).*

Over two thirds of countries reported having formal national standards for wastewater treatment and on-site sanitation technologies.

Figure 4.3 Percentage of respondent countries with formal national standards for wastewater, on-site sanitation, faecal sludge and safe reuse



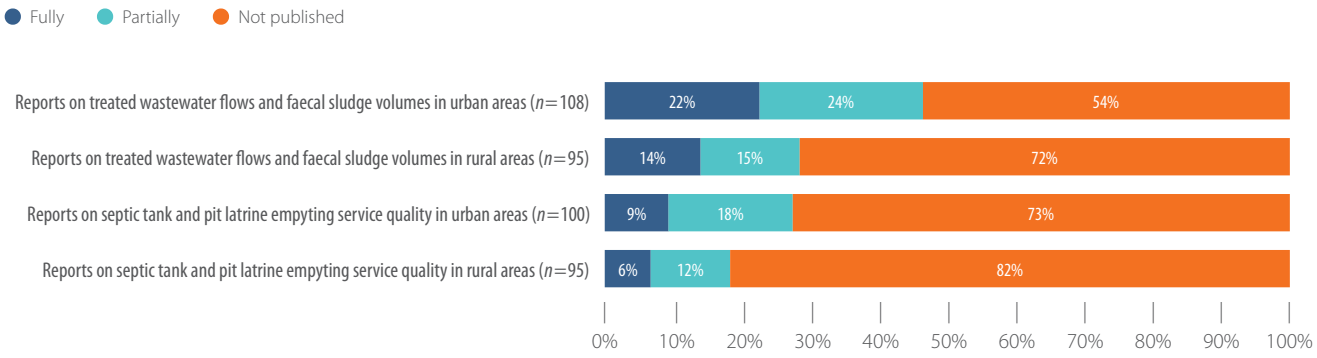
Source: GLAAS 2018/2019 country survey.

The functions of sanitation regulatory authorities

Less than 25% of countries have urban regulatory authorities that fully publish publicly accessible reports on treated wastewater flows and faecal sludge volumes, which is much lower than for drinking-water. This falls to 14% of countries for rural areas (Fig. 4.4).

Less than 10% of countries have regulatory authorities that fully publish publicly accessible reports on the service quality of septic tank and pit latrine emptying services in either urban or rural areas.

Figure 4.4 Percentage of respondent countries with regulatory authorities that publish publicly accessible sanitation-related reports



Source: GLAAS 2018/2019 country survey.

The rural/urban disparity in terms of regulation of septic tank and pit latrine emptying services can also be seen in regulatory authorities' ability to set standards in this area. Twenty-one per cent of countries have regulatory authorities to set and monitor FSM standards in urban areas, and 14% of countries have them for rural areas. Moreover, regulatory authorities can set standards for and monitor the design, construction and use of on-site sanitation systems in only 25% of countries for urban areas and 23% for rural areas. Forty per cent of respondent countries reported having regulatory authorities that can set standards for the design, construction and use of wastewater treatment plants and sewers in urban areas.

[1] See the glossary in Annex 1 for definition.

Only 21% of countries have regulatory authorities to set and monitor FSM standards in urban areas, and 14% of countries have them for rural areas.

Sanitation/wastewater regulatory authorities are also limited in the corrective action they can take against nonperformers. Only 32% of countries reported having sanitation/wastewater regulatory authorities that fully take corrective action in urban areas; for rural areas, only 23% of countries reported regulatory authorities that fully take corrective actions.

Wastewater surveillance

Only 11% of countries reported that wastewater surveillance happens at 100% of the required frequency in urban areas. In rural areas, only 6% of countries reported wastewater surveillance occurring at 100% of the required frequency. Wastewater surveillance is greatly constrained by a lack of sufficient human resources. Sixty-seven per cent of countries reported that they have less than 50% of the human resources they need for wastewater surveillance in urban areas, and 80% of countries cited less than 50% of what is needed for rural areas.

Use of performance indicators for the quality of sanitation services

As shown in Table 4.2, few countries reported using performance indicators for sanitation. Only 31% of countries reported having an agreed indicator for treated effluent quality that is tracked against established baseline data. This is much less than those that reported having an established indicator for water quality.

Few countries track key performance indicators such as treated effluent quality and service quality for sanitation.

Table 4.2 Percentage of countries reporting use of performance indicators on the quality of sanitation services

Type of service performance indicator	Percentage of countries reporting use of an established indicator[a]
Service quality ($n = 105$)	21%
Functionality of systems (for example working/non-working infrastructure, asset management) ($n = 103$)	26%
Treated effluent quality ($n = 104$)	31%

[a] Established means that indicators are agreed upon and tracked against established baseline data.
Source: GLAAS 2018/2019 country survey.

4.3 Are tariff reviews being conducted?

Countries reported that review and adjustment of tariffs may be carried out by a national regulatory authority, by local governments or by the service providers themselves. Municipalities and service providers may have the autonomy to set tariffs. However, in many cases, they are required to request approval for tariff revisions from a national ministry or institution (such as in Lesotho, Namibia and Nepal).

In countries that provided data on the frequency of tariff revision, 54% reported they occur every one to three years (Table 4.3).

Table 4.3 Frequency of tariff review/revisions

Tariff review frequency	Percentage of countries ($n = 37$)
Varies by municipality/performed on request	25%
Annually	21%
Every 2–3 years	33%
More than 3 years	21%

Source: GLAAS 2018/2019 country survey.

The GLAAS 2018/2019 country survey indicates that 72% of 108 respondent countries have regulatory authorities that are responsible for setting tariffs for urban drinking-water, and 67% of 106 countries have authorities that are responsible for setting urban sanitation tariffs. In rural areas, fewer than half of countries reported having regulatory authorities that were responsible for setting tariffs for drinking-water and sanitation.

Several countries, including Angola, Argentina, Congo and Ecuador, indicated recent reforms to tariff regulation or frameworks that have affected or may positively affect cost recovery in the future.

Improving cost recovery through tariff policy in Argentina

In **Argentina**, the provider information system for drinking-water and sanitation implemented since 2017 showed that revenues covered 91% of O&M costs. This result is based on the data of the 20 main providers of 19 provinces in the country, which represent approximately 70% of the urban population supplied with potable water. This figure represents a significant increase since 2015, and was reached due to a change in the tariff policy.

Source: GLAAS 2018/2019 country survey.

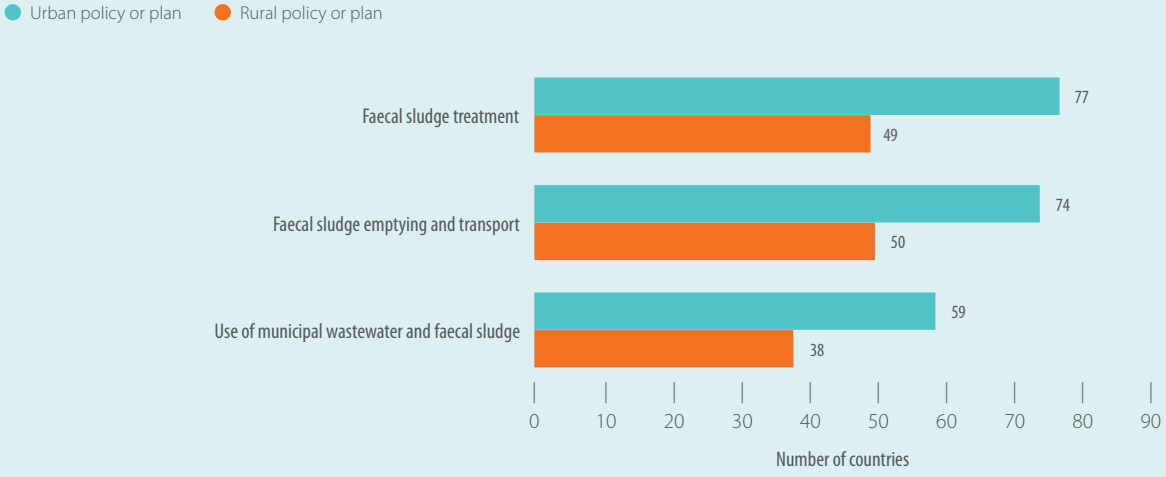
Highlight on faecal sludge management

FSM services are essential for sustained use of toilets and safely managed sanitation in settings without sewers and where faecal sludge cannot be disposed in situ. Households that are most in need of FSM services are often located in dense urban settings and are among the most left behind under the SDGs. However, demand for FSM services comes from all sections of society, in both rural and urban areas, that rely on on-site sanitation facilities (such as septic tanks, latrines or container-based sanitation). In countries with a high proportion of septic tanks and latrines, effective FSM is a critical component to achieve national sanitation targets and the SDGs. As such, FSM is gaining momentum in the WASH sector and there is increasing recognition and support from countries and development partners.

FSM in national policies and plans

GLAAS 2018/2019 findings show that countries are incorporating elements of FSM in national policies and plans. Elements of FSM, such as emptying, transport, treatment and end use/disposal, are addressed in most urban sanitation policies or plans (Fig. 4.5).

Figure 4.5 Number of countries that included FSM in sanitation policies or plans



Source: GLAAS 2018/2019 country survey.

SANITATION POLICY CASE STUDY BOX 4.1

Addressing FSM in policies and plans in Mali, Senegal and Zambia

In **Mali**, where more than half of the population lives in rural areas (57% in 2018) *(3)*, on-site sanitation has been the most commonly used approach for sanitation. The 2009 Sanitation Policy indicates that "Non-sewered sanitation must be privileged as it is inexpensive and already constitutes a widespread practice among users" *(4)*. It also specifies that sewered sanitation should be implemented only in densely populated areas such as city centres, tourist areas, and industrial and commercial zones. The 2009 Sanitation Policy also includes a section on FSM, aiming to have all cities over 50 000 people equipped with adequate sites for storage and treatment of sludge by 2015, and for all towns over 25 000 people by 2025 *(4)*.

In **Senegal**, non-sewered sanitation and FSM were defined and addressed for the first time from a legal point of view in the 2009 Sanitation Code *(5)*, which outlined conditions for their development and management. Non-sewered sanitation had already been recognized in earlier policies, including the 2005–2015 sanitation sector policy (LPSD) on the implementation of the MDGs. More recently, Senegal signed a decree on the application of the Sanitation Code, reinforced by the new LPSD for 2016–2025, which strengthens guidance on non-sewered sanitation and effective FSM including recovery of waste by-products and establishment of sanitation service chains *(6)*.

In **Zambia**, the Zambian National Urban and Peri-Urban Sanitation Strategy (NUSS), developed in 2015, is largely targeted at strategies to improve FSM in the urban context by strengthening the capacity of commercial utilities across the sanitation service chain *(7)*. The NUSS highlights that "insufficient focus on sanitation and too much emphasis on reticulated sewerage" is one of the constraints to moving forward in the sanitation subsector *(7)*.

Source: WHO 2018/2019 sanitation policy case studies.

German Water Programme supports higher levels of sanitation service in Burkina Faso, including FSM

In Burkina Faso, the German Water Programme supports the ministry responsible for water in adapting the access definitions for safe sanitation services in urban areas. The definition now comprises the whole sanitation services chain, including conveyance, emptying, transport, treatment and reuse, to align with the indicators of SDG Target 6.2. Accordingly, a "management concept for the sanitation chain" will be developed with the national water utility. This will be complemented by a dedicated financing mechanism, which is intended to provide financing (both from domestic sources and ODA transfers) for large-scale development of decentralized infrastructure for faecal sludge treatment and the (private sector) emptying business.

Source: GLAAS 2018/2019 ESA survey.

FSM in national targets

Approximately one third of countries have established national targets for FSM. Thirty-two of 101 responding countries (32%) have national targets for emptying and transporting faecal sludge and 27% have national targets for treatment. Two examples from the GLAAS 2018/2019 country survey are presented below.

- **Burkina Faso** aims to have seven faecal sludge treatment plants by 2020.
- **Comoros** aims to construct 200 sludge collection units by 2030.

Responses may underrepresent target setting on FSM because some countries indicated that elements of FSM are included within their national coverage targets for sanitation and, therefore, they did not identify additional specific targets for FSM.

Some countries have targets that extend beyond treatment and into the productive use of faecal sludge. Twenty-five of 100 countries indicate that they have specific targets for the use of faecal sludge. For example, Seychelles has a target to achieve 100% faecal sludge treatment, composting and use by farmers by 2030, to reduce dependence on imported chemical fertilizers.

Institutional arrangements for FSM in African countries

As the importance of FSM continues to gain prominence in the WASH sector, countries are starting to formalize institutional arrangements for FSM, which normally involve multiple institutional stakeholders along the sanitation service chain, including from water, public works, health, environment and agriculture. Table 4.4 outlines how responsibility for governing and regulating faecal sludge collection and management varies across African countries. A majority of the countries in the table have one lead for governing and regulating faecal sludge collection and management with zero to three contributors, highlighting the multisectoral nature of FSM for the full sanitation service chain. Of those countries who indicated one lead, in most cases it was the Ministry of Water and Sanitation (or equivalent).

Table 4.4 Institutional arrangements for governing and regulating faecal sludge collection and treatment in Africa

		Number of contributors		
		Zero to two contributors	Three to four contributors	More than five contributors
Number of leads	More than one lead	Comoros, Mauritania, Mozambique, Senegal	Angola, Liberia, Zimbabwe	Eswatini, Kenya
	One lead	Benin, Botswana, Ethiopia, Ghana, Guinea, Madagascar, Mali, Namibia, Niger, Zambia	Burundi, Burkina Faso, Cameroon, Central African Republic, Chad, Gabon, Lesotho, Nigeria, Togo, South Africa, Uganda	Congo, Côte d'Ivoire, Democratic Republic of the Congo, Eritrea, United Republic of Tanzania
	No leads	Gambia, Sao Tome and Principe	Malawi, Seychelles	

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CHAPTER 5

What actions are governments and development partners taking to leave no one behind?

Highlights

- **Human rights to water and sanitation:** Two thirds of respondent countries reported that they recognize the human rights to water and sanitation in their constitutions.
- **Measures to leave no one behind:** Many countries have measures to reach populations living in vulnerable situations in policies and plans, but far fewer have corresponding systems for monitoring or financing.
- **Targets:** Most countries do not have WASH targets in place for populations living in vulnerable situations.
- **Open defecation:** Approximately three quarters of countries with open defecation rates over 2% reported that open defecation is addressed in national policies or plans for sanitation.
- **Making WASH services affordable:** Urban drinking-water was the subsector for which financial schemes for affordability were most likely to be in place (70% of countries); however, only half of these countries reported that the schemes were widely used.

The SDG imperative to leave no one behind is reflected in SDG 6 on water and sanitation, which states "Ensure availability and sustainable management of water and sanitation for all" as well as in SDG 10 on reducing inequalities within and among countries and SDG 5 on gender equality. Countries have committed to actions to target and reach populations living in vulnerable situations in order to close existing WASH service gaps and expand access to the unserved. Populations living in vulnerable situations vary by country and may include poor populations, populations living in remote and hard-to-reach areas, women, ethnic minorities and other populations that experience greater difficulties in accessing services. To succeed, measures to leave no one behind require prioritization within WASH systems with adequate financial and human resources, as well as monitoring systems that can identify inequalities, track progress towards universal coverage and allow governments to take corrective action. Systems to allow community participation and citizen engagement, addressed under the SDG means of implementation Target 6.b, are also key to addressing the needs of local communities and those living in vulnerable situations (see Annex 6 for more information).

5.1 Have governments recognized the human rights to water and sanitation?

A UN General Assembly Resolution formally recognized the rights to water and sanitation in July 2010 and acknowledged that safe and clean drinking-water and sanitation are essential to the realization of all human rights *(1)*. Recognition of these human rights in a country's constitution is an indication of the political will to provide universal access to water and sanitation. Moreover, it provides the population with a tool to hold the government accountable.

In the GLAAS 2018/2019 country survey, almost two thirds of respondent countries reported that the government recognizes the human rights to water and sanitation in their constitutions (65% for water and 62% for sanitation). Some countries took a broad interpretation of recognition in the constitution; thus, explicit recognition of these rights is likely to be much lower.

SANITATION POLICY CASE STUDY BOX 5.1

Defining the human right to sanitation in constitutions

How countries define the human right to sanitation in their constitutions varies. Some constitutions explicitly recognize the human right to sanitation, while others do so indirectly. For example, the 2010 Constitution of **Kenya** states, "Every person has the right to accessible and adequate housing and to reasonable standards of sanitation" *(2)*. In **Bangladesh**, the Constitution guarantees the "...right to basic necessities of life", which, while not an explicit recognition, the government interprets to include sanitation *(3)*. Similarly, in **Nepal**, the article that states, "every person shall have the right to live in a healthy and clean environment" is interpreted as including aspects of wastewater and waste management *(4)*. In **Mali**, the 1992 Constitution also focuses on a healthy environment as recognition of the right to sanitation *(5)*. It states, "Everyone has the right to a healthy environment. The protection, the defense of the environment and the promotion of the quality of life are a duty for all and for the state".

Source: WHO 2018/2019 sanitation policy case studies.

5.2 Do measures exist to reach vulnerable populations and are they being implemented?

The GLAAS 2018/2019 country survey included questions on: (i) poor populations, (ii) populations living in slums or informal settlements, (iii) populations living in remote or hard to reach areas, (iv) indigenous populations, (v) internally displaced persons and/or refugees, (vi) women, (vii) ethnic minorities, (viii) people living with disabilities and (ix) populations with a high burden of disease. The survey also included "other" as a category for countries to identify any additionally recognized vulnerable populations. Countries were most likely to have measures for drinking-water and sanitation addressing poor populations, followed by populations living in remote and hard-to-reach areas and people living with disabilities. As can be seen in Figure 5.1 for sanitation, many countries have measures to reach populations living in vulnerable situations in policies and plans, but far fewer have corresponding systems for monitoring or financing. The results for drinking-water show similar trends.

Addressing and including populations living in vulnerable situations in the policy development process

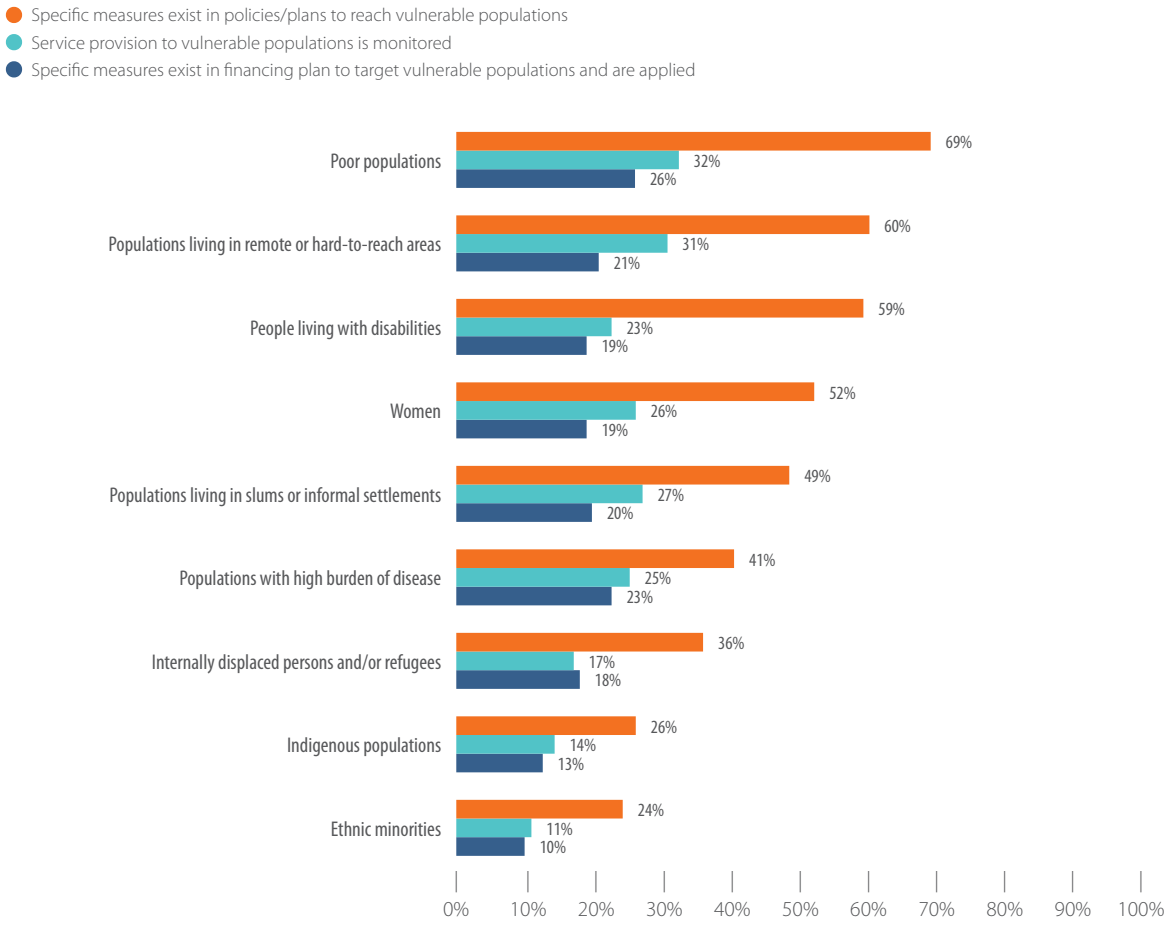
In **Bhutan**, the needs and concerns of potentially vulnerable groups are included through the direct engagement of civil society organizations and organizations for disabled persons regarding affordable and accessible technology options.

In **Mauritania**, the development of sector policies is generally based on a participatory process involving the administration, elected officials, civil society, the private sector, professional organizations, youth groups, women and technical and financial partners. This is an opportunity to identify the most vulnerable groups such as rural populations and to ensure their effective and meaningful participation in the process.

Source: GLAAS 2018/2019 country survey.

More countries have measures for vulnerable populations in policies and plans than have corresponding systems to monitor or finance service provision.

Figure 5.1 Percentage of countries with measures targeting vulnerable groups for sanitation: (i) in policies and plans, (ii) to monitor service provision, (iii) in financing plan and are consistently applied (*n*=111)



Source: GLAAS 2018/2019 country survey.

Specific measures to address poor populations

Consistent with previous GLAAS cycles, GLAAS 2018/2019 data show that most countries have specific measures in national policies and plans to address poor populations, but that systems for implementing the measures are often inadequate. Less than 45% of countries across all income groups have specific measures for monitoring progress for extending or sustaining services or for targeting financial resources to poor populations (Table 5.1). Interestingly, the percentage of countries that consistently apply financial measures targeting poor populations is relatively constant across income groups, indicating that financial targeting of poor populations is not necessarily related to the country's income level and may signal a lack of prioritization of this issue.

While over two thirds of countries reported having specific measures in policies and plans to reach poor populations, less than 40% have corresponding measures for monitoring and financing that are consistently applied to reach poor populations with sanitation and drinking-water services.

Table 5.1 Measures to extend services to poor populations by income group

80–100% 60–79% 40–59% 0–39%

	World Bank income group[a]	Number of countries	Governance: Policies and plans have specific measures to reach poor populations	Monitoring: Progress in extending service provision to poor populations is tracked and reported	Finance: Specific measures in the financing plan to target resources to poor populations are consistently applied
Sanitation	**All responding countries**	**111**	**69%**	**32%**	**26%**
	Low income	28	79%	25%	25%
	Lower-middle income	38	71%	39%	29%
	Upper-middle income	32	69%	38%	22%
	High income	12	50%	17%	33%
Drinking-water	**All responding countries**	**110**	**74%**	**35%**	**35%**
	Low income	28	93%	25%	39%
	Lower-middle income	36	75%	42%	36%
	Upper-middle income	32	66%	41%	31%
	High income	13	54%	31%	31%

[a] More information on World Bank classification by income can be found at: https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups.
Source: GLAAS 2018/2019 country survey.

SANITATION POLICY CASE STUDY BOX 5.2

Addressing vulnerable groups in country sanitation policies

The ability of countries to identify and address vulnerable populations is crucial for targeting these groups with appropriate WASH services. For example, **Bangladesh** has used the 2005 Pro-Poor Strategy for Water and Sanitation to identify "hardcore poor"[a] households whose basic minimum need for sanitation is unmet and to establish strategies to allocate resources to those households *(6)*. **Zambia** established measures through the 2014 National Social Protection Policy to ensure the right to basic services, including sanitation, for people living with disabilities *(7)*. Other countries integrate specific policy measures in existing sanitation policies or plans. For example, **Kenya** integrates specific measures for sanitation marketing specifically in vulnerable populations in the Kenya Environmental Sanitation and Hygiene Policy *(8)*.

[a] The term "hardcore poor" is a particular classification in Bangladesh used to identify and describe the extremely poor.
Source: WHO 2018/2019 sanitation policy case studies.

SANITATION POLICY CASE STUDY BOX 5.3

Uganda's Water and Sanitation Gender Strategy

The Ministry of Water and Environment in **Uganda** developed the Water and Sanitation Gender Strategy 2018–2022 to mainstream gender and improve equity for water and sanitation. The goal of the strategy is to "empower men, women, boys, girls and vulnerable groups through ensuring equity in access to and control of resources in the water and sanitation subsector, contributing to poverty reduction" *(9)*. In addition, the plan includes measures for other vulnerable groups including people living with disabilities.

The strategy has the following objectives:

- gender integration in policy, guidelines, plans and budgets;
- capacity enhancement and promotion of a gender sensitive work environment;
- economic empowerment through equitable access to and control of water resources, supply, sanitation and hygiene;
- gender documentation, reporting and monitoring; and
- gender coordination, partnership and networking.

Examples of specific measures in the strategy include:

- ensure that all specifications for construction of facilities are gender segregated and have provisions for the persons with disabilities; and
- ensure that specifications for school latrines have washrooms for girls to take care of the menstrual hygiene concerns.

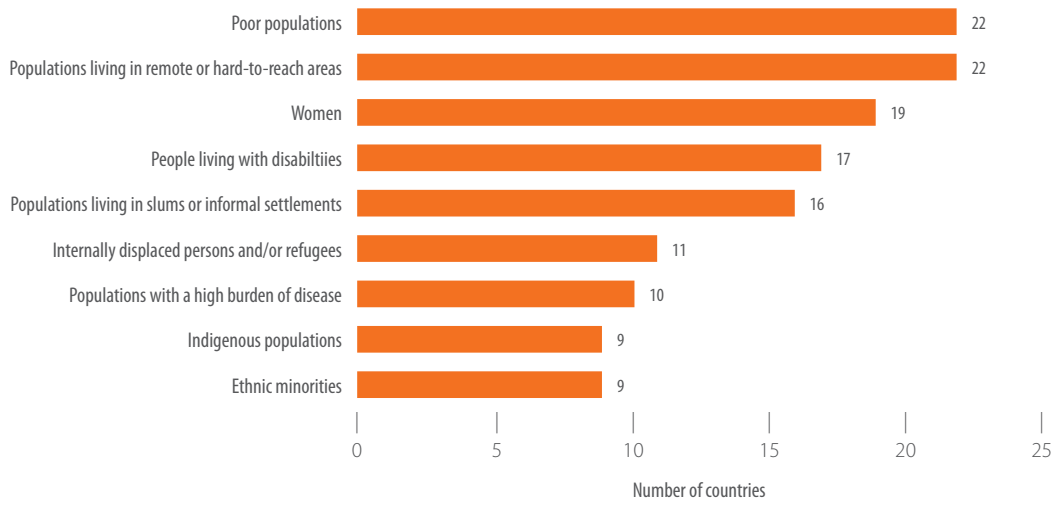
Source: WHO 2018/2019 sanitation policy case studies.

Targets to reach populations living in vulnerable situations

GLAAS 2018/2019 data indicate that most countries do not have specific WASH targets to reach populations living in vulnerable situations. As presented in Figure 5.2, of 106 responding countries, 22 reported that they have specific WASH targets to reach poor populations; 22 countries have WASH targets to reach populations living in remote or hard to reach areas; and 19 countries have specific WASH targets to reach women.

Most countries do not have specific WASH targets to reach vulnerable populations. Those that have them are targeting poor populations, populations living in remote or hard to reach areas, women and/or people living with disabilities.

Figure 5.2 Number of countries reporting WASH targets for vulnerable populations



Note: Not all vulnerable populations are applicable to all countries. Some countries may have targets for more than one of these populations.
Source: GLAAS 2018/2019 country survey.

In responding to the GLAAS country survey question on targets to reach populations living in vulnerable situations, some countries cite their intention to reach universal coverage. For example, Bhutan, the Democratic Republic of the Congo, and Guyana all cited targets for universal coverage by 2030.

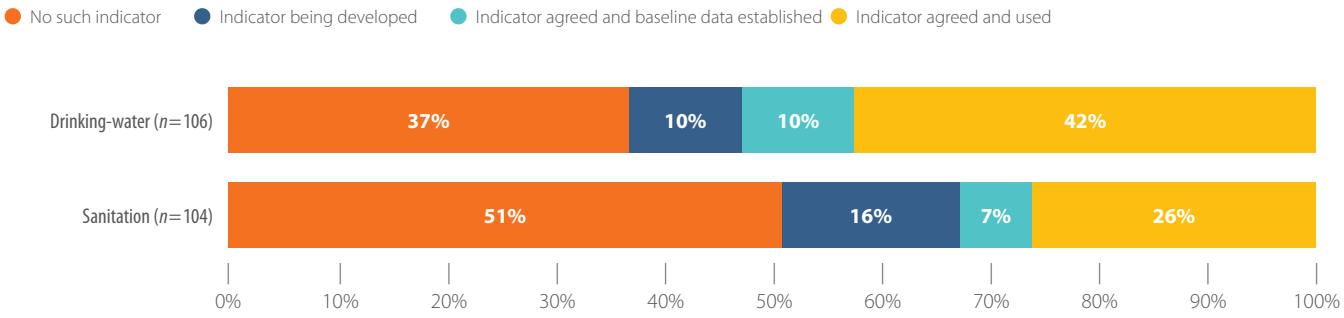
Other countries provided more specific targets. Ethiopia, for example, aims to increase the percentage of institutions with gender- and disability-sensitive improved WASH facilities from the current 20% to 60%. Kenya aims to reach 2.8 million people in hard-to-reach areas with access to safe water by 2022. Sri Lanka cites a special focus on women-headed households for their WASH programmes, as well as a focus on menstrual hygiene management in schools. Uzbekistan aims to reach 100% coverage of the population living in hard-to-reach settlements by the year 2021.

Monitoring equitable service coverage

The ability to identify gaps in equitable service coverage is essential for targeting vulnerable groups that are lagging behind. GLAAS 2018/2019 results reveal that more countries have performance indicators for equitable service coverage of drinking-water as compared to those for equitable service coverage of sanitation (Fig. 5.3).

Over one third of responding countries reported they do not have established performance indicators that are being used for equitable service coverage in drinking-water, while half reported they do not have a performance indicator for sanitation.

Figure 5.3 Percentage of countries with performance indicators for equitable service coverage in drinking-water and sanitation



Source: GLAAS 2018/2019 country survey.

Some countries, such as Bhutan, Honduras and Mauritania, reported they use an indicator that compares coverage in urban and rural areas. Other countries, such as Jamaica, reported that they monitor the distribution of household sanitation coverage by type of sanitation facility, region and economic status. Still others, such as Pakistan, reported they have an indicator that assesses equitable service coverage based on access to drinking-water and sanitation by household income. To identify the portions of unserved or underserved areas, Bangladesh compares coverage in hard-to-reach areas with the mean national coverage.

Prioritization of vulnerable populations in ESA WASH strategies

Development partners also reported prioritizing measures to reach populations living in vulnerable situations. When asked about their main areas of global priority in WASH strategies or activities, 19 of 29 ESAs (66%) indicated that reducing inequalities in access and services to the poor and most vulnerable was a high or very high priority, on a five-point scale. Chapter 6 provides further details on ESA priorities.

How are ESAs addressing inequalities?

BRAC plans to target the unreached, including expanding its reach to further hard-to-reach and urban areas in order to achieve SDG 6, which aims for all people to have safe drinking-water and sanitation by 2030. **CARE International** in Honduras prioritizes women, girls and indigenous groups, the most often excluded, when doing WASH sector work and planning – in terms of location, design and technologies selected. Prices are also adjusted with the community according to the community's ability to contribute to the development of the water system.

Source: GLAAS 2018/2019 ESA survey.

5.3 How are governments working to eliminate open defecation?

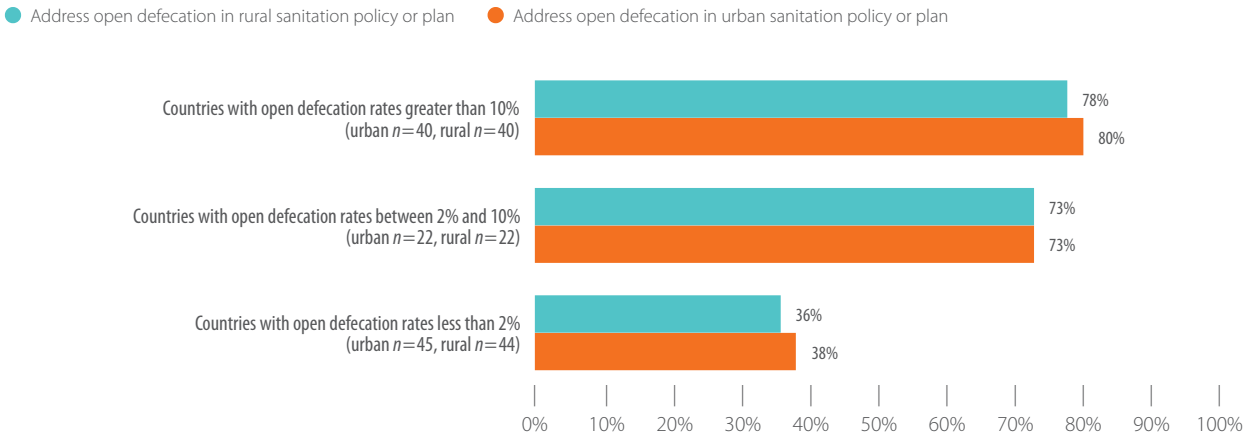
In 2017, 673 million people still practiced open defecation *(10)*. Moreover, according to the JMP, "only one in five countries with open defecation rates greater than 1% were on track to achieve 'near elimination' (less than 1%) of open defecation by 2030" *(10)*. In addition, the JMP report shows that open defecation is overwhelmingly practiced by the poor and people living in rural areas. Reducing or eliminating open defecation would thus especially benefit those populations, and contributes to leaving no one behind *(10)*.

Addressing open defecation in national policies and plans

GLAAS 2018/2019 data indicate that the majority of countries with open defecation rates above 2% included open defecation in their urban and rural policies or plans for sanitation *(10)* (Fig. 5.4).

Approximately three quarters of countries with significant open defecation reported it is addressed in national policies or plans for sanitation.

Figure 5.4 Percentage of countries with open defecation that address open defecation in sanitation policies or plans



Sources: GLAAS 2018/2019 country survey; *(10)*.

SANITATION POLICY CASE STUDY BOX 5.4

Strategies for eliminating open defecation

Strategies for eliminating open defecation have often been used to reach vulnerable groups and to enhance progress towards universal access to basic sanitation services. For example, the National ODF **Kenya** 2020 Campaign Framework 2016/17-2019/20 "aims to eradicate open defecation and to declare 100% villages and Kenya ODF by 2020" *(11)*. The campaign framework operates at the national level, but key to its implementation are the County ODF 2020 Campaign Action Plans that are created by each of Kenya's 47 counties. **Zambia** recently launched the ODF Zambia Strategy (2018–2030), which aims to end open defecation, especially among populations living in vulnerable situations, including women *(12)*. The objectives and measures of the strategy focus on strengthening the enabling environment, ensuring good governance, fostering demand for sanitation in households and public spaces, strengthening supply chains to support sanitation markets and supporting safely managed sanitation through affordable FSM.

Source: WHO 2018/2019 sanitation policy case studies.

Targets for the elimination of open defecation

Of the GLAAS country participants with open defecation rates above 2% *(10)*, 41 out of 65 countries (63%) reported having either urban or rural open defecation targets, but it is notable that seven of these 65 countries specifically indicated that there are no urban or rural targets for the elimination of open defecation. Of the 115 responding countries and territories, 43 provided specific information concerning the open defecation target value, target year and indicator measured. Countries generally reported two types of open defecation indicators, as presented in Table 5.2:

- percentage of population practicing (or not practicing) open defecation (37 countries); or
- percentage of villages, peri-urban areas, informal settlements or authorities that are ODF (six countries).

Table 5.2 Countries and territories reporting open defecation targets by type of target and target timeframe

Percentage of population practicing (or not practicing) open defecation (OD)			
End OD before 2025	**End OD by 2025**	**End OD by 2030**	**Reduce OD rate**
Ethiopia (urban) Gambia Guinea Indonesia Lao People's Democratic Republic Solomon Islands Sudan United Republic of Tanzania West Bank and Gaza Strip *Target year varies between 2019 and 2024*	Burundi Democratic People's Republic of Korea Jordan Mozambique Sri Lanka Viet Nam	Botswana Chad Côte d'Ivoire Dominican Republic Ghana Kenya Mauritania Myanmar Niger Nigeria Seychelles South Africa Uganda Zambia Zimbabwe	Eswatini Haiti Honduras Namibia Senegal South Sudan Togo *Target year varies between 2020 and 2030*
Percentage of villages, peri-urban areas, informal settlements or authorities that are ODF			
End OD by 2025	**End OD by 2030**	**Progress target by 2020**	
Afghanistan Benin Madagascar	Malawi Mali	Burkina Faso	

Note: In addition to the countries and territories listed above, 11 countries indicated having open defecation targets, but did not provide specific details about the target: Angola, Central African Republic, Liberia, Mongolia, Nepal, Pakistan, Papua New Guinea, Sao Tome and Principe, Timor-Leste, Trinidad and Tobago, and Tuvalu.
Source: GLAAS 2018/2019 country survey.

5.4 How are governments addressing the affordability of WASH services?

One key measure in efforts to leave no one behind is the affordability of drinking-water, which is explicitly mentioned in SDG Target 6.1, and is also an obligation under the human rights to water and sanitation *(13)*. Currently there is no universally agreed definition of what constitutes affordable services and monitoring of affordability relies on proxy indicators. Table 5.3 shows some examples from the GLAAS 2018/2019 country survey of how countries define affordability for WASH services. As part of a GLAAS and JMP joint initiative on monitoring affordability of WASH services, an expert group has been formed, and affordability case studies are under way in six countries. Some preliminary findings of the initiative are highlighted in the latest JMP report *(10)*.

Table 5.3 Example country definitions of affordability for WASH services

Country	Definition of affordability
Indonesia	4% of regional minimum income for drinking-water
Lao People's Democratic Republic	3% of household income for urban drinking-water
Lesotho	5% of minimum salary for drinking-water
Lithuania	4% of average monthly family income drinking-water and sanitation
Ukraine	Housing and utilities no greater than 10% of gross monthly income for low-income households and people living with disabilities; no greater than 15% of average monthly income for the rest of the population

Source: GLAAS 2018/2019 country survey.

Addressing affordability in policies and plans

GLAAS 2018/2019 data show that most countries included measures to address the affordability of drinking-water in national policies and plans, but measures are more common in urban policies or plans. Eighty-one per cent of countries (90 of 111) with a policy or a plan for urban drinking-water addressed affordability as compared to 74% of countries (81 of 109) for rural drinking-water. Several high-income countries reported having measures to reach poor populations in their policies and plans. For example, Chile, Hungary and Lithuania all described policy measures to support low-income households with subsidies for WASH services.

SANITATION POLICY CASE STUDY BOX 5.5

Addressing affordability in national policies and plans

While cost sharing and affordability measures were common themes in the sanitation policy case study countries, the approaches outlined in national policies and plans varied. For example, the 2011 National Cost Sharing Strategy for Water Supply and Sanitation in **Bangladesh** outlines measures to facilitate uniform practices with regard to tariff design and the gradual phasing out of subsidies *(14)*. In **Senegal**, the Action Plan for the Implementation of the National Policy for Rural Sanitation by 2025 proposes measures to ensure that the poorest can also access sanitation, while still paying based on their financial capacity *(15)*. **Zambia** has recognized that people living in informal settlements need to be targeted for sanitation service provision. It has established the Devolution Trust Fund, a multi-donor basket fund, to support the provision of services by commercial utilities to low-income communities in urban and peri-urban areas.

Source: WHO 2018/2019 sanitation policy case studies.

Targets for the affordability of drinking-water

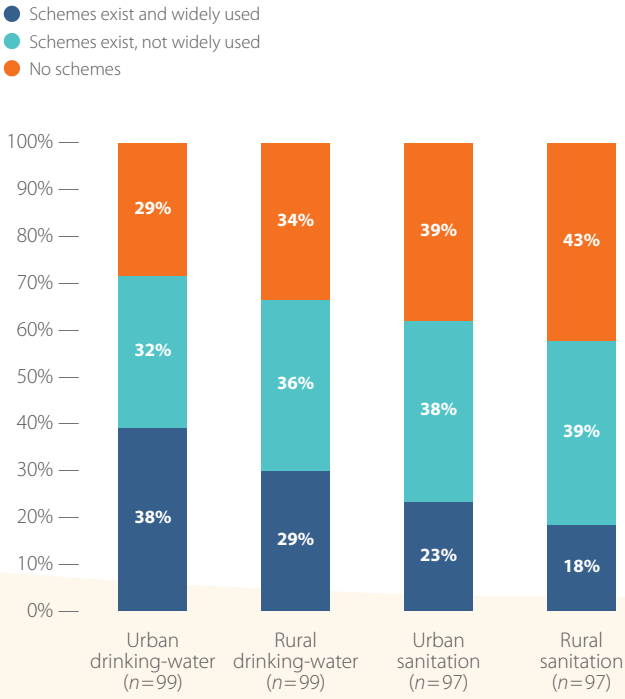
Over 47% (44 of 93) of responding countries indicated that they have targets for achieving affordability of drinking-water. For example, Seychelles' target aims to keep the cost of drinking-water below the threshold of 5% of disposable household income, aiming to achieve 3% by 2030. Lesotho has set a target of 5% of disposable household income to be spent in urban areas on drinking-water by 2020.

While many countries indicated that they have a target for affordability, not all countries reported specific target values, but instead indicated general targets. For example, Jamaica aims for no one to be denied access to potable water because of an inability to pay. Maldives indicated its intention to provide access to drinking-water services free of charge in rural areas for all.

Financial schemes for affordability

Financial schemes such as vouchers, fee exemption schemes and reduced tariffs may help to make WASH services more affordable for populations living in vulnerable situations. Countries were most likely to have financial schemes for affordability in place for urban drinking-water (70%) (Fig. 5.5). However, only half of these countries reported that the schemes were widely used. Financial schemes were less common for urban and rural sanitation and fewer than half of countries with schemes reported that the schemes were widely used.

Figure 5.5 Existence of financial schemes to make access to WASH more affordable to vulnerable groups



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CHAPTER 6

How are ESAs supporting WASH systems?

Highlights

- **Water and sanitation aid trends:** After declining slightly in 2017, aid disbursements for water and sanitation are expected to exceed 2017 levels during the next one to two years, reflecting recent increases in aid commitments.
- **ESA WASH strategies:** Since 2017, most multiyear ESA water/WASH strategies have been revised and increasingly have objectives that align with the 2030 Agenda.
- **ESA targets:** Sixteen ESAs reported specific targets for delivering new or improved drinking-water and sanitation services to at least 200 million people by 2020.
- **Aid targeting:** Aid commitments for water and sanitation to Sub-Saharan Africa increased from US$ 1.7 billion to US$ 3.0 billion from 2015 to 2017.
- **Prioritizing WASH systems strengthening:** Strengthening country systems or systems approaches was rated as one of the highest priority activities in WASH among ESAs and was a major theme in several ESA water/WASH strategies.

Globally, over US$ 10 billion was disbursed in development assistance[1] for water and sanitation in 2017, provided by ESAs such as bilateral donors, multilateral development banks, NGOs and private foundations. These disbursements consisted of US$ 6.9 billion in ODA, US$ 3.0 billion in non-concessional loans/credits and over US$ 500 million in other funds. While external development assistance flows make up a small proportion of global expenditure on WASH in some countries, the amounts received from external sources is significant. Monitoring of aid flows is a means of implementation target for SDG 6, for which WHO is a co-custodian. Annex 6 provides further information on Target 6.a.

In this chapter, the term "water and sanitation", in relation to ODA generally includes activities specific to water supply and sanitation, as well as activities relating to water sector policy and administrative management, water resources conservation, river basin development and waste management and disposal.[2]

[1] Includes ODA and non-ODA disbursements listed under the water supply and sanitation sector in the OECD-CRS aid activity database (all codes in the 140xx series), as well as disbursements made by external support agencies that do not report data to OECD-CRS. Link to OECD-CRS: https://stats.oecd.org/Index.aspx?DataSetCode=crs1.

[2] Includes ODA commitments listed under the water supply and sanitation sector in the OECD-CRS aid activity database (all codes in the 140xx series).

6.1 How have global aid priorities changed to help countries close financial gaps for water and sanitation?

Bilateral and multilateral donors that report development aid activities to OECD reported total ODA commitments of US$ 196 billion in 2017, a 1% decline from US$ 198 billion in 2015 (in constant 2017 US$) (Table 6.1). Despite the relative stagnation in overall aid, ODA commitments for water and sanitation increased from US$ 7.6 billion to US$ 9.0 billion (constant 2017 US$), a 19% increase from 2015 to 2017. However, this increase comes after a recent decrease in commitments for water and sanitation from 2013 to 2016. While there is currently an upward trend, commitments remain below their peak in 2012.

From 2015 to 2017, overall ODA commitments decreased by almost US$ 2 billion, while ODA commitments for water and sanitation increased by US$ 1.5 billion.

The increase in water and sanitation commitments has shifted the proportion of aid[3] allocated to water and sanitation with respect to other development priorities such as health (Fig. 6.1).

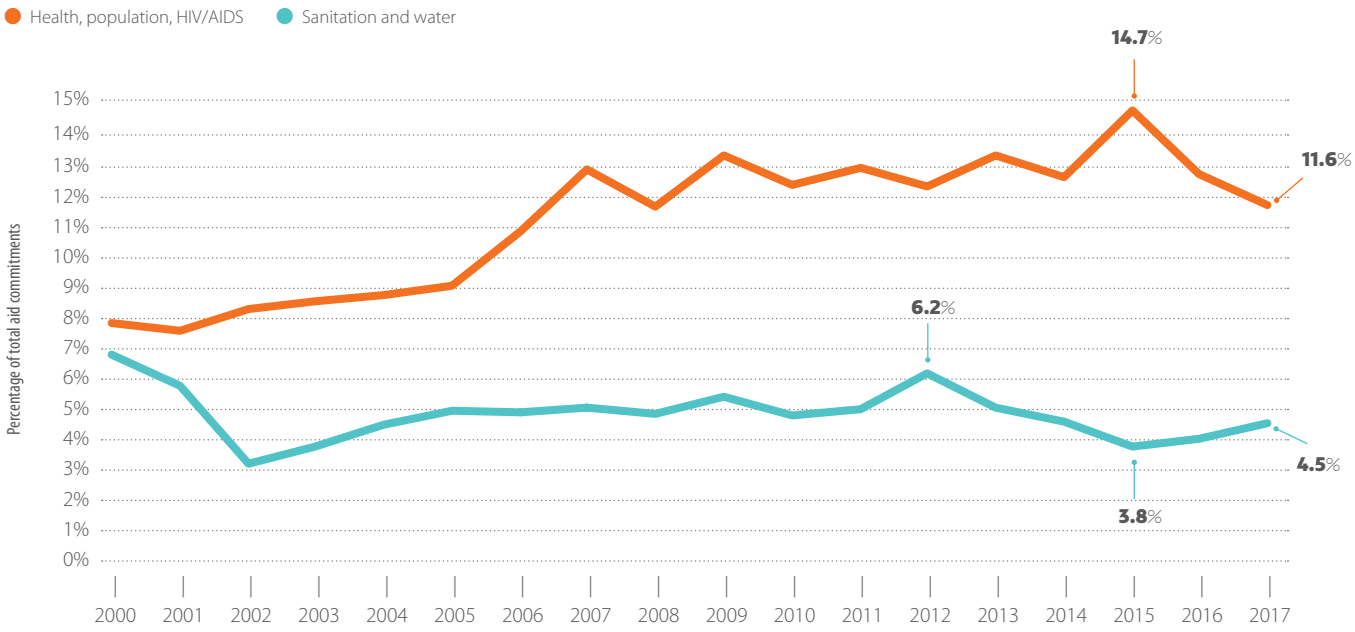
Table 6.1 ODA commitments in 2015 and 2017

	ODA commitments (US$ billions, constant 2017 US$)		
	2015	2017	Change
Total ODA	198.2	196.3	−0.9%
Water and sanitation[a] ODA	7.6	9.1	+19.2%

[a] Includes ODA commitments listed under the water supply and sanitation sector in the OECD-CRS aid activity database (all codes in the 140xx series).
Source: OECD-CRS, 2019.

Aid commitments for water and sanitation have increased from 3.8% to 4.5% of total aid commitments between 2015 and 2017; however, they remain below the high of 6.2% in 2012.

Figure 6.1 Aid commitments to water and sanitation, and to health, population and HIV/AIDS, as a proportion of total aid, 2000–2017



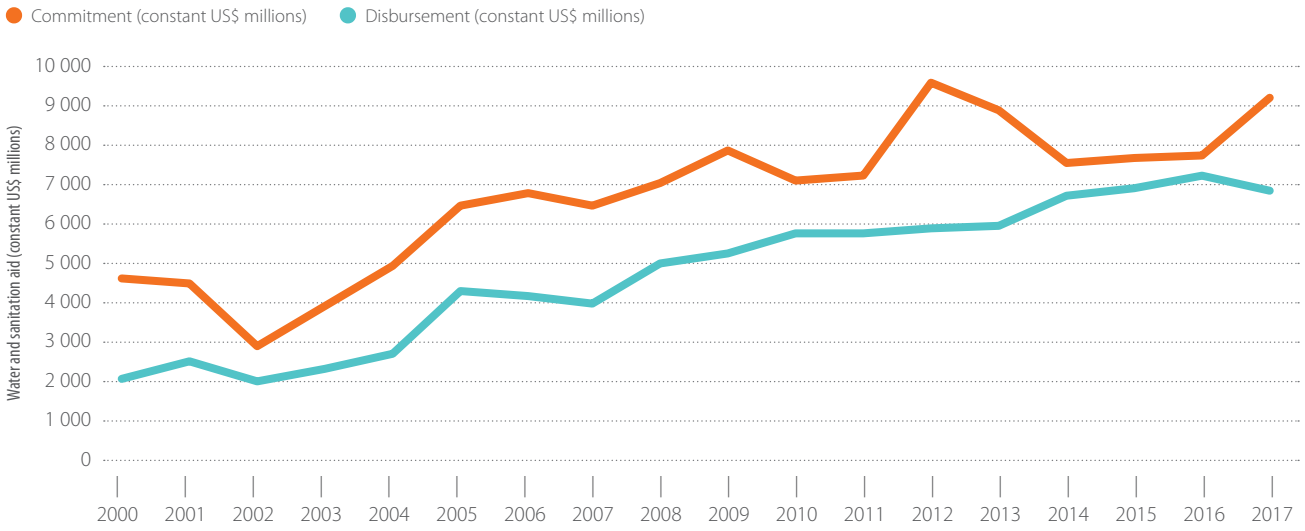
Source: OECD-CRS, 2019.

While aid commitments for water and sanitation have recently increased, disbursements have remained stable, totalling US$ 6.9 billion for both 2015 and 2017. For aid committed to drinking-water and sanitation infrastructure projects, there is an expected time lag of one to several years between multiyear commitments and disbursement. Due to the time lag, it is expected that aid disbursements over the next one to two years will exceed 2017 levels (Fig. 6.2).

[3] The use of the term "aid" in this chapter is inclusive of ODA grants, ODA loans and private grants, but does not include non-concessional lending, unless otherwise indicated.

After declining slightly in 2017, aid disbursements for water and sanitation are expected to increase above 2017 levels during the next one to two years to reflect recent increases in commitments.

Figure 6.2 Water and sanitation aid commitments and aid disbursements, 2000–2017



Note: This chart includes both ODA and private grants.
Source: OECD-CRS, 2019.

6.2 Have the strategies of ESAs been adjusted to align with the ambitions of the SDGs?

WASH strategies

Twenty-two out of 28 ESAs reported they have a multiyear strategy specifically for water or WASH (Table 6.2), with 16 ESAs having revised their water or WASH strategy in 2017 or 2018, and three ESAs in the midst of developing specific water strategies. These multiyear WASH strategies are increasingly centred on targeting the unserved and place a greater focus on remaining challenges, such as water quality and quantity, water security, system approaches, FSM, menstrual hygiene management and financial sustainability.

Most multiyear ESA water/WASH strategies have been revised in the last two years and increasingly have objectives that align with the 2030 Agenda.

Table 6.2 List of ESA WASH strategies

Organization	Title of WASH strategy	Last revised
AECID	Fifth Master Plan for Spanish Cooperation, 2018–2021	2018
AFD	Water and sanitation sectoral intervention framework 2014–2018	Undergoing revision
BMGF	Water, Sanitation, & Hygiene Strategy Overview (three years)	2018
BMZ	BMZ Water Strategy (15–20 years)	2017
BRAC	Strategy 2016–2020 BRAC Environmental WASH programme, 2016–2020	2015
DFID	WASH Approach Paper, 2018–2030	2018
DGIS	WASH Strategy 2016–2030	2017
Finnish Ministry for Foreign Affairs	International Water Sector Strategy – Finnish Water Way, 2018–2030	2018
IDB	Water and Sanitation Sector Framework (three years)	2018
IRC	IRC Strategy Framework 2017–2030	2017
JICA	JICA Assistance Strategy on Water Supply and Sanitation	2017
One Drop Foundation	One Drop 4.0	2017
SDC and SECO	SDC Water 2015 – Policy, Principles and Strategic Guidelines and SDC Global Programme Water Strategic Framework 2017–2020	Undergoing revision
Sida	Strategy for Sweden's Global Development Cooperation in Sustainable Social Development, 2018–2022	2018
UNICEF	UNICEF Strategy for Water, Sanitation and Hygiene 2016–2030	2016
USAID	U.S. Government Global Water Strategy, and USAID Water and Development Plan, 2018–2022	2017
WaterAid	Everyone, Everywhere 2030: WaterAid's Global Strategy 2015–2020	2018
Water.org	Water.org, 2018–2022	2018
WHO	WHO Water, Sanitation, and Hygiene Strategy, 2018–2025	2018
World Vision	World Vision, 2015–2030	2014
WSSCC	WSSCC Strategic Plan 2017–2020	2017

Note: AfDB, CARE International, New Zealand Ministry of Foreign Affairs and Trade, and the World Bank indicated that water strategies are in development.
Source: GLAAS 2018/2019 ESA survey.

Four common themes were found in many of the ESA WASH strategies: (i) supporting countries to achieve universal access, (ii) providing technical resources to meet the goals of SDG 6, (iii) securing additional financing and/or sustainable financing and (iv) strengthening WASH systems. Some examples are presented below.

- The **UNICEF** WASH Strategy 2016–2030 highlights its vision for WASH, which is the realization of the human rights to water and sanitation for all.
- A **DFID** priority is to support and provide leadership in achieving SDG 6.
- **EBRD** objectives include leveraging EU funds or other grant resources to help finance municipal and environmental infrastructure, and supporting private sector participation in the provision of municipal services.
- The primary organizational goal of **Water.org** is to expand financing for water and sanitation available at the household level.
- **IRC** and **WaterAid** place an emphasis on systems strengthening.

ESAs aligning with the SDGs

All ESAs responding to the GLAAS 2018/2019 ESA survey expressed a firm commitment to the water and sanitation sector, with many (23 of 29) specifically highlighting objectives to align with the 2030 Agenda. Some examples are presented below.

- In 2018, **Sida** developed a new strategy, Global Results in Sustainable Development 2018–2022. With the new strategy, WASH is now seen as an integral building block of health as well as education. This will allow for stronger dialogue with different partners on the need for integrated approaches to reach the SDGs.
- With the 2030 Agenda being the frame of reference for Switzerland's international cooperation, **SDC** and **SECO** are committed to ensuring the availability and sustainable management of water and sanitation for all, aligned with SDG 6 and its water-related targets, in a climate of peace and stability.
- Over the past two years, **World Vision** has updated its WASH indicators to align with the SDGs and is now beginning to track its programming in relation to these more rigorous standards.

Source: GLAAS 2018/2019 ESA survey.

Priority areas for ESAs

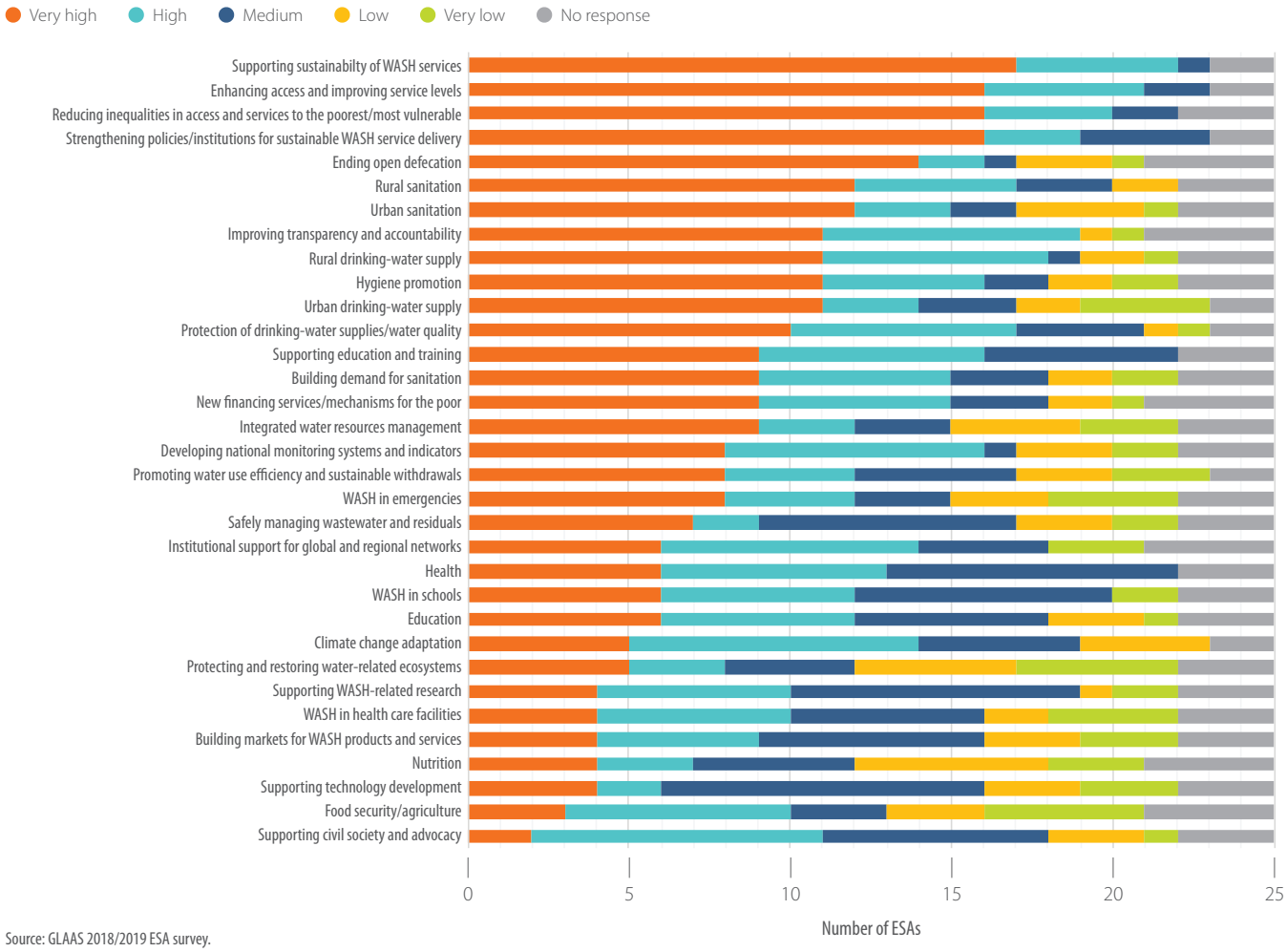
In the GLAAS 2018/2019 ESA survey, ESAs were asked to rank priority areas for water and sanitation from "very low" to "very high" on a five-point scale. Results show there is a wide range of ESA priorities. However, five areas emerged as very high priorities for the majority of ESAs: (i) supporting sustainability of WASH services, (ii) enhancing access and improving service levels, (iii) reducing inequalities in access and services to the poorest and most vulnerable, (iv) strengthening policy/institutions for sustainable WASH service delivery and (v) ending open defecation (Fig. 6.3).

Table 6.3 summarizes targets from 16 ESAs that aim to reach (in aggregate) over 100 million people per year with new or improved access to drinking-water and sanitation by 2021. Many ESA targets have been in place since 2015/2016 with target periods lasting until 2020 or up to 2030. Five ESAs reported newer global WASH aid targets starting in 2018 (One Drop Foundation, UNICEF, USAID, Water.org and the World Bank). Some organizations indicated that they do not use globally aggregated WASH targets (European Commission and WaterAid). These organizations indicated that they use country or other specific targets based on context, with WaterAid additionally indicating the use of a basket of measures to assess the impacts of its work.

As shown in Table 6.3, some ESAs have separate targets for drinking-water and sanitation (USAID and World Bank), while other ESAs specified a breakdown among targeting new populations with access to WASH, targeting populations with new services and/or targeting populations with improved service quality (AFD and One Drop Foundation). Alignment with the SDGs can be seen in targets for ending open defecation (UNICEF and WSSCC).

Supporting the sustainability of WASH services is ranked as the highest priority among 25 ESAs.

Figure 6.3 Main water and sanitation priority areas for ESAs (*n*=25)



Source: GLAAS 2018/2019 ESA survey.

Sixteen ESAs reported specific targets for delivering new or improved drinking-water and sanitation services.

Table 6.3 Summary of ESA targets for new or improved access to drinking-water and sanitation

Organization	Target	Description of target measure	Timeframe
AFD	8 million per year	Every year, on average: provide 1.5 million people with sustainable access to drinking-water, 1 million people with sustainable access to sanitation, improve the quality of drinking-water supply systems for 4 million people and improve the quality of sanitation systems for 1.5 million people	2014–2018
AfDB	85 million	People to be reached with new and improved access to water and sanitation	2016–2025
BMZ	10 million per year	Population with access to drinking-water and sanitation per year	Until 2030
BRAC		Activity (construction and rehabilitation) targets for 73 sub-districts and 38 towns	Until 2020
DFID	60 million	People gaining access to water and sanitation	2016–2020
European Commission		Country-specific targets are defined individually	
Ministry for Foreign Affairs of Finland	8.4 million	Access for 2.5 million to drinking-water, 5.9 million to sanitation and 0.7 million to WASH in schools	2015–2018
IDB	2.25 million households	950 000 households with new or upgraded access to drinking-water and 1 300 000 households with new or upgraded access to sanitation	2016–2019
JICA	10 million	Improvement of access to safe water and sanitary conditions for 10 million people and human resources development for water supply for 1 750 people in Africa	2013–2017
One Drop Foundation	1.6 million	Provide access to 1.4 million to safely managed water and sanitation services by 2021; enhance access and improve service levels to 200 000 in Latin America	By 2021
UNDP		Human resources and institutional capacity development (600 people and 250 institutions)	2016–2017
UNICEF	60 million	Additional people with access to basic sanitation services, and additional people with access to safe drinking-water services; also, 250 million fewer people practicing open defecation and an additional 30 million people living in ODF communities	2018–2021
USAID	23 million	8 million people benefiting from new or improved sustainable sanitation services, and 15 million people gaining new or improved access to sustainable drinking-water services	By 2022
Water.org	60 million	Reach 60 million people with access to safe water and sanitation within a five year span of 2018–2022	2018–2022
World Bank	150 million	Provide access to improved water sources to 70 million and provide access to improved sanitation to 80 million in the fiscal year 2018–2022 period	2018–2022
WSSCC	16 million	16 million people with access to an improved sanitation facility; also, 16 million people living in ODF environments and 16 million people with access to handwashing facilities on premises	2016–2020

Source: GLAAS 2018/2019 ESA survey.

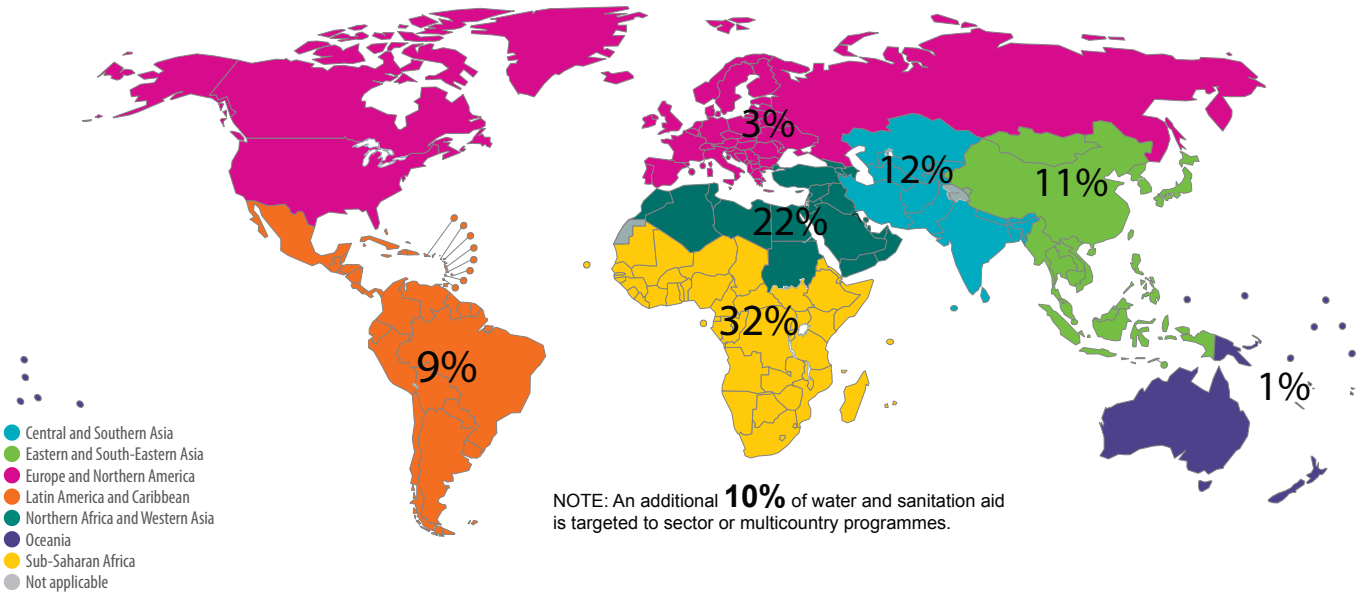
6.3 How have aid commitments and disbursements changed to help achieve the aims of universal access and higher levels of service?

Geographical distribution of aid

In 2017, Sub-Saharan Africa received the largest share (32%) of aid commitments for water and sanitation of any SDG region (nearly US$ 3 billion) (Fig. 6.4). This is a trend reversal: between 2012 and 2015 aid commitments to Sub-Saharan Africa declined from 38% to 20% of overall water and sanitation aid. While Latin American and the Caribbean received only 9% of the aid commitments, the region received a large percentage of non-concessional loans.

Aid commitments for water and sanitation to Sub-Saharan Africa increased from US$ 1.7 billion to US$ 3 billion from 2015 to 2017.

Figure 6.4 Percentage of global water and sanitation aid commitments directed to each SDG region, 2017



Note: SDG regional groupings were used for regional analyses to ensure consistency with SDG reporting. SDG regions are based on the Standard Country or Area Codes for Statistical Use (known as M49) and are primarily based on geographical location. More information at: https://unstats.un.org/sdgs/indicators/regional-groups/.
Map production: Water, sanitation, hygiene and health unit, World Health Organization.
Source: OECD-CRS, 2019.

Table 6.4 highlights the top 10 countries in each SDG region that received the most aid commitments per region in 2017. In Sub-Saharan Africa, nine of the 10 countries each received over US$ 100 million, while the Northern Africa and Western Asia region varied from Jordan receiving US$ 634 million to the Syrian Arab Republic receiving US$ 31 million.

Table 6.4 Top 10 water and sanitation aid commitment recipient countries and territories in 2017 by SDG region (US$ millions)

Central and Southern Asia	Eastern and South-Eastern Asia	Europe and Northern America	Latin America and the Caribbean	Northern Africa and Western Asia	Oceania	Sub-Saharan Africa
Sri Lanka (345) India (213) Uzbekistan (192) Bangladesh (117) Nepal (105) Afghanistan (31) Maldives (22) Pakistan (14) Tajikistan (14) Kyrgyzstan (7)	Viet Nam (390) Myanmar (235) Philippines (150) China (60) Cambodia (58) Indonesia (33) Lao People's Democratic Republic (33) Mongolia (15) Democratic People's Republic of Korea (3) Timor-Leste (2)	Serbia (65) Bosnia and Herzegovina (51) Albania (48) Montenegro (40) North Macedonia (28) Republic of Moldova (20) Ukraine (10) Belarus (1)	Bolivia (Plurinational State of) (309) Nicaragua (120) Haiti (102) Ecuador (74) Mexico (55) Colombia (41) Peru (32) Brazil (22) Honduras (19) El Salvador (13)	Jordan (635) Tunisia (630) Egypt (184) Lebanon (133) Armenia (91) West Bank and Gaza Strip (87) Turkey (82) Yemen (70) Georgia (51) Syrian Arab Republic (31)	Papua New Guinea (74) Marshall Islands (14) Micronesia (Federated States of) (5) Vanuatu (4) Fiji (3) Solomon Islands (3) Cook Islands (2) Kiribati (2) Samoa (2) Tonga (2)	Ethiopia (556) Kenya (373) United Republic of Tanzania (316) Nigeria (174) Angola (160) Malawi (119) Mali (117) Ghana (105) Djibouti (103) Mozambique (98)
All other (9)	All other (3)	All other (0)	All other (33)	All other (53)	All other (1)	All other (868)
Total 1 070	**Total 982**	**Total 263**	**Total 824**	**Total 2 046**	**Total 111**	**Total 2 989**

Source: OECD-CRS, 2019.

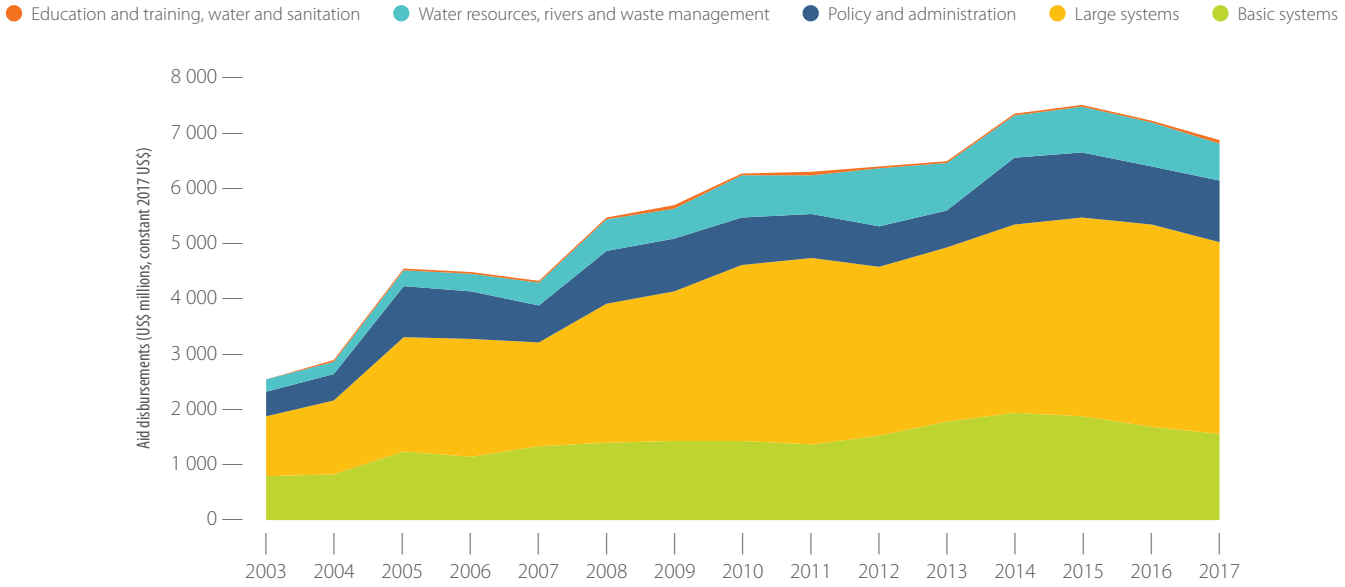
Basic versus large systems

Water and sanitation aid reported to the OECD is disaggregated among several different purpose codes, including aid for basic and large drinking-water and sanitation systems. Large systems are defined as large urban distribution networks and/or treatment facilities. Basic drinking-water systems include rural water supply schemes using hand pumps, spring catchments, gravity-fed systems, rainwater collection, storage tanks, small distribution systems typically with shared connections/points of use and urban schemes using hand pumps and local neighbourhood networks including those with shared connections. Basic sanitation systems are defined as latrines, on-site disposal and alternative sanitation systems, including the promotion of household and community investments in the construction of these facilities.

Aid to basic systems comprised US$ 1.5 billion out of US$ 6.9 billion (22%) in water and sanitation aid disbursements for 2017. Aid disbursement to basic systems declined from US$ 1.9 billion in 2015 to US$ 1.5 billion in 2017 (Fig. 6.5).

Aid disbursements for basic water and sanitation services have ranged from 22% to 27% of total water and sanitation aid since 2010, and were 22% of total water and sanitation aid in 2017.

Figure 6.5 Breakdown of water and sanitation aid disbursements by purpose type, 2003–2017



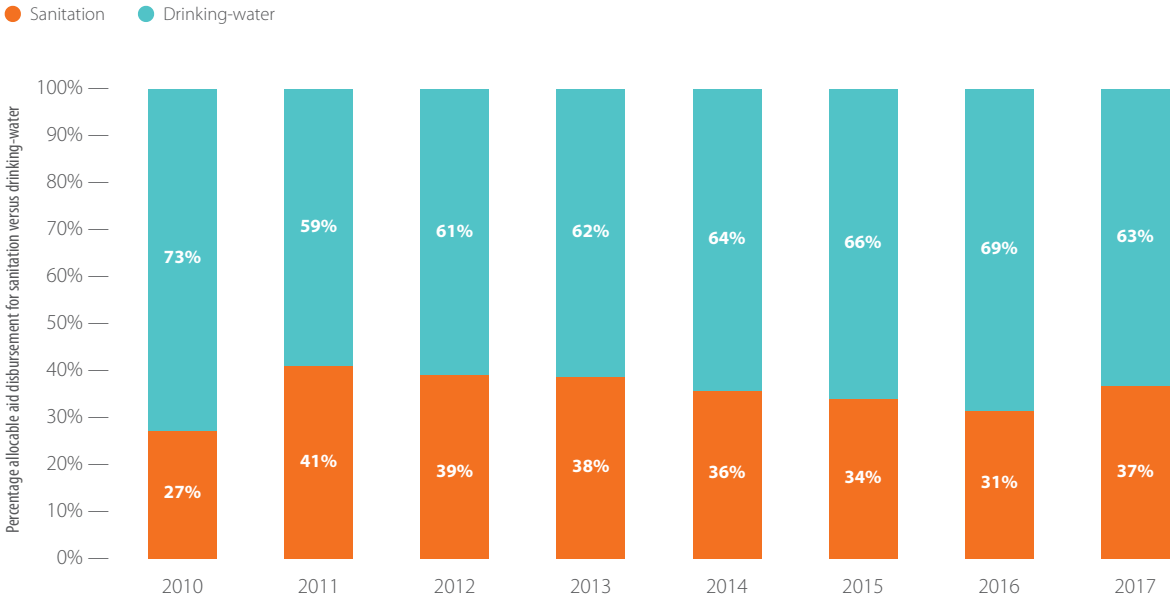
Notes: Includes ODA and private grant disbursements listed under the water supply and sanitation sector in the OECD-CRS aid activity database (all codes in the 140xx series). Aid disbursements categorized under OECD-CRS code 12261, health education, are not shown as these relate to activities broader than water and sanitation, but include some WASH-related projects, including approximately US$ 20 million in 2017, or about 20% of the projects listed under this broader health code.
Source: OECD-CRS, 2019.

Sanitation versus drinking-water

Historically, significantly less aid has been allocated to sanitation than to drinking-water. The most recent OECD data indicate that sanitation received 37% of aid disbursements that could be allocated to sanitation or drinking-water projects in 2017. Since 2010, the percentage of allocable aid to sanitation has ranged from 27% to 41% (Fig. 6.6).

The proportion of allocable aid disbursements for sanitation increased from 34% to 37% from 2015 to 2017.

Figure 6.6 Percentage of allocable aid disbursements for sanitation and drinking-water



Source: OECD-CRS, 2019.

While the majority of sector investment continues to be allocated to water, several ESAs highlighted examples of sanitation projects.

- The **BMGF** WASH programme focuses on developing innovative approaches and technologies that can lead to radical and sustainable improvements in sanitation in the developing world, with a vision to achieve universal use of sustainable sanitation services.

- For **JICA**, construction of sewerage facilities, capacity-building for regulations on urban sanitation, water pollution control and capacity development including human resources are highlighted, with disbursements for urban sanitation reported at 37% of its ODA loans from 2008 to 2017.

- **WHO** led the process to develop the WHO Guidelines on Sanitation and Health, the first global guidelines to address sanitation *(1)*.

- **WSSCC** currently supports 13 countries through its Global Sanitation Fund to carry out collective behaviour change programming for sanitation and hygiene through a variety of delivery mechanisms and models. The aim is to build national and local systems and capacity and increase commitments and resources to ensure long-term sustainability of behavioural gains.

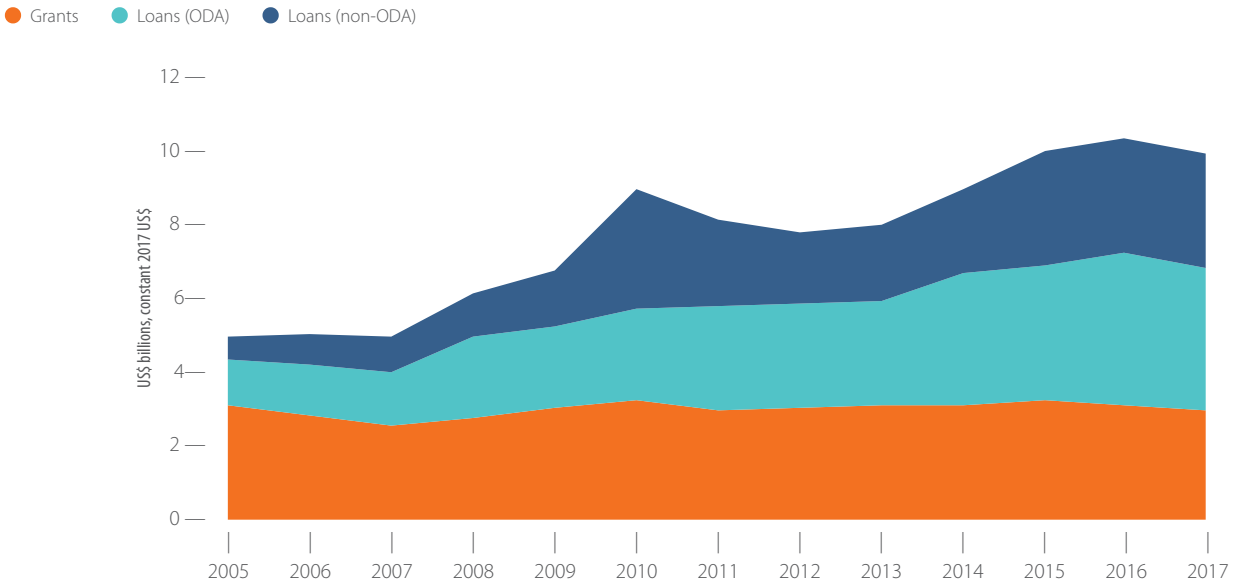
Repayable finance

External development assistance for drinking-water and sanitation includes repayable finance, which includes concessional loans classified as ODA[4] and non-concessional loans from bilateral donors and multilateral development banks. Repayable finance allows governments and utility borrowers to distribute payments for capital infrastructure investment over time and finance repayment through future taxes, fees and tariff revenue. Data from OECD indicate that after several years of growth, ODA loan disbursements and non-concessional loan disbursements to water and sanitation have declined slightly (4%), from US$ 7.2 billion to US$ 6.9 billion from 2016 to 2017 (Fig. 6.7).

[4] For a loan to qualify as ODA, it must, among other things, be concessional in character and convey a grant element of at least 25%. The grant element test is a mathematical calculation based on the terms of repayment of a loan (such as grace period, maturity and interest) and a discount rate of 10%.

Lending in the water and sanitation sector grew between 2005 and 2015, but levelled off between 2015 and 2017.

Figure 6.7 Grants (ODA and private), ODA loans and non-concessional lending (disbursements), 2005–2017



Source: OECD-CRS, 2019.

6.4 Is development assistance being used to strengthen country systems?

Strengthening country systems, or "systems approaches", came through as a major theme in several ESA water/WASH strategies and was rated as one of the highest priority activities in WASH among all ESAs with a "high" or "very high" priority rating from 19 out of 25 ESAs. Several ESAs cited ongoing work in strengthening systems.

- **BMZ** and **DFID** have WASH programmes that use a variety of delivery mechanisms, all of which include activities aimed at building national and local systems.
- **IRC** developed building blocks and a roadmap for WASH systems strengthening and has made available an online training platform to promote this work and support other organizations to analyse and track systems strengthening.
- **WaterAid** began work on its sustainable water, sanitation and hygiene programme (SusWASH) in 2017/2018 in Cambodia, Ethiopia, Pakistan and Uganda. SusWASH is a sector strengthening programme whereby stakeholders work to improve WASH governance, coordination, planning, monitoring, financing, accountability, service delivery, private sector engagement and water resource management at the district level.

One of the challenges for ESAs with a systems strengthening approach is that while information on activities that are supporting sector systems is available, tracking progress and reporting achievements is difficult. For example, CARE International noted that measuring progress and capturing achievements for systems strengthening and government activities is challenging as these activities often produce fewer tangible results than infrastructure and are vulnerable to environmental and contextual factors such as elections or shifts in political priorities.

The GLAAS 2018/2019 ESA survey posed questions concerning the percentage of aid allocated to systems strengthening and to strengthening monitoring and evaluation systems to track, in quantitative terms, whether development assistance is being used to strengthen country systems. ESAs were also requested to provide the percentage of ODA that is channelled through government procurement and public finance management systems. Table 6.5 summarizes these data for seven ESAs at the global level.

Seven ESAs estimated a percentage of aid allocated to strengthening WASH systems between 11% and 33%.

Table 6.5 Percentage of aid allocated to strengthening and using country systems at the global level

Organization	Strengthening country systems		Use of country systems	
	Percentage of aid allocated to strengthening WASH systems	Percentage of aid allocated to strengthening monitoring and evaluation systems	Percentage of ODA spending using government procurement systems	Percentage of ODA disbursed through public finance management systems
AFD	29%	—	—	—
AfDB	15%	6%	—	—
BMGF	20%	—	—	—
BMZ	15%	5%	50%	0%
JICA	12%	—	77%	77%
SDC and SECO	33%	15%	100%	100%
UNDP	11%	—	—	—

Source: GLAAS 2018/2019 ESA survey.

USAID Effective Water, Sanitation and Hygiene (E-WASH) programme

At the core of **USAID's** contributions to global goals is strengthening water sector governance and institutions and mobilizing innovative financing to help partner countries provide their citizens with equitable and sustainable access to safe water and sanitation. For example, in Nigeria, USAID recently launched a new partnership with six states to reform and professionalize the water sector and reach more than 3 million people with safe and reliable drinking-water. The states were competitively selected based on commitment to reform existing infrastructure and potential for positive impact. Launched in 2018, the USAID E-WASH programme will aid Abia, Delta, Imo, Niger, Sokoto and Taraba states to demonstrate that better performing water boards will raise the quality of services for their customers, facilitate economic sustainability and increase the chance of more fully serving all customers in their areas, including the most marginalized.

Source: GLAAS 2018/2019 ESA survey.

6.5 How are ESAs working to better utilize and/or increase financing for WASH?

Globally, external aid in the form of grants and repayable financing comprises less than 15% of total WASH funding sources, while currently available financing is only one third of what is needed for countries to meet national targets (see Chapter 3). Recognizing that the financial resources needed to achieve the SDGs far exceed current financial flows, donors increasingly seek to leverage WASH aid to catalyse additional funds for WASH from different levels of government, commercial finance, the private sector and other donors. Twenty-two ESAs participating in the GLAAS 2018/2019 survey (out of 29) provided examples of initiatives that highlight how their organization has been able to leverage their aid funds (or technical assistance) and encourage increased financing to the WASH sector. Some examples are presented below.

- **Cofinancing with other partners:** Several ESAs cited examples of projects where multi-donor support was crucial for project initiation and implementation. **AfDB** cited two examples: in Sierra Leone, US$ 14 million to support the Freetown WASH and Aquatic Environment Revamping project leveraged US$ 135 million from additional donors and funds, and in Morocco where the approval of US$ 96.5 million for a water access sustainability and security project leveraged an additional US$ 158 million. **BMZ** cited the Lusaka Sanitation Programme for urban development in Zambia where grant contributions leveraged funding in the form of concessional loans from other development banks, including AfDB, the European Investment Bank and the World Bank.

- **Catalysing aid through ongoing partnerships and trust funds:** Partnerships and pooled funding mechanisms attract diverse funding sources to attain specific aims. For example, **AECID** is committed to the field of water and sanitation mainly through the Cooperation Fund for Water and Sanitation in Latin America and the Caribbean. With over 790 million euros (US$ 874 million) in contributions, the fund is present in 19 countries through a portfolio of 67 cooperation programmes in Latin America. **IDB** noted that the AquaFund, which attracts funding for the preparation of studies, technical designs, sector diagnosis and master plans, has leveraged US$ 80 in water and sanitation investment for every US$ 1 spent through the fund, and has established a portfolio of operations of US$ 5.8 billion.

- **Matching funding from governments or private sector:** In Nepal, the **WSSCC** Global Sanitation Fund's matching fund mechanism leveraged US$ 2 million from local government to scale up the national sanitation campaign. Another example is **CARE International**, which has many programmes that require or attract matching funding from the private sector or other donors, which increases total investment. CARE International's programme in Madagascar seeks 10% investment towards capital costs of infrastructure from private sector enterprises winning contracts for small town utility management.

- **Support and advocacy to encourage governments to commit more funds to WASH and to attract additional resources:** Supporting governments in developing policies and implementation can catalyse budgetary commitments for WASH. BMGF reports that support for FSM policies in Bangladesh has recently helped to catalyse government commitments of US$ 3.2 billion towards urban sanitation over the next five years, with at least 20% dedicated to FSM solutions. **WaterAid's** advocacy work in Pakistan contributed to the government pledging an extra Pakistani rupee 400 billion (US$ 3.5 billion) towards improving water and sanitation infrastructure in the Sindh province. The **World Bank, Water.org** and **IRC** have identified 10 foundational issues that need to be addressed to mobilize additional WASH finance as well as the solutions from several countries to overcome these foundational issues.

- **Public–private partnerships:** The Sustainable Water Funds projects supported by **DGIS** have been able to raise 60 million euros (US$ 66 million) in private finance, demonstrating the success of public–private partnerships for WASH.

- **Using blending instruments to reduce commercial or private sector risk of WASH investments:** Only a few ESAs mentioned efforts to attract more private financing to the sector. The **European Commission** cites success with blending instruments by using its grants to attract additional financing by reducing exposure to risk. On a case-by-case basis, the European Union grant contributions can take different forms to support investment projects, including: (i) investment grant and interest rate subsidies – reducing the initial investment and overall project cost for the partner country; (ii) technical assistance – ensuring the quality, efficiency and sustainability of the project; (iii) risk capital (equity and quasi-equity) attracting additional financing; and (iv) guarantees – unlocking financing for development (especially from private sector) by reducing risk. In 2017 in Morocco, **AFD** granted a 10 million euro (US$ 11 million) loan to the Moroccan Bank of Foreign Trade to finance a credit line dedicated to the water and sanitation sector in Morocco. The project is meant to facilitate the emergence of public and private projects that will contribute to the protection of water resources in Morocco.

Reference

1. WHO Guidelines on Sanitation and Health. Geneva: World Health Organization; 2018 (http://apps.who.int/iris/bitstream/handle/10665/274939/9789241514705-eng.pdf?ua=1, accessed 25 May 2019).

ANNEXES

Annex 1. GLAAS glossary

Affordability: The ability of a household, community or society to sustainably cover the costs of WASH services and behaviours without diminishing the capacity to cover other essential needs, especially the poorest or most disadvantaged or vulnerable members of society.

Basic drinking-water systems: Basic drinking-water systems include water supply through low-cost technologies such as hand pumps, spring catchment, gravity-fed systems, rainwater collection, storage tanks and small distribution systems.

Basic sanitation systems: Basic sanitation systems provide sanitation through low-cost technologies such as latrines, small-bore sewers and on-site disposal (for example septic tanks).

Blended financing instruments: The strategic use of development finance and philanthropic funds to mobilize private capital flows to emerging and frontier markets. This means the use of public and philanthropic sources of funding to remove obstacles and incentivize private sources of funding.

Capital expenditure: Capital expenditure includes fixed assets such as buildings, treatment structures, pumps, pipes and latrines, as well as the cost of installation/construction.

Civil society: The aggregate of NGOs and institutions that manifest the interests and will of citizens.

Commitment: A firm obligation expressed in writing and backed by the necessary funds, undertaken by an official donor to provide specified assistance to a recipient country.

Concessional loans: Concessional loans are extended on terms substantially more generous than market loans. The concessions are achieved either through interest rates below those available on the market or by grace periods, or a combination of these. Concessional loans typically have long grace periods.

Costed plan: A plan for which the costs of implementation have been estimated. There are different approaches for estimating the costs of a plan.

Development partners: Donors, international organizations, NGOs and other organizations that contribute to a country's development.

Disbursement: A disbursement is the release of funds to, or the purchase of goods or services for, a recipient; by extension, the amount thus spent. A disbursement comprises the transactions of providing financial resources, which the two counterparts record simultaneously. It can take several years to disburse a commitment.

Drinking-water: Drinking-water services refers to the accessibility, availability and quality of the main source used by households for drinking, cooking, personal hygiene and other domestic uses.

External support agencies (ESAs): Bilateral donors, multilateral organizations, foundations, financing institutions and external agencies that support countries' work in the attainment of achieving sanitation and water for all.

Faecal sludge: Stored excreta emptied from latrines.

Financing plan: A plan that establishes or identifies financial needs, budget allocations, sources of funds and activities necessary to achieve plan goals. It can define and prioritize capital needs, match expected resources with costs of infrastructure and O&M and improve intragovernmental coordination, transparency of budgeting and reliability of expenditure forecasts.

Gross domestic product (GDP): GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources.

Health care facilities: Hospitals, primary health care centres, isolation camps, burn patient units, feeding centres and other locations where health care is provided.

Household contributions: Household contributions include household tariffs and fees paid to service providers, as well as household investment in self-supply solutions (e.g. private or community wells, water tanks), and household level sanitation.

Hygiene: Hygiene refers to the conditions and practices that help maintain health and prevent spread of disease including handwashing, menstrual hygiene management and food hygiene.[1]

Hygiene promotion: Hygiene promotion can include programmes and activities designed to educate and advocate the use of safe hygiene practices that minimize the spread of diarrhoeal diseases, acute respiratory infections and other related diseases. Such activities may include working with communities to identify risks, handwashing with soap campaigns, safe disposal of human excreta, including that of children and infants, food hygiene, etc.

Improved drinking-water (sources): Improved drinking water sources are those that have the potential to deliver safe water by nature of their design and construction, and include piped water, boreholes or tube wells, protected dug wells, protected springs, rainwater and packaged or delivered water.[1]

Improved sanitation (facilities): Improved sanitation facilities are those designed to hygienically separate excreta from human contact and include flush/pour flush to piped sewer system, septic tanks or pit latrines, ventilated improved pit latrines, composting toilets or pit latrines with slabs.[1]

Joint sector review (JSR): A JSR is a government-led periodic process that brings different stakeholders in a particular sector together to: engage in dialogue; review status, progress and performance; and take decisions on priority actions. Note that alternative names for JSRs include: annual water sector conference, joint water sector review, multistakeholder forum, joint annual review, WASH conference, joint sector assessment.

Large drinking-water and sanitation systems: Large systems include potable water treatment plants, intake works, storage, water supply pumping stations, large-scale transmission/conveyance and distribution systems.

Local administrative units: Local administrative units are institutional units whose fiscal, legislative and executive authority extends over the smallest geographical areas distinguished for administrative and political purposes.[2]

Lower-, lower-middle-, upper-middle- and high-income countries: The World Bank classifies countries in one of four income categories: low, middle (lower and upper) and high. Low income countries are defined as countries with a per capita gross national income (GNI) of US$ 995 or less in 2017; lower-middle income economies are those with a per capita GNI more than US$ 995 but less than or equal to US$ 3 895. Upper-middle income economies are those with a per capita GNI more than US$ 3 895 but less than or equal to US$ 12 055. High income economies are those with a per capita GNI more than US$ 12 055 in 2017.

Millennium Development Goals (MDGs): Eight goals that all 189 UN Member States agreed to try to achieve by 2015. These goals aimed to combat poverty, hunger, disease, illiteracy, environmental degradation and discrimination against women.

Nongovernmental organization (NGO): A non-profit organization that operates independently of any government, and whose purpose is to address a social or political issue and/or provide services to people.

Non-revenue water (NRW): NRW represents water that has been produced and is "lost" before it reaches the customer (either through leaks, theft or through authorized usage for which no payment is made). It should not be used interchangeably with unaccounted for water, which is a component of NRW. NRW includes authorized unbilled consumption (such as water used for firefighting), whereas unaccounted for water excludes authorized unbilled consumption (see unaccounted for water).

[1] WHO/UNICEF JMP definitions. Available at: https://washdata.org/.

[2] OECD glossary. Available at: https://stats.oecd.org/glossary/detail.asp?ID=1550.

Official development assistance (ODA): Flows of official financing administered with the promotion of the economic development and welfare of developing countries as the main objective, and which are concessional in character with a grant element of at least 25% (using a fixed 10% rate of discount).[3] By convention, ODA flows comprise contributions of donor government agencies, at all levels, to developing countries ("bilateral ODA") and to multilateral institutions. ODA receipts comprise disbursements by bilateral donors and multilateral institutions. Lending by export credit agencies – with the pure purpose of export promotion – is excluded.

Operations and maintenance (O&M): O&M includes activities necessary to keep services running. Operating costs are recurrent (regular, ongoing) spending to provide WASH goods and services such as labour, fuel, chemicals, materials and purchases of any bulk water. Basic maintenance costs are the routine expenditures needed to keep systems running at design performance but do not include major repairs or renewals.

Plan: A plan sets out targets to achieve and provide details on implementation, based on policies where these exist. It indicates how the responsible entity will respond to organizational requirements, type of training and development that will be provided, and how the budget will be allocated, etc.

Policy: A policy is a key guiding instrument for present and future decisions. Policies are the principle guides to action taken by the government to achieve national, sector and/or industry-wide goals.

Publicly available: Publicly available means information that has been published or broadcast for public consumption, that is easily accessible and may be obtained through government offices or is available online.

Public–private partnership: A long-term contract between a private party and a government entity, for providing a public asset or service, in which the private party bears significant risk and management responsibility, and remuneration is linked to performance.

Regulations (or regulatory instruments): Rules created by an administrative agency or body that typically include tangible measures necessary to implement and/or enforce the general requirements prescribed in the broader legislation. Regulations may cover water quality standards, service-level standards, required monitoring frequencies, requirements for risk management, surveillance requirements and/or audit guidance, etc.

Repayable financing: Concessional or private/commercial finance that must be repaid.

Safely managed drinking-water: Drinking-water is considered safely managed when people use an improved source of drinking-water that is accessible on premises, available when needed and free from contamination. See the definition for improved drinking-water for further information.[4]

Safely managed sanitation: Sanitation is considered safely managed when people use improved sanitation facilities that are not shared with other households, and the excreta produced should either be treated and disposed of in situ, stored temporarily and then emptied and transported to treatment off site, or transported through a sewer with wastewater and then treated off site.[4]

Sanitation: Sanitation services refer to the management of human excreta from the facilities used by individuals, ideally following the sanitation service chain (see sanitation service chain). For the purposes of this report, sanitation does not include wider environmental sanitation such as solid waste management.

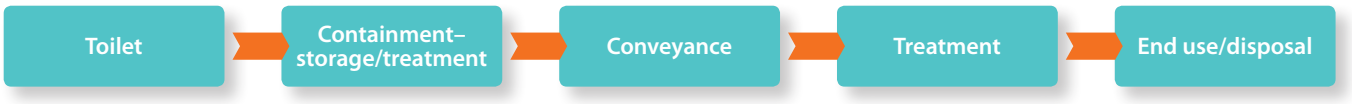
Sanitation system: A context-specific series of sanitation technologies (and services) for the management of faecal sludge and/or wastewater through the stages of containment, emptying, transport, treatment and end use/disposal (see sanitation service chain).

[3] OECD glossary. Available: http://www.oecd.org/dac/stats/officialdevelopmentassistancedefinitionandcoverage.htm#Definition; http://www.oecd.org/dac/stats/What-is-ODA.pdf.

[4] WHO/UNICEF JMP definitions. Available at: https://washdata.org/.

Sanitation service chain: The sanitation service chain covers all steps from safe toilets and containment (in some system with treatment in situ) through the conveyance (in sewers or by emptying and transport), treatment and end use or disposal as depicted in Figure A1.1.

Figure A1.1 Sanitation service chain



Source: *(1)*.

Self-supply (by households/users): For water supply, this includes private protected wells, collection from protected springs or rainwater harvesting. For sanitation, this includes latrines that are built and emptied by households.

Standard: The term "standard" is commonly used to describe a mandatory numerical value in a table of parameters and limits (such as 10 µg/L of arsenic). However, it is also used to describe technical standards and policy documents designed to help achieve improved water quality.

Surveillance: The continuous and vigilant public health assessment and periodic review of the safety and acceptability of drinking-water supplies and/or wastewater effluent for its intended disposal or next use.

Sustainable Development Goals (SDGs): A collection of 17 goals with 169 targets agreed as part of the 2030 Agenda for Sustainable Development that build upon the MDGs. These cover areas such as poverty reduction, access to education, gender equality, and water and sanitation for all.

Tariffs: Payments made by users to service providers for getting access to and using their services.

Tax: Revenues from domestic taxes levied by local and central governments and provided as grants or subsidies.

Transfer: Support from external sources such as international donors, foundations, NGOs or remittances.

Unaccounted for water: Unaccounted for water is the difference between "net production" (volume of water delivered into a network) and "consumption" (volume of water that can be accounted for by legitimate consumption, whether metered or not). Unaccounted for water excludes authorized unbilled consumption (such as water used for firefighting). It is a component of NRW (see definition of NRW).

WASH system: A system that affects WASH service delivery which includes various components such as governance (legislation, policies, plans and regulatory frameworks), institutional arrangements, financing and financial systems, monitoring systems for informed assessments and reviews, human resources and capacity-building, and the infrastructure and its functionality.

Wastewater: Wastewater refers to the waste conveyed in a sewer, as opposed to faecal sludge, which is not conveyed in a sewer. Municipal wastewater refers to domestic, commercial and industrial effluents, and storm-water runoff, generated within urban areas.

Reference

1. WHO Guidelines on Sanitation and Health. Geneva: World Health Organization; 2018 (http://apps.who.int/iris/bitstream/handle/10665/274939/9789241514705-eng.pdf?ua=1, accessed 25 May 2019).

Annex 2. Methodology and validation

Introduction

GLAAS findings in this report summarize data collected from 115 countries and territories and 29 ESA surveys. The GLAAS survey data are complemented by data from TrackFin studies in Argentina, Burkina Faso, Ghana, Kenya, Madagascar, Mali and Senegal, as well as data from OECD-CRS on water and sanitation aid flows. Regional analyses in this report use SDG regions[1] to ensure consistency with SDG reporting. SDG regions are based on the Standard Country or Area Codes for Statistical Use (known as M49) and are primarily based on geographical location. In addition to the GLAAS 2019 report, the survey data are being used to create ESA and country highlights, working in close collaboration with participating countries and ESAs.

The GLAAS 2018/2019 country survey

Beginning in early 2018 and working in collaboration with global, regional and country partners and stakeholders including JMP/GLAAS Strategic Advisory Group (SAG) members, the GLAAS country survey was updated to integrate suggestions for improvement from past cycles as well as strengthen the questions on topics such as policies, plans, targets and drinking-water quality standards and surveillance. The GLAAS 2018/2019 country survey continues to be aligned with the SDGs, expanding survey questions to cover relevant areas such as safely managed water and sanitation systems, FSM and WASH in health care facilities and schools. The survey includes two questions to be used for SDG monitoring and reporting to the UNSD. The question on community participation used for monitoring of Target 6.b was substantially revised based on input received through expert consultation for the 6.b in-depth study, conducted in collaboration with Stockholm International Water Institute (SIWI) and the Water Institute at the University of North Carolina (UNC).

The GLAAS 2018/2019 survey was launched in July 2018.[2] National governments were invited to participate in the GLAAS 2018/2019 cycle by their respective WHO regional office or WHO country office. In line with the universality principle of the SDGs, the GLAAS country survey was open to all interested countries – high-income countries as well as low- and middle- income countries. Participation was also supported by regional and national WASH partners such as Aguaconsult, IRC, the SWA secretariat, UNICEF, WaterAid and WSSCC. Participation in the country survey was voluntary and involved data collection, supported in most cases by multistakeholder review workshops and data validation. Most completed GLAAS 2018/2019 country surveys were submitted between December 2018 and February 2019, with a few countries submitting in March/April 2019.

High-income country consultation and participation

While the GLAAS country survey was developed in 2008 with the aim of collecting data from low- and middle-income countries, the SDGs and the 2030 Agenda apply to all countries. Perspectives and information from high-income countries provide valuable and relevant input on national WASH systems and contribute to monitoring and reporting on the global SDGs, particularly SDG 6 and its targets on the means of implementation. To support the expansion of country surveys to high-income countries, GLAAS implemented a high-income country consultation to assess the relevance of existing questions and identify new questions to be added. Fourteen high-income countries participated in the consultation during the GLAAS 2018/2019 cycle by completing at least selected survey questions and providing feedback on questions and the process. This feedback will be used by WHO to determine how best to include high-income countries in future cycles. Information from high-income countries is also included in the GLAAS 2018/2019 dataset and this report.

Country feedback and data collection processes forms

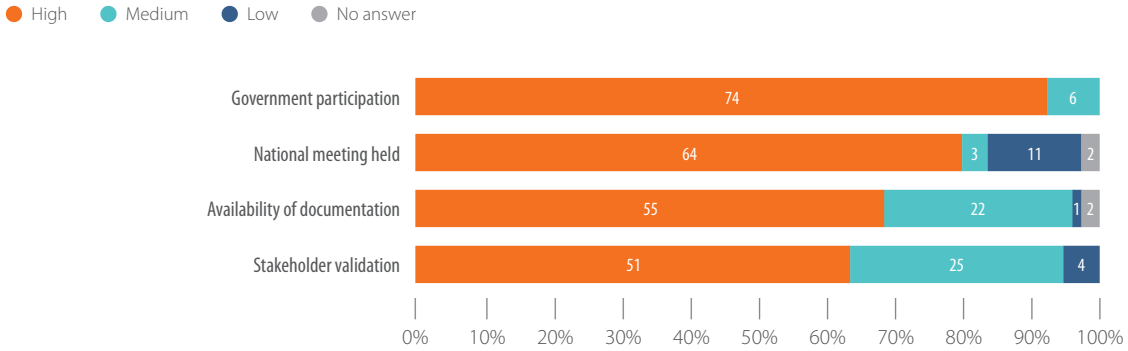
Countries were asked to provide feedback on the GLAAS survey, including rating the value of the survey in assessing the WASH enabling environment in country, as well as suggestions for improving the survey content and processes. A total of 83 out of 115 countries and territories submitted the country feedback form. The median time required to complete the GLAAS survey was six weeks, and a median of 10 institutions were involved in completing the survey. Qualitative information provided by countries will contribute to the further improvement of GLAAS in the next cycle.

[1] More information available at: https://unstats.un.org/sdgs/indicators/regional-groups/.

[2] GLAAS 2018/2019 survey documents available at: https://www.who.int/water_sanitation_health/monitoring/investments/glaas-2018-2019-country-survey-documents/en/.

To understand and promote wider stakeholder involvement in the GLAAS process, including in validation and approval of the submitted data, countries were requested to provide information on the processes used to collect and validate data for GLAAS. A total of 80 out of 115 countries and territories submitted the data collection processes form. Figure A2.1 shows the aggregated results for the 80 responding countries. Almost all countries (76 out of 80) indicated that a multistakeholder review was performed to validate the GLAAS survey response prior to submission. Two thirds of countries (67 out of 80) indicated that at least one national meeting was held as part of the GLAAS process.

Figure A2.1 Summary of responses to the GLAAS data collection processes form (*n*=80)



Source: GLAAS 2018/2019 data collection processes form.

Strengthening GLAAS country data quality

With each GLAAS cycle and increasing commitment and engagement by countries, the quality of country information is improving. For the GLAAS 2018/2019 cycle, country data collection has been supported by detailed survey guidance in seven languages (Arabic, Chinese, English, French, Portuguese, Russian and Spanish) and information modules in English and French. These materials were complemented by advocacy, training and technical support by WHO headquarters and WHO regional advisors prior to and during implementation, including two training workshops in Africa to accommodate francophone and anglophone countries. At the country level, wider stakeholder involvement and interest, along with greater availability of information for countries to use for decision-making and planning – especially for countries that have participated in past GLAAS cycles and/or TrackFin – has also contributed to improved country survey data. Validation of the GLAAS country survey response through a multistakeholder process within the country prior to submission has been a key component of ensuring data quality.

The review process for GLAAS has been strengthened for clarifying and confirming country data with the following multistep process:

1. Review and confirmation of survey information by national GLAAS focal points and stakeholders, followed by review by WHO country and/or regional offices against a checklist of common issues, with country participants providing any needed additional information or edits before official submission to WHO headquarters.

2. Review by WHO headquarters including analysis of responses and data, comparison with previous cycle data, review of source and supporting documents provided by countries and cross-checking of information with additional data sources such as OECD when applicable.

3. Requests for clarifications to national GLAAS focal point and teams, who provide explanations, corrections and additional information.

Almost all participating countries responded to requests and provided clarifications and additional information. Using a multistep process involving WHO regional offices and partners has greatly improved the quality of country survey data compared to previous cycles.

External key information validation

In addition to the data quality review, an external validation of GLAAS country survey data was conducted with experts on WASH from selected sample countries[3] during May and June 2019. WASH experts were considered eligible for participation if they had strong knowledge and experience of the WASH sector in the country and had not participated in the GLAAS 2018/2019 process.

The external validation questionnaire covered 47 data elements from nine questions from the GLAAS 2018/2019 country survey. The questions concerned national standards, risk management approaches, national policies for urban sanitation and rural drinking-water, participation procedures, JSRs, regulatory authorities, financial reporting and affordability. A total of 116 key informant questionnaires were sent to WASH experts for 43 countries. Forty-two responses from 35 countries were returned from all WHO regions, and responses were compared against country submissions.

There was a high level of agreement (77%) between country and external validation responses on national standards for drinking-water quality and wastewater treatment. There was a moderate to high level of agreement for questions on participation procedures (71%), JSRs (71%), and regulatory authorities (68%). Agreement between the country and external validation responses was low for questions on financial reporting and affordability (47%), national policies (43%), and risk management approaches (36%). The questions for which there was low agreement tended to be measured on three- or four-point scales, resulting in fewer responses that matched exactly.

The GLAAS 2018/2019 ESA survey

The ESA survey, which complements the data received from countries and other sources such as OECD, was updated by WHO headquarters based on inputs from bilateral organizations, international NGOs, partners and UN organizations including during a meeting of experts convened by WHO in October 2018. The meeting also provided an opportunity to discuss tracking of donor commitments to sanitation and their alignment with SDG 6. The ESA survey was launched in November 2018, with 29 ESAs representing development banks, multilateral organizations, bilateral donors, private foundations and NGOs submitting surveys by April 2019. These ESAs represent over 93% of bilateral development assistance[4] to water and sanitation, and almost 71% of multilateral development assistance to water and sanitation.

[3] A stratified random sample of 45 countries was selected, with stratification by WHO region.

[4] As measured by the proportion of 2017 ODA commitments.

Annex 3. Benefits of the GLAAS process and country use of GLAAS data

The GLAAS country survey covers information requiring inputs from a diverse group of stakeholders including the multiple government ministries and agencies responsible for WASH,[1] development partners, service providers, NGOs and civil society. A national GLAAS focal point coordinates these inputs through meetings and exchanges that often culminate with a final validation workshop among stakeholders to share and agree on survey information.

As part of feedback to WHO, countries have described multiple benefits of the GLAAS process, often highlighting the improved cooperation and coordination among the different institutions and public bodies linked to the WASH sector. Countries across all income groups indicated that the stakeholder meetings and processes needed to complete the GLAAS country survey facilitate discussion around WASH challenges and issues as well as exchange of information.

For example, Serbia noted that as a result of the GLAAS process, representatives of relevant institutions are much better acquainted with national policies, plans and objectives in the water sector, have gained new knowledge in this area and have learned that WASH issues need to be looked at in a comprehensive way. For the Islamic Republic of Iran, the GLAAS process identified information and planning gaps, facilitated dialogue among different sectors and highlighted the need for increased attention to vulnerable groups in national plans. For Georgia, the process provided an opportunity to obtain information on WASH finance. Mexico stated that the process strengthened communication mechanisms and relationships among relevant institutions that normally do not actively engage in WASH issues and discussions. Additional benefits of the GLAAS process shared by countries included:

- identification of strengths and weaknesses of the national WASH system and processes and critical gaps;
- highlighting of overarching system needs for better WASH results including the need for a national mechanism for WASH monitoring, and more regular interaction among the various groups and agencies responsible for WASH;
- establishment of an evidence base (and providing a tool) for ongoing follow-up and monitoring of the WASH sector;
- a real situation assessment of WASH systems and finance; and
- creation of a mechanism for measuring progress towards SDG targets and other national, regional and global WASH monitoring.

Country use of GLAAS data

Countries that complete the GLAAS survey have compiled comprehensive data on WASH policies, plans, institutional arrangements, financing, human resources and monitoring. WHO also generates highlights for each participating country based on survey data. Below are some examples of how countries use GLAAS data.

- **Cuba** uses GLAAS as a tool to support monitoring of the SDGs and to produce consolidated data on WASH for the central state administration bodies linked to drinking-water, sanitation and hygiene services.
- **El Salvador** is increasing attention on interinstitutional coordination of WASH, high-level engagement and planning as a direct result of the GLAAS process.
- **Fiji's** GLAAS 2018/2019 data on community and user participation highlighted a policy gap in public participation. Fiji is now reviewing current policies to address these gaps.
- **Mongolia** is using the compiled GLAAS database – along with past cycle data – for regular WASH progress monitoring every two years.
- **Montenegro** is using GLAAS data to address WASH-related issues through ratification and implementation of the Protocol on Water and Health. The GLAAS data revealed gaps and improvement needs in the areas of rural WASH as well as WASH in schools and health care facilities.
- **The Syrian Arab Republic** will use GLAAS results to improve WASH services based on a better understanding through the GLAAS process of international standards of WASH governance, monitoring and human resources.
- **Togo** is using GLAAS data to prepare for high-level meetings, to improve alignment with the SDGs across different ministries and institutions, and to reinforce decision-making including financial decisions.

Sources: GLAAS 2018/2019 country survey and country feedback form.

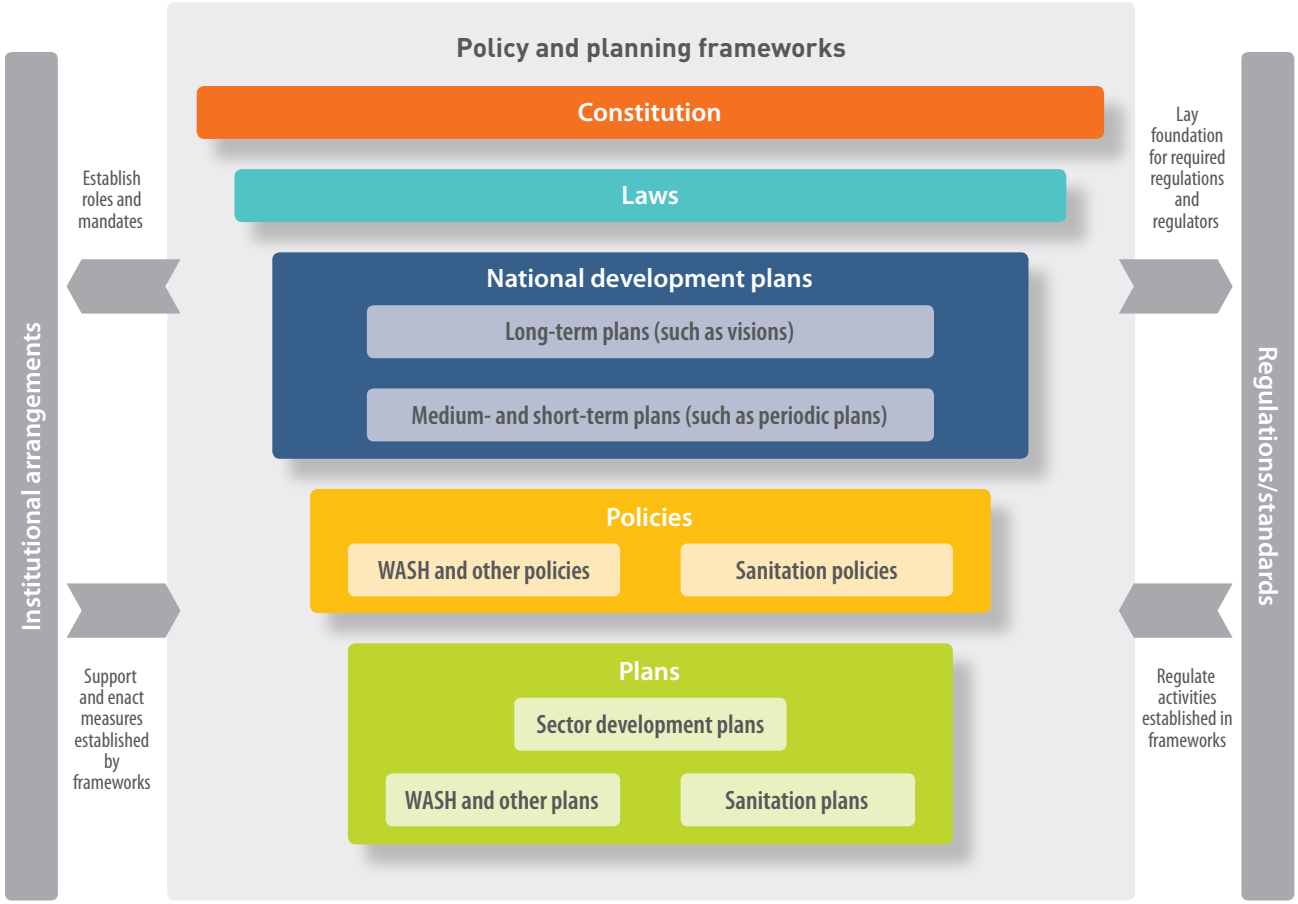
[1] Typical government stakeholders include WASH line ministries, ministries of finance, health, education and water resources, drinking-water and wastewater regulators, and national statistics offices.

Annex 4. About the WHO sanitation policy case studies

As part of the GLAAS 2018/2019 cycle focus on systems strengthening, with an emphasis on national WASH policies, plans and targets, WHO developed seven country case studies focused on national sanitation policies and plans. The case studies also highlight links with the WHO Guidelines on Sanitation and Health *(1)*. The case study countries are Bangladesh, Kenya, Mali, Nepal, Senegal, Uganda and Zambia.[1]

Figure A4.1 presents a schematic overview of the relationships among the different policy and planning frameworks reviewed for the case studies. See definitions of selected terms in Annex 1.

Figure A4.1 Overview of elements of policy and planning frameworks



Source: WHO 2018/2019 sanitation policy case studies.

The case studies, along with data from the GLAAS 2018/2019 data, are a main source of evidence for the development of the Africa Sanitation Policy Guidelines (ASPG). The African Ministers' Council on Water (AMCOW) is leading the development of the ASPG with support from WHO through GLAAS and the Center for Water Security and Cooperation. The objective of the ASPG is to provide guidance to policy-makers and those supporting the policy-making process in Africa on how to develop effective sanitation policies and what should be included in effective sanitation policies.

To develop the ASPG, AMCOW has convened a task force comprised of sanitation and policy experts. Over the course of 2019/2020, the task force will meet to inform the ASPG, which will then be endorsed by the African Union. Additionally, AMCOW will conduct extensive stakeholder consultations to ensure that the ASPG are representative of various views and will have the support of those who will be using them. It is expected that the ASPG will be finalized in 2020 and then be available as a resource for countries. To learn more about the ASPG or be involved in ASPG stakeholder consultations, please contact: aspg@amcow-online.org.

[1] Examples from the WHO sanitation policy case studies have been highlighted throughout the GLAAS report in sanitation policy case study boxes and are available online at: https://www.who.int/water_sanitation_health/monitoring/investments/glaas-2019-sanitation-policy-case-studies/en/index.html.

In addition to providing evidence to support the development of the ASPG, GLAAS is developing a tool, known as a policy assessment tool, to track and assess the content of sanitation policies. The policy assessment tool will cover a number of key criteria that effective sanitation policies should include. To develop the key criteria, WHO will consult members of the ASPG task force as well as a broader range of stakeholders, including policy-makers and development partners in the seven sanitation policy case studies. The policy assessment tool will also incorporate elements of the ASPG and the WHO Guidelines on Sanitation and Health, and can be used to monitor implementation of the ASPG and aspects of the WHO Guidelines on Sanitation and Health. The first iteration of the policy assessment tool is expected in 2020 and will be piloted in the seven case study countries with a plan to eventually scale up the tool globally.

Reference

1. WHO Guidelines on Sanitation and Health. Geneva: World Health Organization; 2018 (http://apps.who.int/iris/bitstream/handle/10665/274939/9789241514705-eng.pdf?ua=1, accessed 25 May 2019).

Annex 5. TrackFin status update: tracking financing to WASH

Effective financing for WASH is essential to deliver and sustain services, and to allow countries to make progress towards SDG 6. Since 2008, GLAAS results have indicated that there are substantial gaps in the understanding and tracking of financing to the WASH sector. A GLAAS-commissioned expert review in 2012 concluded that financial reporting is often insufficient for making sound and evidence-based planning and budgeting decisions.

To respond to this need, WHO developed the TrackFin methodology to provide a global standardized methodology for collecting and analysing WASH financial data. Closely modelled on the System of Health Accounts, the TrackFin methodology enables countries to map and analyse financial flows to the WASH sector based on standard classifications and terminology, resulting in what is referred to as WASH accounts. TrackFin is a government-led process, often supported technically and financially by development partners in its initial phases. The process aims to strengthen national capacities and systems for collecting and analysing financial information for WASH sector policy-making and programming.

Country and global activities

As of July 2019, 15 countries have initiated TrackFin (Table A5.1). Five countries are launching or implementing their second or even third cycle of TrackFin and several more countries are expected to take up the initiative in the coming years.

Support from and engagement by partners for TrackFin coordination and technical inputs at the global level and implementation at the country level has been essential, including from AFD, BMGF, DFID, DGIS, IRC, SDC, UNICEF, USAID, WaterAid and the World Bank.

Table A5.1 Summary of TrackFin implementing countries

	Initiated first cycle[a]	Completed first cycle	Initiating second cycle	Initiating third cycle
Countries	Bangladesh, Kyrgyzstan, Mozambique	Argentina*, Brazil, India (Rajasthan and West Bengal), Morocco, Senegal*, Tunisia and Uganda	Burkina Faso*, Kenya* and Madagascar*	Ghana and Mali*

[a] Including planning, resource mobilization, data collection and analysis.
Note: Countries with an asterisk (*) used TrackFin data to report on WASH expenditure in the GLAAS 2018/2019 country survey.

In February 2018, WHO, in partnership with the USAID WASH-FIN programme and AMCOW, hosted a Training of Trainers for TrackFin workshop in Nairobi, Kenya. The workshop brought together government officials from nine countries implementing TrackFin and partners supporting the process at national, regional and global levels to share results and experiences. Additional regional workshops are planned for 2019 and 2020.

WHO has also developed a WASH Accounts Production Tool (WAPT) to support TrackFin data collection and analysis. The WAPT was piloted in India in August 2017 and has since been rolled out to other TrackFin countries. In May 2018, four francophone African countries participated in a WAPT workshop where participants gained hands on experience using the tool and strengthened their TrackFin data and results. The WAPT is currently available in English, French, Portuguese and Russian, and it is expected that most countries implementing TrackFin will use the WAPT.

To support the TrackFin scale-up and contribute to further strengthening the TrackFin community, WHO launched the TrackFin Community of Practice on EZ Collab[1] in August 2018. The Community of Practice provides a platform for resources, discussion and support for those developing WASH accounts using the TrackFin methodology and the WAPT.

Future outlook

Demand from countries for support for the standard production of WASH accounts using the TrackFin methodology is rapidly increasing as countries recognize the value of WASH accounts for country processes such as monitoring SDG 6 progress and taking evidence-based decisions on funding allocations, policy development and planning. In the immediate future, WHO will continue to support implementing countries technically, and coordinate among development partners on TrackFin to ensure efficiency and pooling of resources.

[1] WHO TrackFin Community of Practice: https://ezcollab.who.int/trackfin/.

To enable uptake and institutionalization of TrackFin by all interested and committed countries, the approach to TrackFin implementation and related technical support must continue to evolve based on learning from the first five years of implementation and in response to growing collaboration with WASH sector partners on TrackFin.

Over the next two to three years, WHO plans to further develop TrackFin as a global public good, supported by mechanisms for promoting consistent application of the TrackFin methodology and a robust set of tools and training materials. Delivering TrackFin as a global public good will promote institutionalization of national WASH accounts by enhancing the capacity of country teams while decreasing reliance on external technical support, thereby increasing country ownership.

Delivering the required high-quality outputs that result from these activities will rely greatly on active engagement by and support from countries and WASH sector partners to complement inputs by the TrackFin secretariat at WHO. This collaborative effort will help to achieve the long-term vision of sustainable and high-quality WASH financial data used in national policy- and decision-making. WHO plans to publish a paper "Reflecting on TrackFin 2012–2019" later in 2019, summarizing results and lessons learned, and outlining a way forward for TrackFin.

Annex 6. SDG 6 means of implementation: monitoring and progress

The 2030 Agenda for Sustainable Development includes a dedicated goal on water and sanitation (SDG 6) that seeks to "Ensure [the] availability and sustainable management of water and sanitation for all". It contains the eight targets shown in Table A6.1 of which two, 6.a and 6.b, are dedicated to the means of implementation (MoI). The MoI refer the interdependent combination of factors including financial resources, human capacity, technology and governance arrangements that are conducive to implementing the 2030 Agenda and making progress towards Targets 6.1 to 6.6 and overall SDG 6. Through the GLAAS initiative, WHO is a co-custodian of SDG MoI Targets 6.a and 6.b in collaboration with OECD and UNEP under the UN-Water Integrated Monitoring Initiative.[1] WHO led the development of a methodological note *(1)* proposing a monitoring method for the MoI targets and indicators.

Table A6.1 SDG 6 targets

Outcomes	6.1	By 2030, achieve universal and equitable access to safe and affordable **drinking-water** for all
	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
	6.3	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
	6.4	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
	6.5	By 2030, implement **integrated water resources management** at all levels, including through transboundary cooperation as appropriate
	6.6	By 2020, protect and restore **water-related ecosystems**, including mountains, forests, wetlands, rivers, aquifers and lakes
Means of Implementation	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.b	Support and strengthen the **participation of local communities** in improving water and sanitation management

Source: *(2)*.

As the MoI targets were added at the very end of the SDG negotiation process, Targets 6.a and 6.b have not gone through the same level of scrutiny and rigorous debate among subject matter experts compared to the outcome targets. A policy review of the SDG 6 MoI targets and indicators states that, "There is generally weak evidence linking the MoI to outcomes; they are imperfectly conceptualized and inconsistently formulated; and tracking of their indicators will be difficult because many are not quantitative" *(3)*. In response, WHO, in collaboration with partners, is further developing the monitoring for these targets and indicators through expert consultation, review of existing literature and data sources, and additional exploratory analysis while complying with annual monitoring obligations to UNSD for these indicators.

While a great deal of work remains to ensure that the MoI targets and indicators are interpreted and monitored to the best possible benefit of the WASH sector in countries, the inclusion of MoI targets within the SDGs has already succeeded in raising the profile of monitoring of resources and elements of the enabling environment.

[1] The UN-Water Integrated Monitoring Initiative brings together the eight UN organizations that are formally mandated to compile country data on the SDG 6 global indicators, who organize their work within three complementary initiatives: WHO/UNICEF JMP, the inter-agency Global Environment Management Initiative (GEMI) and UN-Water GLAAS.

Update on progress reported to UNSD

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

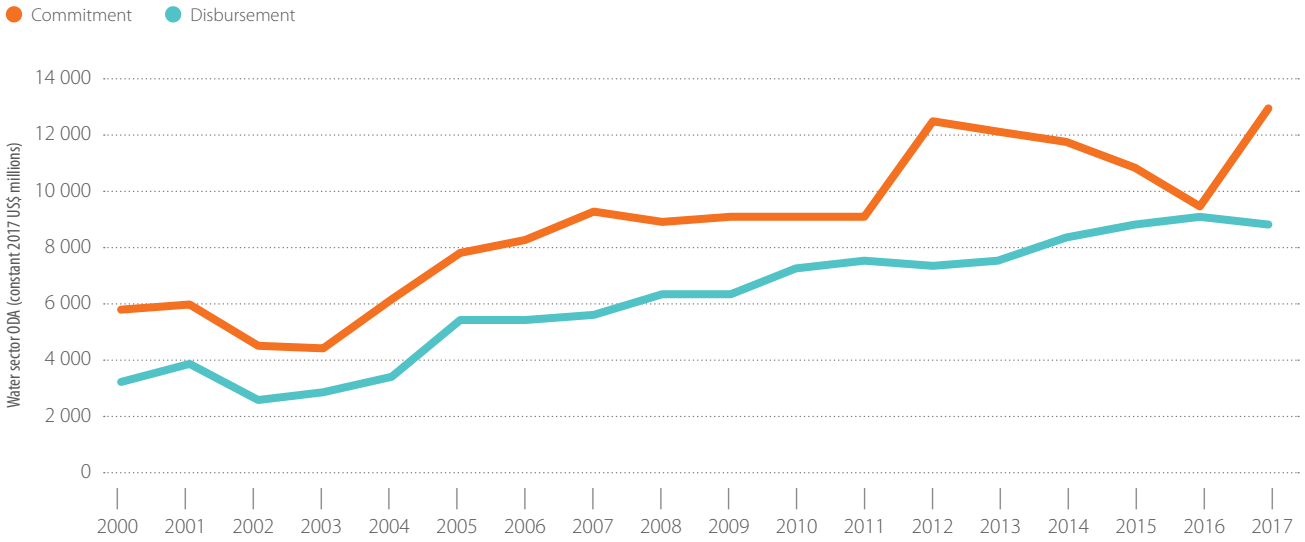
Following gradual increases in ODA disbursements to the water sector since 2002, reaching US$ 9.1 billion in 2016, disbursements have stalled in the SDG era. This may be due to donor stock-taking in the transition from MDGs to SDGs. It corresponds to a fall in ODA commitments to the water sector between 2012 and 2016 from US$ 12.5 billion to US$ 9.5 billion. However, ODA commitments jumped considerably by 37% between 2016 and 2017, indicating a renewed focus by donors to the water sector (Fig. A6.1). It is expected that disbursements will show a corresponding increase in the subsequent one to two years.

The significant increase in ODA commitments between 2016 and 2017 was due in large part to a tripling of commitments to agricultural water resources, prompted by new projects in southern and south-eastern Asia. There was also a substantial increase to water supply and sanitation from US$ 7.6 billion to US$ 9.1 billion, with large increases in ODA committed to water sector policy and administrative management, as well as to large water supply and sanitation systems.

Chapter 6 provides detailed analysis of ODA for water and sanitation (CRS code 140). Analysis of ODA in the above paragraphs includes, in addition to water and sanitation, agricultural water resources (CRS code 31140), flood prevention and control (CRS code 41050) and hydroelectric power plants (CRS code 23220) to reflect the broader scope of SDG 6 beyond WASH.

ODA commitments to the water sector have increased while disbursements have levelled off.

Figure A6.1 ODA commitments and disbursements to the water sector, 2000–2017 (US$ millions, constant 2017 US$)



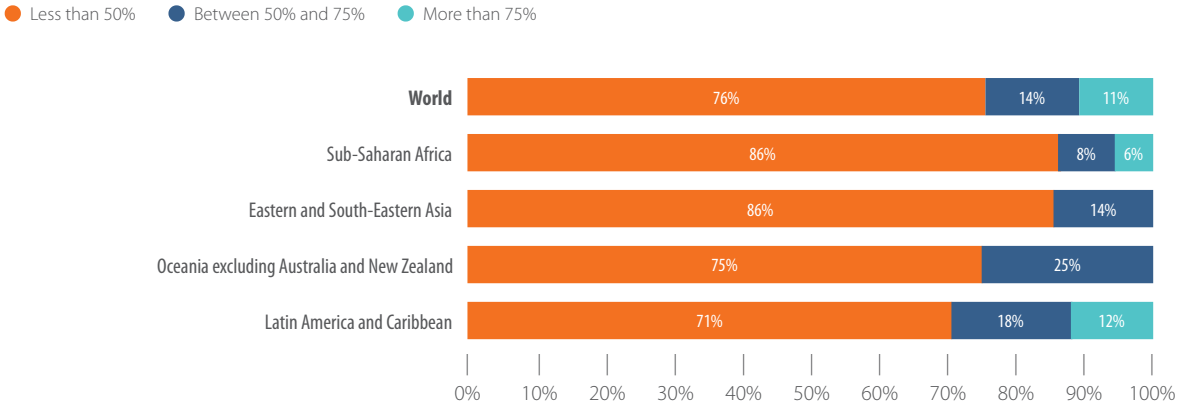
Notes: This chart includes only ODA and covers water and sanitation (CRS 140xx series), agricultural water resources (CRS 31140), flood prevention and control (CRS 41050), and hydroelectric power plants (CRS 23220). This chart excludes private grants.
Source: OECD-CRS, 2019.

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

Community participation is crucial to ensuring sustainable solutions to attain SDGs adapted to local community contexts and is a key factor in ensuring no one is left behind. Community participation is recognized as a fundamental concept for sustainable water and sanitation activities in most countries. Approximately three quarters of countries reported having procedures for participation defined in policy or law for rural drinking-water and water resources management. However, implementation of procedures is hampered by lack of resources. Approximately six in 10 countries reported that human and financial resources were less than 50% of that needed to support community participation (Fig. A6.2). As a result, activities at the local level may not be implemented effectively. For example, 41% of countries reported that regular fora for citizen engagement took place in fewer than half of local administrative units for rural sanitation and drinking-water services. More than half of countries in each SDG region except Australia and New Zealand reported that financial resources were less than 50% of that needed to support community participation, including over 85% of countries in the Sub-Saharan Africa and the Eastern Asia and South-Eastern Asia regions.

Insufficient financial resources hamper implementation of community participation procedures.

Figure A6.2 Sufficiency of financial resources to support participation of users and communities for rural sanitation and drinking-water services by SDG region (*n*=94)



Note: Figure shows only those SDG regions for which data cover at least 50% of the population.
Source: GLAAS 2018/2019 country survey.

References

1. Methodological note: Indicators and proposed monitoring framework for Means of Implementation (MoI) targets for Sustainable Development Goal 6 (Draft); 2017. Geneva: World Health Organization (https://www.unwater.org/app/uploads/2017/05/Methodological-note-6a-and-6b_7-March-2017.pdf, accessed 9 July 2019).
2. SDG 6 Synthesis Report 2018 on Water and Sanitation. New York: United Nations; 2019 (https://www.unwater.org/app/uploads/2018/12/SDG6_SynthesisReport2018_WaterandSanitation_04122018.pdf, accessed 11 July 2019).
3. Bartram J, Brocklehurst C, Bradley D, Muller M, Evans B. Policy review of the means of implementation targets and indicators for the sustainable development goal for water and sanitation. npj Clean Water. 2018; 1:3 (https://www.nature.com/articles/s41545-018-0003-0.pdf, accessed 9 July 2019).

Annex 7. Summary of responses to GLAAS 2018/2019 country survey

	POLICIES AND PLANS														
	Existence of national WASH policies					Existence of national WASH implementation plans					Developed cost estimates for WASH plan				
	Drinking-water		Sanitation		Hygiene	Drinking-water		Sanitation		Hygiene	Drinking-water		Sanitation		Hygiene
COUNTRY OR TERRITORY	Urban	Rural	Urban	Rural	National	Urban	Rural	Urban	Rural	National	Urban	Rural	Urban	Rural	National
Afghanistan	●	●	◑	◕	●	◕	◕	◕	◕	◕	✔	✔	✔	✔	✔
Albania	◕	◕	◕	◕	○	◕	◕	◕	◕	◕	✔	✔	✔	✔	✔
Angola	●	●	◑	◑	◕	◑	◕	◔	◔	◔	✔	✔			✔
Anguilla	○	○	○	○	○	○	○	○	○	○					
Antigua and Barbuda	○	○				○	○								
Argentina	●	○	●	○	○	◕	○	◕	○	○	✔		✔		
Austria															
Azerbaijan	●	●	●	●	●	●	●	●	●	●	✔	✔	✔	✔	✔
Bangladesh	●	●	●	●	●	◕	◕	◕	◕	◔	✔	✔	✔	✔	✘
Barbados	◑	◑	◑	◑	○	◔	◔	◔	◔	○					
Belarus	●	●	●	●	●	●	●	○	○	●	✔	✔			✔
Belize	●	◕	●	●	◕	◕	●	◕	●	●	✘	✘	✔	✔	✘
Benin	●	●	●	◑	●	◕		◕	◔	◕		✔	✔		
Bhutan	○	●	◑	◕	◑	◔	◔	◔	◔	◔		✔	✔	✔	✔
Bolivia (Plurinational State of)	●	●	●	●	●	●	●	●	●	○	✔	✔	✔	✔	✘
Bosnia and Herzegovina	●	●	●	●	○	○	○	○	○						
Botswana	●	●	◕	◕	●	◕	◕	◕	◕	◑	✘	✘	✘	✘	✘
Brazil	●	◕	●	◕	○	◕	◕	◕	◕	○	✔	✔	✔	✔	
British Virgin Islands	○	○	○	○	○	○	○	○	○	○	✘	✘	✘	✘	✘
Burkina Faso	●	●	●	●	◕	◕	◕	◕	◕	○	✔	✔	✔	✔	
Burundi	●	●	●	●	●	◕	◕	◕	◕	◕	✔	✔	✔	✔	✔
Cambodia	●	●	●	●	●	○	◕	◔	◕	◕		✔		✔	
Cameroon	◕	◕	◑	●	◑	◕	○	◑	○	○	✘				
Central African Republic	●	●	●	●	●										
Chad	●	●	●	●	○	◕		◑	◑	○	✔	✔	✔	✔	
Chile	◕	●	●	●	●	●	●	●	◑	●	✘	✔	✔	✘	✘
China	●	●		●	●	◕	●			●	✔	✔	✔	✔	✔
Colombia	◕	◕	◕	◕	●	◕	◔	◕	◑	◑	✘	✔	✔	✔	✘
Comoros	●	●	●	●	●	◑	◑	◑	◑	◕	✔	✔	✔	✔	✔
Congo	◑	◑	◑	◑	●	◕	◕	◕	◕	◕	✔	✔	✔	✔	✔
Costa Rica	●	●	●	●	○	○	○	◕	◕	○			✔	✔	
Côte d'Ivoire	◑	◑	●	●	○	○	○	○	○	◔					✔
Cuba	●	●	●	●	●	●	●	●	●	◕	✔	✔	✔	✔	✔
Democratic People's Republic of Korea	●	●	●	●		◕	◕	◕	◕		✔	✔	✔	✔	✔
Democratic Republic of the Congo	◑	◑	●	●	●	○	◑	◑	◑	●		✔	✘	✘	✔
Dominican Republic	◑	◑	◑	◑	◑	◔	◔	○	◔	◔	✘	✘	✘	✘	✘
Ecuador			○		○			◕		◑			✔		
El Salvador	◑	◑	◑	◑	○	◑	◑	◑	◑	○	✔	✔	✔	✔	
Eritrea	◑	◑	◑	●	●	○	◕	◔	●	◕		✔	✔	✔	✔
Eswatini	●	●	◑	◑	◑	◕	◕	◔	◔	◔	✔	✔	✔	✔	✘
Ethiopia	◕	◕	●	●	●	◕	◕	◕	◕	◕	✔	✔	✔	✔	✔
Fiji	◑	◕	◑	◕	○	●	◔	●	◕	○	✔	✔	✔	✘	
Gabon	●	●	●	●	●	○	○	○	○	○					

● Formally approved
◕ Undergoing revision
◑ Under development
○ None

● Approved and fully implemented
◕ Approved and partially implemented
◑ Approved but not yet implemented
◔ Under development
○ None

✔ Yes
✘ No

POLICIES AND PLANS

Conducted human resources assessment for WASH plan					Sufficient financial resources to implement plans					Sufficient human resources to implement plans				
Drinking-water		Sanitation		Hygiene	Drinking-water		Sanitation		Hygiene	Drinking-water		Sanitation		Hygiene
Urban	Rural	Urban	Rural	National	Urban	Rural	Urban	Rural	National	Urban	Rural	Urban	Rural	National
✔	✔	✔	✔	✔	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘
✔	✔	✔	✔	✔	✘	✘	✘	✘	✔	✔	✔	✔	✔	✔
	✔			✔	✘	✘			✘	✘	▲			✘
✘		✘			▲		▲			▲		▲		
✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
✔	✔	✔	✔		✘	✘	✘	✘		▲	▲	▲	▲	
✔	✔			✔	✘	✘			✔	✘	✘			✔
✔	✔	✔	✔				▲			✔	▲	✘	✔	✔
	✔	✔				✘	✘				✘	✘		▲
✔	✔	✔	✔	✔	▲	✔	▲	▲	▲	▲	▲	▲	▲	▲
✘	✘	✘	✘	✘	✘	✘	✘	✘		✘	✘	✘	✘	
✘	✘	✘	✘	✘	✔	✔	✔	✔		▲	▲	▲	▲	
✘	✘	✘	✘		▲	✘	▲	✘		✘	✘	✘	✘	
✘	✘	✘	✘	✘										
✘	✘	✘	✘		✘	✘	✘	✘		▲	▲	▲	▲	
✘	✘	✘	✘	✔	✔	✘	✘	✘	✘	✘	✘	✘	✘	✘
	✘		✘	✘		▲			▲		▲		▲	▲
✘					✘		✘			✘		✘		
✘	✘	✘	✔		✘	✘	✘	✘		▲	✘	✘	▲	
✔	✔	✔	✘	✘	✔	✔	✔		✔	✔	✔	✔		✔
	✔				✔	✔	▲	▲	✔		✔			✔
✔	✔	✔	✔	✔	✘	✘	✘	✘		✘	✘	✘	✘	✘
✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘
✘	✘	✔	✔	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘
		✘	✘				✘	✘				▲	▲	
				✔					✘					✘
✔	✔	✔	✔	✔	✔	✔	✔	✔	▲	✔	✔	✔	✔	✔
												✔		
	✘	✘	✘									✘		
✘	✘	✘	✘	✘						▲	✘	✘	✘	✘
		✘		✘			✘		✘			✘		✘
✔	✔	✔	✔		✘	✘	✘	✘		✘	✘	✘	✘	
	✔	✔	✘	✔		✘	✘	✘	✘		✘	✘	✘	✘
✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘
✔	✔	✔	✔	✔	▲	▲	✘	✘	▲	▲	▲	✘	✘	✘
✔		✔	✔		✔		✔	▲		✔		✔	▲	

✔ Yes
✘ No

✔ More than 75% of what is needed
▲ Between 50% and 75%
✘ Less than 50% of what is needed

✔ More than 75% of what is needed
▲ Between 50% and 75%
✘ Less than 50% of what is needed

COUNTRY OR TERRITORY	POLICIES AND PLANS														
	Existence of national WASH policies					Existence of national WASH implementation plans					Developed cost estimates for WASH plan				
	Drinking-water		Sanitation		Hygiene	Drinking-water		Sanitation		Hygiene	Drinking-water		Sanitation		Hygiene
	Urban	Rural	Urban	Rural	National	Urban	Rural	Urban	Rural	National	Urban	Rural	Urban	Rural	National
Gambia	◑	◑	◕	●	◕	◔	◔	◕	◕	◕	✔	✔	✔	✔	✘
Georgia	●	●	●	●	●	◔	◔	◕	◕	◔	✔		✔	✔	
Ghana	●	●	●	●	●	●	●	●	●	●	✔	✔	✔	✔	✔
Guinea	●	●	●	●	●	◔	◕	○	○	◕		✔	✘	✘	✔
Guyana	○	○	○	○	○	○	○	○	○	○					
Haiti	○		◑		●	◔		◑		○	✔		✔		
Honduras	●	●	●	●	●	◕	●	◕	◕	●	✔	✔	✔	✔	✔
Hungary	●	●	●	●	○	◕	◕	◕	◕	○	✔	✔	✔	✔	
Indonesia	●	●	●	●	●	◕	◕	◕	◕	◕	✔	✔	✔	✔	✘
Iran (Islamic Republic of)	●	●	●	●	●	◕	◕	◕	◕	◕	✔	✔	✔	✔	✔
Jamaica	●	●	●	●	○	◕	◕	◕	◕	○	✔	✘	✔	✔	
Jordan	◕	◕	●	◕	●	●	●	◔	◕	◔	✘	✘	✘	✘	✘
Kenya	●	●	●	●	●	◕	◕	◕	◕	◕	✔	✔	✘	✔	✘
Kyrgyzstan	●	●	●	●	◑	◕	◕	◕	◕	○	✔	✔	✔	✔	
Lao People's Democratic Republic	◕	◑	◑	◑	◑	◕	◑	◕	◔	◑	✔	✔	✔	✔	✔
Lebanon	●	●	●	●	○	◕	◕	◕	◕	○	✔	✔	✔	✔	
Lesotho	◕	◕	◕	◕	◕	◕	◕	◕	◕	◕	✔	✔	✘	✔	✔
Liberia	●	●	●	●	●	◕	◕	○		◕	✔	✔	✔		✔
Lithuania	●	●	●	●	●	◕	◕	◕	◕	◕	✔	✔	✘	✔	✔
Madagascar	◕	◕	◕	◕	◕	◕	◕	◕	◕	◕	✔	✔	✔	✔	✔
Malawi	●	◕	◕	◕	◕	◕	◕	◕	◕	●	✔	✔	✔	✔	✘
Maldives	●	●	●	●	○	◔	◔	◔	◔	○	✘		✘	✘	
Mali	●	◕	◕	◕	●	◕	◔	○	○	◕	✔				✔
Marshall Islands	●	●	●	●	●	○	○	○	○	○	✘		✘	✘	✘
Mauritania	●	●	●	●	●	◕	◕	◕	◕	◕	✔	✔	✔	✔	✔
Mexico	◕	◕	◕	◕	◕		●	●	●	●	✔	✔	✔	✔	✔
Mongolia	●	●	●	●	●	◕	◕	◕	◕	◕	✘	✘	✘	✘	✔
Montenegro	●	○	◕	○	●	◑	○	◕	○	○	✔		✔		
Morocco	●	●	●	●	○	●	●	●	◔	○	✔	✔	✔	✘	
Mozambique	◕	●	●	◕	◕	◕	◕	◕	◕	◕	✔	✔	✔	✔	✘
Myanmar	●	●	○	◑	◑	◕	◕	◕	◔	◔	✔	✔	✔	✔	✔
Namibia	●	●	●	●		●	●	◕	◕		✔	✔	✔	✔	
Nauru	◑	◑	◑	◑	◑	◔	◔	◔	◔	◔	✘	✘	✘	✘	✘
Nepal	◕	◕	◕	◕	◕	◔	◔	◔	◕	◕				✘	✘
Netherlands	◕		◕		◕	◕		◕		●	✘		✔		✔
New Zealand	◕	◕	○	○	○			○	○	○					
Niger	◑	●	◑	●	◑	◕	◕	◕	◕	◕	✔	✔	✔	✔	✔
Nigeria	◕	◕	◑	◕	◕	●	●	◔	●	◔	✔	✔		✔	✘
Oman	●	●	◕	◕	◑	●	●	●	●	◔	✘	✘	✔	✔	
Pakistan	◕	◕	◕	◕	◕	◔	◔	◔	◔	◔	✔	✔	✔	✔	✘
Panama	◑	◑	◑	◑	●	◕	◕	●	◕	◕	✔	✔	✔	✔	✘
Papua New Guinea	●	●	●	●	●	●	●	◕	●	◕	✔	✔	✔	✔	✔
Paraguay	◑	◑	◑	◑	○	◔	◔	◔	◔	◔	✔	✔	✔	✔	
Peru	●	●	●	●	●	◕	◕	◕	◕	◑	✔	✔	✔	✔	✘

● Formally approved
◕ Undergoing revision
◑ Under development
○ None

● Approved and fully implemented
◕ Approved and partially implemented
◑ Approved but not yet implemented
◔ Under development
○ None

✔ Yes
✘ No

POLICIES AND PLANS

Conducted human resources assessment for WASH plan					Sufficient financial resources to implement plans					Sufficient human resources to implement plans				
Drinking-water		Sanitation		Hygiene	Drinking-water		Sanitation		Hygiene	Drinking-water		Sanitation		Hygiene
Urban	Rural	Urban	Rural	National	Urban	Rural	Urban	Rural	National	Urban	Rural	Urban	Rural	National
✘	✘	✔	✔	✘	▲	▲	✘	✘		▲	▲	▲	▲	
✔		✘	✔		✘		✘	✘		✘		✘	✘	
✘	✘	✘	✘	✘	✘	✘	✘	✘	✘			✘		
	✔			✔		✘			✘		▲			✔
✔		✔			✘		✘			✘		✘		
✔	✔	✔	✔	✔	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘
✘	✘	✘	✘		✔	✔	✔	✔						
✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘
✔	✘	✔	✔	✔	▲	▲	▲	✘		✔	✘	✔	▲	▲
✔	✔	✔	✔		✘	✘	✘	✘		▲	▲	▲	▲	
✔	✔	✔	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘
✔	✘	✔	✘	✘	✘	✘	▲	✘	✘	✘	✘	✘	✘	✘
✘	✘	✔	✘		✘	✘	✘	✘		✘	✘	✘	✘	
✔	✔	✔	✔	✔	✔	✘	✔	✘	✘	▲	✘	✘	✘	✘
✘	✘	✘	✘		✘	✘	✘	✘		✘	✘	✘	✘	
✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘
	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘
✘	✘	✘	✘	✘					✔					
✔	✔	✔	✔	✔	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘
✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✔	✔	✔
✔				✔	✘				✘	▲				▲
✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✘	✘	▲	▲	▲
✘	✘	✘	✘	✘	▲	▲	▲	▲	▲	▲	✘	✘	✘	✘
✘	✘	✔	✘	✔	✘	▲	▲	▲	✘	✘	▲	▲	▲	✘
✔		✔			▲		▲			▲		▲		
✔	✔	✔			✔	✔	✔			✔	✔	✔		
✔	✔	✔	✔		✘	✘	✘	✘	✘	✘	✘	✘	✘	✘
	✘		✘	✘		✘		✘	✘		✘		✘	✘
✔	✔	✔	✔		▲	▲	✘	✘		▲	▲	▲	▲	
✘	✘	✘	✘	✘										
			✘	✘									▲	▲
✘		✔		✔	▲		✔		✔	▲		✔		✔
✔	✔	✔	✔	✔	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘
✔	✔		✔	✔	✘	✘		✘	✘	▲	▲		▲	▲
✔	✔	✔	✘		✔	✔	✔	✔		✔	✔	▲	▲	
✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘			✘
✘	✘	✘	✘	✘	▲	▲	✔	▲	✘	▲	▲	▲	▲	✘
✔		✔	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘		✘
✔	✘	✔	✔		✘	✘	✘	✘		✘	✘	✘	✘	
✘	✔	✘	✘	✘	▲	✘	▲	✘	✘	✘	✘	✘	✘	✘

✔ Yes
✘ No

✔ More than 75% of what is needed
▲ Between 50% and 75%
✘ Less than 50% of what is needed

✔ More than 75% of what is needed
▲ Between 50% and 75%
✘ Less than 50% of what is needed

POLICIES AND PLANS

COUNTRY OR TERRITORY	Existence of national WASH policies					Existence of national WASH implementation plans					Developed cost estimates for WASH plan				
	Drinking-water		Sanitation		Hygiene	Drinking-water		Sanitation		Hygiene	Drinking-water		Sanitation		Hygiene
	Urban	Rural	Urban	Rural	National	Urban	Rural	Urban	Rural	National	Urban	Rural	Urban	Rural	National
Philippines	●	●	●	●	●	◔	◔	◕	◕	◕	✔	✔	✔	✔	✘
Sao Tome and Principe	●	◑	●	●	◑	◕	◑	◕	◕	●	✔	✔	✔	✔	✔
Senegal	●	●	●	●	◕	◕	◕	◕	●	◑	✔	✔	✔	✔	✔
Serbia	●	●	●	●	●	◔	◔	◔	◔	◕	✔	✔	✔	✔	✔
Seychelles	●	●	●	●	○	◕	◕	◕	◕	○	✔	✔	✔	✔	
Solomon Islands	●	●	●	●	●	◑	◕	◑	◕	◕	✘	✔	✘	✔	✔
South Africa	●	●	●	●	●	●	●	●	●	◕	✔	✔	✔	✔	✘
South Sudan	●	●	●	◕	●	◕	◑	◑	◑	◕	✔	✔	✔	✔	✔
Sri Lanka	◕	●	●	◕	●	◕	◔	●	◔	◑	✔	✔	✔	✘	✔
Sudan	◑	◑	◑	◑	◑	◕	◕	◕	◕	◕	✔	✔	✔	✔	✔
Syrian Arab Republic	◑	◑	●	●	●	◔	◔	◔	◔	◔	✔	✔	✔	✔	✔
Tajikistan	●	●	●	●	●	●	◑	●	◑	◕	✔	✔	✘	✘	✔
Thailand	●	●	●	●	●	●	●	●	●	●	✔	✔	✔	✔	✔
Timor-Leste	◑	◑	●	●		◕	◕	◕	◕		✔	✔	✔	✔	
Togo	◕	◕	◕	◕	◕	◔	◔	◔	◔	◔	✘	✘	✘	✘	✘
Trinidad and Tobago	○	○	○	○	○	●	●	◔	◔	●	✘	✔	✔		✔
Tunisia	●	●	●	◑		◕	●	◕	◔	●	✔	✔	✔		✘
Tuvalu	●	●	●	●	●	○	○	○	○	○	✘	✘	✘	✘	✘
Uganda	◕	◕	◕	◕	◕	●	●	●	●	●	✘	✘	✔	✔	✔
Ukraine	●	●	●	●	◕	◕	◕	◕	◕	◕	✔	✔	✔	✔	✘
United Republic of Tanzania	●	◕	●	●	●	●	●	●	●	●	✔	✔	✔	✔	✔
Uzbekistan	●	●	●	●	●	●	●	●	●	◔	✔	✔	✔	✔	
Vanuatu		●	●		◑			○					✘		
Venezuela (Bolivarian Republic of)					◕					◔					
Viet Nam	●	●	●	●	◑	◔	◔	◔	●	◔	✘		✘	✔	
West Bank and Gaza Strip	●	●	●	●	●	◕	◕	◕	◕	◕	✔	✔	✔	✔	✔
Zambia	◑	◑	◑	◑	◑	◕	◔	◕	◑	◔	✔	✔	✔	✔	✔
Zimbabwe	●	●	◑	◑	◑	◔	○	○	◑	○		✘		✘	✘

● Formally approved
◕ Undergoing revision
◑ Under development
○ None

● Approved and fully implemented
◕ Approved and partially implemented
◑ Approved but not yet implemented
◔ Under development
○ None

✔ Yes
✘ No

Source: GLAAS 2018/2019 country survey.

POLICIES AND PLANS

Conducted human resources assessment for WASH plan					Sufficient financial resources to implement plans					Sufficient human resources to implement plans				
Drinking-water		Sanitation		Hygiene	Drinking-water		Sanitation		Hygiene	Drinking-water		Sanitation		Hygiene
Urban	Rural	Urban	Rural	National	Urban	Rural	Urban	Rural	National	Urban	Rural	Urban	Rural	National
✘	✘	✘	✔	✘	✘	✘	▲	✘	▲	▲	▲	▲	✘	▲
✔	✔	✔	✔	✘	✔	✔	✘	✘		▲	▲	✘	✘	
✔	✔	✘	✘	✘	▲	✘	✔	✘	▲	✔	✘	✔	▲	▲
✔	✔	✔	✔	✔	✘	✘	✘	✘	▲	✘	✘	✘	✘	✘
✔	✔	✔	✔		✘	✘	✘	✘		✘	✘	✘	✘	
✘	✔	✘	✔	✔	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘
✔	✔	✔	✔	✔	▲	▲	✘	▲	✘	▲	▲	▲	▲	✘
✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘
✔		✔		✔	▲	✔	▲		▲	▲	✔	✔		▲
					✘	✘	✘	✘	✘	▲	▲	▲	▲	▲
✔	✔	✔	✔	✔	▲	▲	✘	✘	✘	▲	▲	✘	✘	✘
✔		✔	✔	✔	▲	✘	▲	✘	✘	✔	✘	▲	✘	✘
✔	✔	✔	✔	✔	✘	✘	▲	✘	✘	✘	✘	✘	✘	✘
✔	✘	✔			✘	✘	✘	✘		✘	✘	▲	▲	
✘	✘	✘	✘	✘	▲	▲			▲	▲	▲			✘
✔		✔		✘	✔		✔		✔			▲		▲
✘	✘	✘	✘	✘	✘	✘	✘	✘		✘	✘	✘	✘	✘
✘	✘	✔	✘	✘	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
✔	✔	✔	✔	✔	✘	✘	✘	✘	▲	▲	▲	▲	▲	✔
✔	✔	✔	✘	✔	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
✔	✔	✔	✔		✔	✔	✔	✔		✔	✔	✔	✔	
			✔					✘					✘	
✘	✘	✘	✘	✘	▲	▲	✘	✘	✘	▲	▲	▲	✘	▲
✔	✔	✔	✔	✔	✘	✘	✘	✘	✘	✔	✔	▲	▲	✔
	✘			✘										

✔ Yes
✘ No

✔ More than 75% of what is needed
▲ Between 50% and 75%
✘ Less than 50% of what is needed

✔ More than 75% of what is needed
▲ Between 50% and 75%
✘ Less than 50% of what is needed

NATIONAL WASH TARGETS

Sections 2.2 and 5.3 provide further information on the categorization of national WASH targets

COUNTRY OR TERRITORY	Sanitation targets						Open defecation (OD) targets		
	Urban			Rural					
	Category (percentage of population covered by)	Target value (percentage)	Year	Category (percentage of population covered by)	Target value (percentage)	Year	Category (percentage of)	Target value (urban/rural if applicable) (percentage)	Year (urban/rural if applicable)
Afghanistan				Limited services	100%	2025	Localities/villages ODF	100%	2025
Albania	Sewer connection, safely managed services	87%	2017	Basic services	45%	2017			
Angola	Safely managed services	100%	2030	Safely managed services	50%	2022	Other		
Anguilla									
Antigua and Barbuda									
Argentina	Sewer connection, basic services	75%	2023						
Austria									
Azerbaijan	Sewer connection, safely managed services	65%	2030	Limited services	65%	2020			
Bangladesh	Limited services	100%	2020	Limited services	100%	2020			
Barbados	Basic services			Basic services					
Belarus									
Belize	Other	90%	2030	Other	80%	2030			
Benin	None						Localities/villages ODF	100%	2025
Bhutan	Safely managed services	70%	2023	Safely managed services		2023			
Bolivia (Plurinational State of)	Basic services	70%	2020	Basic services	60%	2020			
Bosnia and Herzegovina	Safely managed services	88%	2033	Basic services	88%	2033			
Botswana	Basic services	89%	2023	Basic services	89%	2023	Population practicing OD	0%	2030
Brazil	Safely managed services	93%	2033	Safely managed services	69%	2033			
British Virgin Islands									
Burkina Faso	Basic services	55%	2020	Basic services	25%	2020	Localities/villages ODF	30%	2020
Burundi	Basic services	90%	2025	Basic services	80%	2025	Population practicing OD	0%	2025
Cambodia	Other	100%	2025	Basic services	100%	2025			
Cameroon	Sewer connection, basic services	60%	2020	Sewer connection, basic services	60%	2020			
Central African Republic							Other		
Chad	Limited services	60%	2030	Limited services	33%		Population practicing OD	0%	2030
Chile	None			Sewer connection, safely managed services	50%	2020			
China									
Colombia	Other	99%	2021	Basic services	76%	2021			
Comoros	Safely managed services	100%	2030	Basic services	100%	2030			
Congo	Limited services	95%	2022	Limited services	22%	2022			
Costa Rica									
Côte d'Ivoire	Basic services	75%	2030	Basic services	45%	2030	Population practicing OD	0%	2030
Cuba	Safely managed services	100%	2030	Safely managed services	100%	2030			
Democratic People's Republic of Korea	Limited services	100%	2025	Basic services	100%	2030	Population practicing OD	0%	2025
Democratic Republic of the Congo	Other	95%	2030	Other	95%	2020			
Dominican Republic	Basic services	100%	2030	Basic services	100%	2030	Population practicing OD	0%	2030
Ecuador				Basic services	64%	2021			
El Salvador	Sewer connection, safely managed services	43%	2019	Sewer connection, safely managed services	43%	2019			
Eritrea	Limited services	50%	2021	Limited services	50%	2021			
Eswatini	Limited services	100%	2022	Limited services	100%	2022	Population practicing OD	5%	2022
Ethiopia	Safely managed services	100%	2020	Limited services	82%	2020	Population practicing OD[1]	0%	2020
Fiji	Sewer connection, basic services	35%	2018	Sewer connection, basic services	20%	2018			

See category definitions at the bottom of page 94.

Note: ODF = open defecation free

See category definitions at the bottom of page 94.

[1] Urban target.

NATIONAL WASH TARGETS

Sections 2.2 and 5.3 provide further information on the categorization of national WASH targets

Drinking-water targets						Hygiene targets		
Urban			Rural					
Category (percentage of population covered by)	Target value (percentage)	Year	Category (percentage of population covered by)	Target value (percentage)	Year	Category (percentage of population covered by)	Target value (percentage)	Year
Other	100%	2030	Other	100%	2030	Basic services	100%	2030
Safely managed services	98%	2017	Safely managed services	85%	2017	None		
Safely managed services	85%	2022	Limited services	80%	2022	Basic services	50%	2022
Basic services	90%	2015	Basic services	90%	2015			
Safely managed services	100%	2023						
Safely managed services	100%	2020				Basic services	100%	2030
Basic services	100%	2020	Basic services	100%	2020	None		
Basic services	100%	2025	Basic services	100%	2025			
Safely managed services	100%	2020	Basic+ services	100%	2020	Basic services	100%	Achieved
Safely managed services	100%	2030	Safely managed services	100%	2025	Basic services	100%	2030
Basic+ services	100%	2025	Basic+ services	100%	2021	None		
Safely managed services	75%	2023	Basic services			Basic services		2030
Basic+ services	95%	2020	Basic services	80%	2020	None		
Basic+ services	96%	2025	Basic+ services	96%	2025	None		
Safely managed services	98%	2023	Limited services	98%	2023	None		
Safely managed services	100%	2033	Basic+ services	80%	2033			
						None		
Limited services	100%	2030	Basic+ services	76%	2020	None		
Basic+ services	97%	2020	Basic+ services	89%	2020	Basic services	80%	2025
Other	100%	2025	Other	100%	2025	Basic services	100%	2025
Limited services	75%	2020	Limited services	75%	2020	None		
Other	30%	2003				None		
Other	80%	2030	Safely managed services	80%	2030			
None			None					
Safely managed services	95%	2020	Basic+ services	80%	2020			
Basic+ services		2022	Basic+ services	83%	2021	None		
Basic+ services	100%	2030	Basic+ services	100%	2030	None		
Safely managed services	98%	2022	Basic+ services	70%	2022	Basic services	100%	2024
Safely managed services	100%	2030	Safely managed services	100%	2030	None		
Basic+ services	100%	2030	Limited services	100%	2030	Basic services	100%	2015
			Safely managed services	100%	2030			
Other	70%	2021	Other	100%	2030	Basic services	100%	2020
Basic services	100%	2030	Limited services	100%	2030	None		
Basic services	90%	2021	Basic services	64%	2021	None		
Safely managed services	100%	2034	Basic+ services	100%	2039			
Other		2026	Safely managed services	80%	2026	None		
Basic+ services	95%	2022	Basic services	49%	2022	None		
Safely managed services	75%	2020	Basic+ services	85%	2020	Other		2020
Basic+ services	99%	2018	Basic+ services	75%	2018	None		
See category definitions at the bottom of page 95.						See category definitions at the bottom of page 95.		

NATIONAL WASH TARGETS

Sections 2.2 and 5.3 provide further information on the categorization of national WASH targets

COUNTRY OR TERRITORY	Sanitation targets						Open defecation (OD) targets		
	Urban			Rural					
	Category (percentage of population covered by)	Target value (percentage)	Year	Category (percentage of population covered by)	Target value (percentage)	Year	Category (percentage of)	Target value (urban/rural if applicable) (percentage)	Year (urban/rural if applicable)
Gabon	Limited services	100%	2025	Limited services	100%	2025			
Gambia	Limited services	75%	2021	Limited services	75%	2021	Population practicing OD	0%	2019
Georgia	Limited services	97%	2020	Limited services	78%	2020			
Ghana	Basic services	100%	2030	Limited services	100%	2030	Population practicing OD	0%	2030
Guinea	Safely managed services	96%	2030	Limited services	77%	2017	Population practicing OD	0%	2022
Guyana	None								
Haiti	Basic services	70%	2030	Basic services	70%	2030	Population in ODF localities	100% / 80%	2030
Honduras	Basic services	95%	2022	Basic services	90%	2022	Population practicing OD	5% / 10%	2022
Hungary	Sewer connection, safely managed services	82%	2015	Basic services	100%	2030			
Indonesia	Limited services	100%	2019	Limited services	100%	2019	Population practicing OD	0%	2019
Iran (Islamic Republic of)	Sewer connection, safely managed services	72%	2022	Sewer connection, safely managed services	3%	2022			
Jamaica	Limited services	100%	2030	Basic services	100%	2030			
Jordan	Sewer connection, safely managed services	80%	2025	Sewer connection, safely managed services	80%	2025	Population practicing OD	0%	2025
Kenya	Limited services	85%	2022	Limited services	76%	2022	Population practicing OD	0%	2030
Kyrgyzstan									
Lao People's Democratic Republic	Basic services	100%	2030	Limited services	100%	2030	Population practicing OD	0%	2023
Lebanon	Sewer connection, safely managed services	80%	2015	Basic services	80%	2015			
Lesotho	Sewer connection, basic services		2019	Basic services	44%	2020			
Liberia	Limited services	85%	2023	Limited services	85%	2023	Other		
Lithuania	Sewer connection, basic services	100%	2030	Sewer connection, basic services	100%	2030			
Madagascar	Basic services	100%	2025	Basic services	100%	2025	Localities/villages ODF	100%	2025
Malawi	Basic services	100%	2030	Limited services	100%	2030	Localities/villages ODF	100%	2030
Maldives	Sewer connection, safely managed services	75%	2019	Sewer connection, basic services	75%	2019			
Mali	Limited services	70%	2018	Limited services	70%	2018	Localities/villages ODF	100%	2030
Marshall Islands	Limited services	100%	2015	Limited services	100%	2015			
Mauritania	Basic services	82%	2020	Basic services	50%	2020	Population practicing OD	0%	2030
Mexico	Other	97%	2018	Other	80%	2018			
Mongolia	Limited services	40%	2020	Limited services	40%	2020	Other		
Montenegro	Basic services	100%	2035	None					
Morocco	Sewer connection, safely managed services	80%	2020	Sewer connection, safely managed services	80%	2020			
Mozambique	Basic services	100%	2030	Basic services	100%	2030	Population practicing OD	0%	2025
Myanmar	Basic services	85%	2025	Limited services	100%	2030	Population practicing OD	0%	2030
Namibia	Limited services	87%	2022	Limited services	40%	2022	Population practicing OD	12%/60%	2022
Nauru									
Nepal	Basic services	84%	2019	Basic services	84%	2019	Other		
Netherlands	Sewer connection, safely managed services	99.9%	Achieved	Sewer connection, safely managed services	99.9%	Achieved			
New Zealand	Sewer connection, safely managed services	100%	Achieved	Safely managed services	100%	Achieved			
Niger	Limited services	50%	2030	Limited services	40%	2020	Population practicing OD	0%	2030
Nigeria	Limited services	100%	2030	Limited services	100%	2025	Population practicing OD	0%	2030/2025
Oman	Sewer connection, safely managed services	80%	2031	Basic services	61%	2045			
Pakistan	Safely managed services	62%	2030	Safely managed services	62%	2030	Other		

See category definitions at the bottom of page 94.

Note: ODF = open defecation free

See category definitions at the bottom of page 94.

NATIONAL WASH TARGETS

Sections 2.2 and 5.3 provide further information on the categorization of national WASH targets

Drinking-water targets						Hygiene targets		
Urban			Rural					
Category (percentage of population covered by)	Target value (percentage)	Year	Category (percentage of population covered by)	Target value (percentage)	Year	Category (percentage of population covered by)	Target value (percentage)	Year
Safely managed services	100%	2025	Limited services	100%	2025	Basic services	100%	2021
Safely managed services	100%	2021	Safely managed services	100%	2021			
Safely managed services	98%	2020	Safely managed services	92%	2020	Basic services	100%	2030
Safely managed services	100%	2025	Basic+ services	100%	2030	Basic services	100%	2030
Safely managed services	82%	2022	Safely managed services	100%	2030	Basic services	100%	2030
None			None			None		
Safely managed services	100%	2030	Safely managed services	100%	2030	None		
Basic+ services	99%	2022	Basic+ services	90%	2022	None		
Basic+ services	100%		Basic+ services	100%	2030	None		
Safely managed services	85%	2019	Safely managed services	85%	2019	None		
Safely managed services	100%	2022	Safely managed services	87%	2022	Other		2022
Safely managed services	100%	2030	Basic+ services	100%	2030	Other		2030
Other	95%	2025	Other	95%	2025	Other		2025
Safely managed services	84%	2022	Safely managed services	78%	2022	Basic services	90%	2020
Basic+ services	90%	2026	Other		2026	Other		2020
Basic+ services	90%	2030	Safely managed services	70%	2030	Basic services	97%	2030
Safely managed services	100%	2035	Other	100%	2035	Other		
			Basic+ services	69%	2020	Other		2020
						None		
Basic+ services	100%	2030	Basic+ services	100%	2030	Other		2030
Basic+ services	100%	2030	Safely managed services	100%	2030	Basic services	100%	2019
Basic services	100%	2030	Basic+ services	90%	2020	Basic services	100%	2030
Safely managed services	75%	2019	Basic+ services	75%	2019			
Safely managed services	100%	2030	Safely managed services	100%	2030	Basic services	80%	2015
Safely managed services	50%	2015	Safely managed services	50%	2015	Other		2015
Limited services	100%	2020	Limited services	61%	2020	Basic services	100%	2030
Basic services	97%	2018	Other	85%	2018	None		
Safely managed services	80%	2020						
Safely managed services	100%	2025	Safely managed services	100%	2025	None		
Safely managed services	100%		Safely managed services	99%	2021			
Safely managed services	100%	2030	Limited services	75%	2019	None		
Basic services	90%	2040	Basic+ services	100%	2030	Other		2030
Basic+ services	100%	2022	Basic+ services	95%	2022	None		
Basic services	92%	2019	Basic services	92%	2019	Basic services	84%	2019
Safely managed services	100%		Safely managed services	100%				
Safely managed services	100%		Basic+ services	100%	Achieved	Other		Achieved
Basic+ services	80%	2020	Safely managed services	25%	2020	Basic services	50%	2020
Safely managed services	100%	2030	Safely managed services	80%	2030	Basic services	45%	2025
Basic services	98%	2040	Safely managed services	98%	2040	Other		2020
Safely managed services	97%	2030	Safely managed services	97%	2030	Other		2024

See category definitions at the bottom of page 95.

See category definitions at the bottom of page 95.

NATIONAL WASH TARGETS

Sections 2.2 and 5.3 provide further information on the categorization of national WASH targets

COUNTRY OR TERRITORY	Sanitation targets						Open defecation (OD) targets		
	Urban			Rural					
	Category (percentage of population covered by)	Target value (percentage)	Year	Category (percentage of population covered by)	Target value (percentage)	Year	Category (percentage of)	Target value (urban/rural if applicable) (percentage)	Year (urban/rural if applicable)
Panama	Basic services	100%	2019	Basic services	100%	2019			
Papua New Guinea	Limited services	85%	2030	Limited services	70%	2030	Other		
Paraguay	Basic services	100%	2030	Basic services	100%	2030			
Peru	Basic services	100%	2021	Other	70%	2021			
Philippines	Basic services	100%	2028	Limited services	100%	2028	Population practicing OD	0%	2022
Sao Tome and Principe	Basic services	75%	2030	Limited services	80%	2030	Other		
Senegal	Basic services	70%	2020	Basic services	75%	2025	Population practicing OD	13%	2025
Serbia	Sewer connection, safely managed services	85%	2034	Sewer connection, safely managed services	85%	2034			
Seychelles	Basic services	99%	2030	Basic services	99%	2030	Population practicing OD	0%	2030
Solomon Islands	Limited services	100%	2035	Limited services	100%	2024	Population practicing OD	0%	2024
South Africa	Limited services	90%	2019	Limited services	90%	2019	Population practicing OD	0%	2030
South Sudan	Limited services	44%	2021	Limited services	15%	2021	Population practicing OD	46%	2021
Sri Lanka	Safely managed services	100%	2030				Population practicing OD	0%	2025
Sudan	Basic services	100%	2030	Basic services	100%	2030	Population practicing OD	0%	2022
Syrian Arab Republic	Basic services	80%	2025	Basic services	80%	2025			
Tajikistan	Limited services	90%	2025	Sewer connection, basic services	25%	2025			
Thailand	Basic services								
Timor-Leste	Limited services	100%	2030	Limited services	100%	2030	Other		
Togo	Basic services	46%	2022	Basic services		2022	Population practicing OD	5%	2030
Trinidad and Tobago	Limited services	100%		Limited services	100%		Other		
Tunisia	Sewer connection, safely managed services	91%	2020	Sewer connection, basic services	91%	2020			
Tuvalu							Other		
Uganda	Sewer connection, safely managed services	100%	2020	Basic services	95%	2020	Population practicing OD	0%	2030
Ukraine	Sewer connection, safely managed services	100%	2020	Sewer connection, safely managed services	50%	2020			
United Republic of Tanzania	Sewer connection, basic services	70%	2025	Limited services	85%	2025	Population practicing OD	0%	2019
Uzbekistan	Sewer connection, safely managed services		2021	Sewer connection, safely managed services		2021			
Vanuatu	Limited services	100%	2030						
Venezuela (Bolivarian Republic of)									
Viet Nam				Limited services	100%	2030	Population practicing OD	0%	2025
West Bank and Gaza Strip	Sewer connection, safely managed services	80%	2022	Sewer connection, safely managed services	80%	2022	Population practicing OD	0%	2022
Zambia	Limited services	90%	2030	Limited services	90%	2030	Population practicing OD	0%	2030
Zimbabwe	Sewer connection, limited services	100%	2030	Limited services	90%	2030	Population practicing OD	0%	2030

Safely managed services: Use of improved facilities that are not shared with other households and where excreta are safely disposed of in situ or transported and treated offsite.

Sewer connection, safely managed services: Connection to sewer network, with reference to treatment or treatment facilities within the target.

Basic services: Use of improved facilities that are not shared with other households.

Sewer connection, basic services: Connection to sewer network, with no reference to treatment or treatment facilities within the target.

Limited services: Use of improved facilities that may be shared between two or more households.

Sewer connection, limited services: Connection to sewer network, with facilities that may be shared between two or more households.

None: No national target for sanitation.

Other: Insufficient information to assess alignment of national target to JMP ladder.

Note: ODF = open defecation free

Population practicing OD: National target is monitored through the percentage of population practicing (or not practicing) OD.

Localities/villages ODF: National target is monitored through the percentage of localities, villages, peri-urban areas, informal settlements or authorities that are ODF.

Population in ODF localities: National target is monitored through the percentage of population living in ODF localities.

Other: A national target exists but specific details of the target were not reported.

Source: GLAAS 2018/2019 country survey.

NATIONAL WASH TARGETS

Sections 2.2 and 5.3 provide further information on the categorization of national WASH targets

Drinking-water targets						Hygiene targets		
Category (percentage of population covered by)	Target value (percentage)	Year	Category (percentage of population covered by)	Target value (percentage)	Year	Category (percentage of population covered by)	Target value (percentage)	Year
Urban			Rural					
Safely managed services	100%	2020	Safely managed services	100%	2020	None		
Safely managed services	95%	2030	Safely managed services	70%	2030	Basic services	100%	2030
Safely managed services	100%	2030	Safely managed services	100%	2030			
Safely managed services	100%	2021	Safely managed services	85%	2021	None		
Safely managed services	100%	2025	Safely managed services	100%	2025	None		
Basic services	90%	2030	Other	90%	2030	Other		2030
Basic services	98%	2025	Limited services	90%	2021	Basic services	57%	2021
Basic+ services	93%	2034	Basic+ services	93%	2034	Basic services	100%	2030
Basic+ services	99%	2030	Basic+ services	99%	2030	Basic services	100%	Achieved
Limited services	100%	2035	Basic+ services	97%	2024	Basic services	100%	2024
Safely managed services	90%	2019	Safely managed services	90%	2019	None		
Limited services	76%	2021	Limited services	64%	2021	Other		2021
Safely managed services	95%	2025	Limited services	100%	2030	Basic services	100%	2025
Basic+ services	100%	2030	Safely managed services	100%	2030	Basic services	100%	2030
Safely managed services	100%	2030	Safely managed services	98%	2030	None		
Basic+ services	97%	2025	Safely managed services	70%	2025	None		
Basic+ services	100%	2017	Limited services	100%	2021	None		
Basic+ services	100%	2030	Safely managed services	100%	2030			
Safely managed services	80%	2022	Safely managed services	80%	2022	Other		2022
Safely managed services	100%		Safely managed services	100%				
Basic+ services	100%		Basic+ services	97%	2020	Basic services	87%	2020
Other		2021				Basic services		2030
Safely managed services	100%	2020	Basic+ services	79%	2020	Basic services	90%	2030
Basic+ services	100%	2020	Basic+ services	70%	2020	None		
Basic+ services	85%	2020	Basic+ services	85%	2020	Basic services	75%	2021
Basic services	90%	2021	Basic services	90%	2021	None		
Other	100%	2030				None		
Safely managed services	95%	2025	Safely managed services	90%	2020	Other		2011
Safely managed services	95%	2022				Basic services	85%	2022
Safely managed services	100%	2030	Basic+ services	100%	2030	Basic services	40%	2021
Safely managed services	100%	2030	Limited services	85%	2030	Basic services	100%	2030

Safely managed services: Drinking water from an improved water source that is located on premises, available when needed and free from faecal and priority chemical contamination.

Basic+ services: Drinking water from an improved source, provided collection time is not more than 30 minutes for a round trip, including queuing, and at least one but not all of the following: water is accessible on premises OR water is available when needed OR water supplied is free from contamination.

Basic services: Drinking water from an improved source, provided collection time is not more than 30 minutes for a round trip, including queuing.

Limited services: Drinking water from an improved source for which collection time exceeds 30 minutes for a round trip, including queuing.

None: No national target for drinking-water.

Other: Insufficient information to assess alignment of national target to JMP ladder.

Basic services: Availability of a handwashing facility on premises with soap and water.

Other: Other types of hygiene targets (for example, targets for hygiene promotion activities or hygiene practices). Target values are not presented due to lack of comparability with other targets.

COUNTRY OR TERRITORY	MONITORING AND REGULATION					
	Progress towards national targets monitored through government-led process	Joint sector reviews conducted	Frequency of surveillance in practice compared to requirements			
			Drinking-water		Sanitation	
	National	National	Urban	Rural	Urban	Rural
Afghanistan	✘	✘	◔	◔	◔	○
Albania	✔	✔	◕	◔	○	○
Angola	✔	✔	○	○	◔	◔
Anguilla	✘	✘	○	○	○	○
Antigua and Barbuda			○	○		
Argentina	✔	✘	○	○	○	○
Austria						
Azerbaijan	✔	✔	●	●	●	●
Bangladesh	✔	✔	◔	○	○	○
Barbados	✘	✘	○	○		
Belarus	✔	✔	◕	◕	○	○
Belize	✔	✘	○	○	◔	○
Benin	✔	✔	◔	◔	○	○
Bhutan	✔	✔	●	●		
Bolivia (Plurinational State of)	✔	✔	◔	◔	○	○
Bosnia and Herzegovina	✔	✔	◔	○	◔	○
Botswana	✔	✔	◕	◕	◔	◔
Brazil	✔	✘	◔	◔	◔	○
British Virgin Islands	✘	✘	○	○	○	○
Burkina Faso	✔	✔	●	◔	◔	○
Burundi	✔	✔	○	○	○	○
Cambodia	✘	✘	○	○	○	○
Cameroon	✔	✘	◔	○	○	○
Central African Republic	✔	✔	○	○	○	○
Chad	✔	✔	◑	◑	◔	○
Chile	✘	✘	●	●	●	○
China	✔	✔	●	◑	●	
Colombia	✔	✔	◕	◔	◑	◑
Comoros	✘	✘	○	○	○	○
Congo	✔	✔	◔	○	○	○
Costa Rica		✘	◑	◑	◔	◔
Côte d'Ivoire	✘	✘	◔	○	○	○
Cuba	✔	✔	◕	◕	●	●
Democratic People's Republic of Korea						
Democratic Republic of the Congo	✘	✘	○	○	○	○
Dominican Republic	✔	✔	◕	◑	○	○
Ecuador	✘	✘	○	○	○	○
El Salvador	✔	✘	●	◔	◑	○
Eritrea	✔	✔	○	○	○	○
Eswatini	✔	✔	○	○	◑	◑
Ethiopia	✔	✔	◔	◔		
Fiji	✔	✔	◕	◕	●	◑
Gabon	✔	✘	◔	◔	◔	◔
Gambia	✔	✔	◕	◑	◔	○
Georgia	✔	✔	◑	◔	◕	○

✔ Yes
✘ No

✔ Yes
✘ No

● 100% of required frequency
◕ Between 75% and 100% of required frequency
◑ Between 50% and 75% of required frequency
◔ Less than 25% of required frequency
○ No frequency requirement

MONITORING AND REGULATION

Regulatory authorities publish publicly accessible reports on drinking-water quality		Regulatory authorities publish publicly accessible reports on treated wastewater flows and faecal sludge volumes		Use of performance indicator on water quality	Use of performance indicator on treated effluent quality	Use of a performance indicator on equitable service coverage	
Drinking-water		Sanitation					
Urban	Rural	Urban	Rural	National	National	Drinking-water	Sanitation
✔	✔	▲	▲	◑	○	◕	○
✘	✘	✘	✘	○	○	●	●
✘		✘	✘		◑		
▲		✘		○	○	○	○
▲	▲			◕		◕	
▲	▲	▲	✘	●	●	●	●
✔	✔	✔	✔	●	●	●	●
				●	◑	◑	◑
				○	◑	○	○
✔	✔	✔	✔	●	●	●	●
✘	✘	✘	✘	●	○		
▲	▲	✘	✘	●	◑	◑	○
✘	✘	✘	✘	●	◑	●	●
▲	✘	▲	▲	●	●		○
				◑	◑	○	○
				●	●	●	○
✘	✘	▲	✘	●	○	○	○
✘	✘	✘	✘	○	○	○	○
▲	✘	✘	✘	●	○	●	●
✘	✘	✘	✘	◑	◑	◑	◑
✘	✘	✘	✘	○	○	○	○
				●	○	●	●
✘	✘	✘	✘	◑	○	◑	◑
✔	▲	✘	✘	◑	◑	◑	◑
✔	✘	✔	✘	●	●	●	○
✔	▲	✔		●		●	
✔	▲	✔	▲	●		●	●
✘	✘	✘	✘	○	○	○	○
✘	✘	✘	✘	●	○	●	●
✔	✔	✔	▲	●	○	○	○
✔	✔	✔	✔	◕	◑	◕	○
✘	✘	✔	✔	●	●	●	●
✘	✘						
▲	▲	✘	✘		○	○	○
▲	▲	✘	✘	●	○	○	○
✘	✘	✘	✘	○	○	○	○
				●	○	○	○
▲	▲	✘	✘	◕	○	◕	●
✔	✔	✘	✘	●	●	●	○
✔	✔	▲	✘	●	○	●	◑
✘	✘	✘	✘	◑	◑	◑	◑
✘	✘	✘	✘	●	●	●	●
▲	▲	✘	✘	●	○	○	○
✔	▲	▲	✘	◑	◑	◑	◑

✔ Fully
▲ Partially
✘ Not published

✔ Fully
▲ Partially
✘ Not published

● Agreed and tracked against baseline data
◕ Agreed and baseline data established
◑ Being developed or agreed but not yet implemented
○ No indicator

COUNTRY OR TERRITORY	MONITORING AND REGULATION					
	Progress towards national targets monitored through government-led process	Joint sector reviews conducted	Frequency of surveillance in practice compared to requirements			
			Drinking-water		Sanitation	
	National	National	Urban	Rural	Urban	Rural
Ghana	✔	✔	◑	◔	○	○
Guinea	✔	✔	◑	◔	○	○
Guyana	✘	✘			○	○
Haiti	✘	✘			○	○
Honduras	✔	✔			○	○
Hungary	✔	✘	●	◕	●	●
Indonesia	✔	✔	◑	◔	◔	○
Iran (Islamic Republic of)	✔	✔	◕	◕	◑	◑
Jamaica	✔	✔	◕	◕	◕	◕
Jordan	✔	✔	◕	◕	◑	◑
Kenya	✔	✔	◔	◔	◔	◔
Kyrgyzstan	✘	✔	◕	◑	◕	◔
Lao People's Democratic Republic	✔	✔	◕	◑	◔	◔
Lebanon	✘	✔	◔	◔	○	○
Lesotho	✔	✔	◕	◑	◔	○
Liberia	✔	✔	○	○	◔	○
Lithuania	✔	✔	●	●	●	●
Madagascar	✔	✔	◑	◔	◔	◔
Malawi	✔	✔	◔	◔	◔	◔
Maldives	✘	✘	◑	◑	◑	◔
Mali	✔	✔	◕	◔	◔	◔
Marshall Islands	✔	✘				
Mauritania	✔	✔	◕	○		
Mexico	✔		◑	◔	◕	◔
Mongolia	✔	✘	◕	◕	◕	○
Montenegro	✔	✔	◑	◔	◕	○
Morocco	✔	✔	◕	◑	○	○
Mozambique	✔	✔	◔	◔	○	○
Myanmar	✔	✔	◔	◔	○	○
Namibia	✔	✔	◑	◑	◑	◑
Nauru	✘	✘				
Nepal	✔	✔	◔	◔	○	○
Netherlands	✔		●	●	●	●
New Zealand	✔	✘	◕	◕	●	●
Niger	✔	✔	●	○	○	○
Nigeria	✔	✔	◔	◔	◔	◔
Oman	✔	✔	○	○	◕	◕
Pakistan	✔	✔	◔	◔	○	○
Panama	✘	✘	○	○	○	○
Papua New Guinea	✘	✘		◔	○	○
Paraguay	✘	✔	○	○	●	
Peru	✔	✘	◑	◑		
Philippines		✔	◕	◔	◕	○
Sao Tome and Principe		✔				
Senegal	✔	✔	●	●	◔	◔

✔ Yes
✘ No

✔ Yes
✘ No

● 100% of required frequency
◕ Between 75% and 100% of required frequency
◑ Between 50% and 75% of required frequency
◔ Less than 25% of required frequency
○ No frequency requirement

MONITORING AND REGULATION

Regulatory authorities publish publicly accessible reports on drinking-water quality		Regulatory authorities publish publicly accessible reports on treated wastewater flows and faecal sludge volumes		Use of performance indicator on water quality	Use of performance indicator on treated effluent quality	Use of a performance indicator on equitable service coverage	
Drinking-water		Sanitation					
Urban	Rural	Urban	Rural	National	National	Drinking-water	Sanitation
✘	✘	▲	▲	●	○	○	◐
▲	▲	✘	✘	●	○	◕	◐
✘	✘	✘	✘	○	○	○	○
✘	✘	✘	✘	●	◑	○	○
▲	▲	✘	✘	●	●	●	●
✔	✔	✔	✔	●	●	●	●
✘	✘	✘	✘	●	◕	○	◐
▲	▲	▲	▲	●	◕	●	○
✘	✘	✘	✘	●	●	●	●
▲	▲	✔	✔	●	●	●	◕
✔	▲	✘		◐	◐	○	◕
✘	✘	✘	✘	●	○	○	○
✔	▲	✔	✘	●	○	○	○
✘	✘	✘	✘	●	◕	●	○
✘	✘	✘	✘	●	●	◕	○
✘	✘	✘	✘	◐	◐	◐	◐
✔	▲	✔	✔	●	●	○	●
▲	▲	▲	✘	◕	◕	●	◕
✘	✘			●	○	●	○
✘	✘	✘	✘	◕	○	●	●
✔	▲	▲	▲	●	◑	●	◕
▲	✘	✘	✘	○	○	○	○
✘	▲			●	○	◕	○
		✔	✔	○	●	○	○
▲	▲	✘	✘	●	●	●	●
✔	✘	▲	✘	●	○	○	○
✔	✔	✔	▲	●	◕	●	○
✔	▲	✔	✘	●	◕	◕	◕
▲	✘	▲	✘	◐	○	○	○
✔	✔	▲	▲	●	●	●	●
✘	✘	✘	✘				
▲	▲	✘	✘	◕	◑	◑	○
✔	▲	✔	✔	●	●	●	○
✔	✔	✘	✘	●	●	●	○
✔	✔	✘	✘	●	○	○	●
▲	▲	▲	▲	●	◑	●	◑
▲	▲	✔	✔	●	●	●	●
				◕		●	●
✘	✘	✘	✘	●	●	○	○
✔	✔	✔	✔	○	○	○	○
✔	✔	✘	✘	●	◑	●	◑
▲	▲	▲	✘	●		●	
▲	✘	✘	✘	◑	◑	◑	◑
				◕	○	◕	◑
✘	✘	▲	▲	●	●	○	○

✔ Fully
▲ Partially
✘ Not published

✔ Fully
▲ Partially
✘ Not published

● Agreed and tracked against baseline data
◕ Agreed and baseline data established
◑ Being developed or agreed but not yet implemented
○ No indicator

COUNTRY OR TERRITORY	MONITORING AND REGULATION					
	Progress towards national targets monitored through government-led process	Joint sector reviews conducted	Frequency of surveillance in practice compared to requirements			
			Drinking-water		Sanitation	
	National	National	Urban	Rural	Urban	Rural
Serbia	✔	✔	●	◑	◕	◔
Seychelles	✔	✘	◕	◕	◔	◔
Solomon Islands	✔	✘		○		○
South Africa	✘	✘	○	○	○	○
South Sudan	✔	✔	◔	◕	○	○
Sri Lanka	✔	✘	○	◔	◑	○
Sudan	✔	✔	◑	○	○	○
Syrian Arab Republic	✔	✔	◑	◔	◑	◑
Tajikistan	✔	✔	○	○	◔	◔
Thailand	✘	✔	○	○	◑	◔
Timor-Leste	✔	✔	○	○	◔	◔
Togo	✘	✔				
Trinidad and Tobago	✔	✘	○	○	◑	◑
Tunisia	✔	✔	◕	◕	●	◔
Tuvalu	✔	✘	◔	◔	◔	◔
Uganda	✔	✔	○	○	○	○
Ukraine	✔	✔	◔	○	○	○
United Republic of Tanzania	✔	✔	○	○	◑	○
Uzbekistan	✔	✔	◕		◑	
Vanuatu		✘	○	○		
Venezuela (Bolivarian Republic of)		✔	◕	◑	○	○
Viet Nam	✔	✘	◑	◔	○	○
West Bank and Gaza Strip	✔	✔	◕	◑	○	○
Zambia	✔	✔	◕	◑	◕	◔
Zimbabwe	✔	✔	◑	◑	◕	◕
	✔ Yes ✘ No	✔ Yes ✘ No	● 100% of required frequency ◕ Between 75% and 100% of required frequency ◑ Between 50% and 75% of required frequency ◔ Less than 25% of required frequency ○ No frequency requirement			

Source: GLAAS 2018/2019 country survey.

MONITORING AND REGULATION

Regulatory authorities publish publicly accessible reports on drinking-water quality		Regulatory authorities publish publicly accessible reports on treated wastewater flows and faecal sludge volumes		Use of performance indicator on water quality	Use of performance indicator on treated effluent quality	Use of a performance indicator on equitable service coverage	
Drinking-water		Sanitation					
Urban	Rural	Urban	Rural	National	National	Drinking-water	Sanitation
✔	✔	✔	✘	●	●	○	○
✘	✘	✘		●	●	○	○
✔	✘	✔	✘	○	○	○	○
✔	✔	✘	✘	●	●	●	●
✘	✘	✘	✘	◕	○	●	○
✔	▲	✘	✘	●	◕	●	◑
✔	✔	✘	✘	●	○	○	○
▲	▲	✔	▲	●			
✘	✘	✘	✘	●	○	●	●
▲	▲	▲	▲	◕	○	○	○
▲	▲			◕	◑	◕	◕
✘	✘	✘	✘	◑		◑	
✘	✘	▲	▲	●	◑	○	◑
▲	▲	✔	✔	●	◕	●	○
✘	✘	✘	✘	●	○	○	○
✘	✘	✘	✘	●	●	○	○
▲	▲	▲	✘	●	●	●	○
✔		✘		●	●	●	●
▲	▲	✘	✘	●	◑	○	○
		✘			○		○
✘	✘	✘	✘				
✘	▲	✘	✘	◑	◑	◑	◑
✔	▲	✘	✘	●	◕	●	●
✔	✘	✔	✘	●	●	○	○
		✔	✔	●	●	●	●

✔ Fully
▲ Partially
✘ Not published

✔ Fully
▲ Partially
✘ Not published

● Agreed and tracked against baseline data
◕ Agreed and baseline data established
◑ Being developed or agreed but not yet implemented
○ No indicator

VULNERABLE POPULATIONS

COUNTRY OR TERRITORY	Recognition of human rights to water and sanitation in constitution		Measures to reach poor populations exist in national policies and plans		Existence and use of affordability schemes	
	Drinking-water	Sanitation	Drinking-water	Sanitation	Drinking-water	
	National	National	National	National	Urban	Rural
Afghanistan	✘	✘	✔	NA	✘	✘
Albania	✔	✔	✔	✔	▲	▲
Angola	✔	✔		✔	✔	✔
Anguilla	✘	✘	✘	✘	✘	✘
Antigua and Barbuda	✘		NA			
Argentina	✔	✔	✔	✔	✔	✘
Austria						
Azerbaijan	✔	✔	✔	✔	▲	▲
Bangladesh	✔	✔	✔	✔	▲	✔
Barbados	✘	✘	✘	✘		
Belarus	✔		✔	✔	▲	▲
Belize	✔	✔	✔	✔	✔	▲
Benin	✔	✔	✔	✔	▲	▲
Bhutan	✘	✘	✔	✔	✔	✔
Bolivia (Plurinational State of)	✔	✔	✘	✘	✔	▲
Bosnia and Herzegovina	✔	✘	✔	✘	✘	✘
Botswana	✔	✔	✔	✔	▲	▲
Brazil	✘	✘	✔	✔	▲	▲
British Virgin Islands	✘	✘	NA	NA	✘	✘
Burkina Faso	✔	✔	✔	✔	✔	▲
Burundi	✔	✔	✔	✔	▲	▲
Cambodia	✘	✘	✔	✘	✔	✘
Cameroon	✔	✔	✔	✔	✘	✘
Central African Republic	✔	✔	✔	✔	✔	✔
Chad	✔	✔	✔	NA	✔	✔
Chile	✘	✘	✔	✔	✘	✔
China	✔		✔		✔	✔
Colombia	✘	✘	✔	✔	✔	✔
Comoros	✔	✔	✘	✘	✘	✘
Congo	✘	✔	✔	✔	▲	▲
Costa Rica	✘	✘	✔	✔	✔	✔
Côte d'Ivoire	✔	✔	✔	✔	✔	✔
Cuba	✘	✘	✘	✘		
Democratic People's Republic of Korea	✔	✔				
Democratic Republic of the Congo	✔	✔	✔	✔	▲	▲
Dominican Republic	✔	✔	✔	✔	✘	✘
Ecuador	✔	✘	✔	✔	✘	✘
El Salvador	✘	✘	✔	✔	✘	✘
Eritrea	✔	✔	✔	✔	▲	✔
Eswatini	✔	✔	✔	✔	▲	✔
Ethiopia	✔	✔	✔	✔	▲	▲
Fiji	✔				✔	✔
Gabon	✘	✘	✔	✔	✔	✘
Gambia	✘	✘	✔	✔	✘	✘
Georgia	✔	✔	✔	✔		

✔ Yes
✘ No

✔ Yes
✘ No
NA Not applicable

✔ Exist and widely used
▲ Exist but not widely used
✘ Do not exist

VULNERABLE POPULATIONS

Existence and use of affordability schemes		Community participation procedures defined in law or policy (SDG 6.b)					
Sanitation		Drinking-water		Sanitation		Hygiene	Water resources management
Urban	Rural	Urban	Rural	Urban	Rural	National	National
✘	✘	✔	✔	✔	✔	✔	✘
▲	▲	✔	✔	✔	✔	✔	✔
✔	✔			✔			✔
✘	✘	✘	✘	✘	✘	✘	✘
		✔	✔				✘
✔	✘	✔	✘	✔	✘	✘	✔
		✔	✔	✔	✔		✔
▲	▲	✔	✔	✔	✔	✔	✔
▲	✔	✔	✔	✔	✔	✔	✔
		✘	✘	✔	✔	✘	✔
▲	▲	✔	✔	✔	✔	✔	✔
✔	▲	✔	✔	✔	✔	✔	✔
▲	✘	✔	✔	✔	✔	✔	✔
▲	▲	✔	✔	✔	✔	✔	✔
▲	▲	✔	✔	✔	✔	✔	✔
✘	✘	✔	✔	✔	✔	✔	✔
▲	▲	✘	✘	✘	✘	✘	✘
▲	▲	✔	✔	✔	✔	✘	✔
✘	✘	✘	✘	✘	✘	✘	✘
✔	✔	✔	✔	✔	✔	✔	✔
▲	▲	✔	✔	✔	✔	✔	✔
✘	✘	✘	✔	✘	✔	✘	✘
✘	✘	✘	✘	✘	✘	✘	✘
▲	▲	✔	✔	✔	✔	✔	✔
▲	▲	✔	✔	✔	✔	✔	✔
✘	✔	✔	✔	✔	✘	✘	✘
		✔	✔				
✔	✔	✔	✔	✔	✔	✘	✔
✘	✘	✘	✘	✘	✘	✘	✘
▲	▲	✔	✔	✔	✔	✔	✔
✔	✔	✔	✔	✔	✔	✘	✔
▲	✘	✔	✔	✔	✔	✘	✔
		✔	✔	✔	✔	✔	✔
		✔	✔	✔	✔	✔	
▲	▲	✔	✔	✔	✔	✔	✔
✘	✘	✔	✔	✔	✔	✔	✔
✘	✘	✔	✔	✔	✔	✔	✔
✘	✘	✔	✔	✔	✔	✔	
▲	▲	✔	✔	✘	✔	✔	✔
✘	✔	✔	✔	✔	✔	✔	✔
▲	▲	✔	✔	✔	✔	✔	✔
✘	✘	✘	✔	✘	✔	✔	✘
✘	✘	✔	✔	✔	✔	✔	✔
✘	✘	✔	✔	✔	✔	✔	✔
		✔	✔	✔	✔	✔	✔

✔ Exist and widely used
▲ Exist but not widely used
✘ Do not exist

✔ Yes
✘ No

COUNTRY OR TERRITORY	VULNERABLE POPULATIONS					
	Recognition of human rights to water and sanitation in constitution		Measures to reach poor populations exist in national policies and plans		Existence and use of affordability schemes	
	Drinking-water	Sanitation	Drinking-water	Sanitation	Drinking-water	
	National	National	National	National	Urban	Rural
Ghana	✘	✘	✔	✔	✔	▲
Guinea	✔	✔	✔	✔	✔	✔
Guyana	✘	✘	✘	✘		
Haiti	✘	✘	✘	✘	▲	✔
Honduras	✔	✔	✔	✔	✘	✘
Hungary	✔	✔	✔	✔	▲	▲
Indonesia	✔	✔	✔	✔	✔	✘
Iran (Islamic Republic of)	✔	✔	✔	✔	✔	✔
Jamaica	✔	✔	✔	✔	▲	▲
Jordan	✔	✘	NA	NA	✘	✘
Kenya	✔	✔	✔	✔	▲	▲
Kyrgyzstan	✔	✔	NA	NA	✘	✘
Lao People's Democratic Republic	✔	✘	✔	✔	✔	▲
Lebanon	✔	✔	✘	✘	✘	✘
Lesotho	✘	✘	✔	✔	✘	▲
Liberia	✘	✘	✔	✔	▲	▲
Lithuania	✔	✔	✔	✔	✔	✔
Madagascar	✘	✘	✔	✔	▲	▲
Malawi	✘	✘	✔	✘	✘	✘
Maldives	✔	✔	NA	NA	✘	✘
Mali	✘	✔	✔	✔	✔	✔
Marshall Islands	✔	✔	✔	✔		
Mauritania	✘	✘	✔	✔	✔	✔
Mexico	✔	✔	✔	✔	✘	✘
Mongolia	✔	✔	✘	✘	✘	✘
Montenegro	✔	✔			✔	▲
Morocco	✔	✔	✔	✔	✔	✔
Mozambique	✘	✘	✔	✔	✔	▲
Myanmar	✘	✘	✘	✔	▲	▲
Namibia	✘	✘	✔	✔		
Nauru	✘	✘	NA	NA	✘	✘
Nepal	✔	✔	✔	✔	▲	▲
Netherlands	✔	✔	✔	NA	✘	✘
New Zealand	✘	✘	NA	NA	✔	✔
Niger	✔	✔	✔	✔	▲	▲
Nigeria	✘	✘	✔	✔	✘	▲
Oman	✔	✔	NA	NA	✘	✘
Pakistan	✔	✔	✔	✔	✘	✘
Panama	✘	✘	✔	✔	✘	✘
Papua New Guinea	✔	✔	✘	✘	▲	✘
Paraguay	✘	✘	✘	✔	✔	✔
Peru	✔	✔	✘	✔	▲	✘
Philippines	✔	✔	✔	✔	▲	▲
Sao Tome and Principe	✔	✔	✔	✔		
Senegal	✘	✘	✔	✔	✔	✔
Serbia	✔	✔	✔	✔	✔	▲

✔ Yes
✘ No

✔ Yes
✘ No
NA Not applicable

✔ Exist and widely used
▲ Exist but not widely used
✘ Do not exist

VULNERABLE POPULATIONS

Existence and use of affordability schemes		Community participation procedures defined in law or policy (SDG 6.b)					
Sanitation		Drinking-water		Sanitation		Hygiene	Water resources management
Urban	Rural	Urban	Rural	Urban	Rural	National	National
▲	▲	✔	✔	✔	✔	✔	✔
✔	✔	✔	✔	✔	✔	✔	✔
▲	▲	✘	✘	✘	✘	✘	✘
		✘	✘	✘	✘		
✘	✘	✔	✔	✔	✔	✔	✔
▲	▲	✔	✔	✔	✔	✘	✔
✘	✘	✔	✔	✔	✔	✔	✔
✔	✔	✔	✔	✔	✔	✔	✔
▲	▲	✘	✔	✔	✔	✘	✔
✘	✘	✔	✔	✔	✔	✔	✔
▲	▲	✔	✔	✔	✔	✔	✔
✘	✘	✘	✘	✘	✘	✘	✘
✔	▲	✔	✔	✔	✔	✔	✔
✘	✘	✘	✘	✔	✔	✘	✔
✘	✘	✔	✔	✔	✔	✔	✔
▲	▲	✔	✔	✔	✔	✔	✔
✔	✔	✔	✔	✔	✔	✔	✔
▲	▲	✔	✔	✔	✔	✔	✔
✘	✘	✔	✔	✔	✔	✔	✔
✘	✘	✔	✔	✔	✔	✔	✔
✘	✘	✔	✔	✔	✔	✔	✔
		✔	✔	✔	✔	✔	✔
✘	✘	✔	✔	✔	✔	✔	✔
✘	✘	✔	✔	✔	✔	✔	✔
✘	✘	✔	✔	✔	✔	✔	✔
✔	▲	✔	✘	✔	✘	✔	✔
✔		✔	✔	✔	✔	✔	✔
✔	▲	✔	✔	✔	✔	✔	✔
▲	▲	✔	✔	✔	✔	✔	✔
✘	✘						
▲	▲	✔	✔	✔	✔	✔	✔
✘	✘	✔	✔	✔	✔	✔	✔
✔	✔	✔	✔	✔	✔	✔	✔
▲	▲	✔	✔	✔	✔	✔	✔
✘	▲	✔	✔	✘	✔	✔	✔
✘	✘	✔	✔	✔	✔	✔	✔
✘	✘	✔	✔	✔	✔	✔	✔
✘	✘	✔	✔	✔	✔	✔	✔
▲	✘	✔	✘	✔	✘	✘	✘
✔	✔	✔	✔	✔	✔	✔	✔
▲	✘	✔	✔	✔	✔	✔	✔
▲	▲	✔	✔	✔	✔	✔	✔
✔	✔	✘	✘	✘	✘	✘	✘
✔	▲	✔	✔	✔	✔	✔	✔

✔ Exist and widely used
▲ Exist but not widely used
✘ Do not exist

✔ Yes
✘ No

COUNTRY OR TERRITORY	VULNERABLE POPULATIONS					
	Recognition of human rights to water and sanitation in constitution		Measures to reach poor populations exist in national policies and plans		Existence and use of affordability schemes	
	Drinking-water	Sanitation	Drinking-water	Sanitation	Drinking-water	
	National	National	National	National	Urban	Rural
Seychelles	✔	✔	✘	✘	✔	✔
Solomon Islands	✘	✘	✘	✘		✘
South Africa	✔	✔	✔	✔	✔	✔
South Sudan	✔	✔	✔	✔	▲	▲
Sri Lanka	✘	✘	✔	✔	✔	✔
Sudan	✔	✔	✔	✔	▲	▲
Syrian Arab Republic	✔	✔	✔	✔	✔	
Tajikistan	✔	✔	✔	✘	✘	✘
Thailand	✔	✔	✔	✔	✔	▲
Timor-Leste	✔	✔	✔	✘	▲	✔
Togo	✘	✘	✔	✔		
Trinidad and Tobago	✘	✘	✔	✔	▲	▲
Tunisia	✔	✔	✔	✔	✔	✔
Tuvalu	✔	✔	NA	NA	✘	✘
Uganda	✔	✔	✔	✔	✔	✔
Ukraine	✔	✘	✘	✘	✔	✘
United Republic of Tanzania	✔	✔	✔	✔	▲	▲
Uzbekistan	✔	✔	NA	NA		
Vanuatu	✔	✔		✘		
Venezuela (Bolivarian Republic of)	✔			✔		
Viet Nam		✔	✔	✔		
West Bank and Gaza Strip	✔	✔	NA	NA	▲	▲
Zambia	✘	✘	✔	✔	▲	▲
Zimbabwe	✔	✔	✔	✔	✘	✘

✔ Yes
✘ No

✔ Yes
✘ No
NA Not applicable

✔ Exist and widely used
▲ Exist but not widely used
✘ Do not exist

Source: GLAAS 2018/2019 country survey.

VULNERABLE POPULATIONS

Existence and use of affordability schemes		Community participation procedures defined in law or policy (SDG 6.b)					
Sanitation		Drinking-water		Sanitation		Hygiene	Water resources management
Urban	Rural	Urban	Rural	Urban	Rural	National	National
✔	✔	✘	✘	✘	✘	✘	✘
	✘	✔	✔	✔	✔	✘	✘
✔	✔	✔	✔	✔	✔	✔	✘
▲	▲	✔	✔	✔	✔	✔	✔
✔	✔	✔	✔	✔	✔	✔	✘
▲	▲	✔	✔	✔	✔	✔	✔
		✔	✔	✔	✔	✔	✘
✘	✘	✔	✔	✔	✔	✔	✔
✔	▲	✔	✔	✔	✔	✔	✔
▲	▲	✔	✔	✔	✔	✔	
✘	✘	✔	✔	✔	✔	✔	✔
✔	✔		✔			✔	
✘	✘	✔	✔	✔	✔	✔	✔
▲	▲	✔	✔	✔	✔	✔	✔
▲	✘	✔	✔	✔	✔	✔	✔
▲	▲	✔	✔	✔	✔	✔	✔
		✘	✘	✘	✘	✔	✔
		✔	✔	✔	✔	✔	✔
			✔		✔		✔
✘	✘	✔	✔	✔	✔	✘	✔
▲	▲	✔	✔	✔	✔	✔	✔
✘	✘	✔	✔	✔	✔	✔	✔

✔ Exist and widely used
▲ Exist but not widely used
✘ Do not exist

✔ Yes
✘ No

FINANCE

COUNTRY OR TERRITORY	Existence of financing plan					Funding gap to reach national targets			Government WASH budget (US$ millions, constant 2017 US$)	
	Drinking-water		Sanitation		Hygiene	Annual need (US$ millions, constant 2017 US$)	Available (US$ millions, constant 2017 US$)	Funding gap	National	
	Urban	Rural	Urban	Rural	National	National	National	National	Year	Budget
Afghanistan	◑	◑	◑	◑	◑	140	24	83%	2018	49.0
Albania	●	●	●	●	●				2017	120.4
Angola			◕	◕	◕					
Anguilla	○	○	○	○	○					
Antigua and Barbuda										
Argentina	◕	○	◕	○	○				2017	1 119.3
Austria										
Azerbaijan	●	●	●	●	●		11.2		2018	14.1
Bangladesh	◕	◕	◑	◕	◔	1 309	800.4	39%	2017	800.2
Barbados										
Belarus	●	●	●	●	●					
Belize	◕	●	◕	◑	◑					
Benin	●	●	◔	◑	◑					
Bhutan	●	●	●	●	●				2018	16.4
Bolivia (Plurinational State of)	◕	◑	◕	◑	◑				2017	176.9
Bosnia and Herzegovina	◑	◑	◕	◑	◔				2017	19.0
Botswana	◑	◑	◑	◑	◑				2018	339.2
Brazil	◕	◕	◕	◕	○				2016	2 124.6
British Virgin Islands	○	○	○	○	○					
Burkina Faso	●	●	●	●	○	229.9	122.1	47%	2018	120.8
Burundi	◑	◑	◑	◑	◑	16.8	5.1	70%	2019	5.2
Cambodia	◔	◑	◔	◑	◑				2018	
Cameroon	○	○	○	○	○					
Central African Republic	◑	◑	◑	◑	◑				2018	
Chad	◕	◑	◑	◑	◑				2018	
Chile	●	◑	●	◔					2018	16.0
China	●	●							2018	1 131.6
Colombia	●	●	●	●	○	1 927.2			2019	144.6
Comoros	◑	◑	◑	◑	○					
Congo	◑	◑	◑	◑	◑				2018	7.9
Costa Rica	●	◑	◕	◕		654.2	75.1	89%	2018	387.2
Côte d'Ivoire	●	●	◕	○	◔	27.4	0.9	97%	2019	165.8
Cuba	◑	◑	◑	◑	◕	300.2	224	25%	2018	
Democratic People's Republic of Korea										
Democratic Republic of the Congo	○	○	○	○	○				2017	12.4
Dominican Republic	○	○	○	○	○				2018	262.0
Ecuador	◑	◑	◑	◑		733	388	47%		
El Salvador	◔	◔	◔	◔					2018	292.2
Eritrea	◑	◑	◔	◑	◔					
Eswatini	○	○	○	○	○				2019	12.1
Ethiopia	●	●	●	●	●				2018	112.4
Fiji	○	○	○	○	○				2019	119.2
Gabon	◕	◕	◕	◕	◕				2018	20.4

● Agreed and consistently used in decisions
◕ Agreed and used for some decisions
◑ Agreed but insufficiently implemented
◔ In development
○ No financing plan

FINANCE

Annual WASH expenditure (US$ millions, constant 2017 US$)										Non-revenue water[1] (percentage)
National		By source of funding				By subsector				
Year	Expenditure	Households	Government	External	Repayable	Drinking-water	Sanitation	Hygiene	Other	National
2018			38.0							
2017	120.4	6.6	76.0		37.8	108.1	12.2	0.1		72%
2018										
										48%
2017	3 746.7	2 490.6	783.7		472.4					
2017	475.8	93.2	191.3		170.8					31%
2017	1 157.9	385.0	336.8	436.1		833.1	217.0	107.7		15%
2018										
2017	66.9		34.0	32.9		63.0	3.9			20%
2018	17.1	3.5	6.6	6.9		7.7	6.1	0.2	3.1	
2017	242.3		242.3			140.1	39.6		62.6	27%
2017	159.8	99.6	19.0	41.3						50%
2018	524.9		339.2		14.1	426.3	98.5	0.1		28%
2016	18 502	15 910.1	1 706	0.3	885.3	11 445.9	5 808.7		1 119.1	
2015	265.1	185.1	13.9	53.1	13.0	154.5	8.9	88.1	3.8	
										35%
2018				67.8	37.0					
										32%
2018			8 469.6							15%
2018	3 571.3	3 027.5	516.8	26.8		1 796.8	1 231	402.9		41%
										60%
2018										
2017	402.1	323.5	2.6	12.6	63.3	33.6	68.4			44%
2017	248.8									
2018	276.1	245.3		0.5	30.3				276.1	45%
2018										50%
2017										
										30%
2018	20.4		15.1		5.3	19.8	0.5	0.1		

COUNTRY OR TERRITORY	FINANCE									
	Existence of financing plan					Funding gap to reach national targets			Government WASH budget (US$ millions, constant 2017 US$)	
	Drinking-water		Sanitation		Hygiene	Annual need (US$ millions, constant 2017 US$)	Available (US$ millions, constant 2017 US$)	Funding gap	National	
	Urban	Rural	Urban	Rural	National	National	National	National	Year	Budget
Gambia	◕	◕	◕	◕	◕	7.8				
Georgia	◕	◕	◕	◕	◕				2017	120.5
Ghana	◕	◑	◔	◔	◔	1 202.7	303.5	75%	2018	
Guinea	◑	◑	◑	◑	◑	41.2	62.3	0%	2017	37.7
Guyana	○	○	○	○	○				2018	
Haiti	◕	◕	◕	◕		141.3	52	63%	2015	
Honduras	◔	◔	◔	◔	◔	155.4			2017	44.6
Hungary	●	●	●	◔	○					
Indonesia	◔	◔	◔	◔	○				2018	704.1
Iran (Islamic Republic of)	●	●	●	●	●				2019	
Jamaica	●	●	●	●	○				2018	
Jordan	●	●	●	●	●				2018	547.0
Kenya	◑	◑	◑	◑	○				2018	
Kyrgyzstan	●	●	○	○	◔				2017	2.3
Lao People's Democratic Republic	●	◑	◕	◑	◑	185.2			2018	1.5
Lebanon	◑	◑	◑	◑	○	1 113	355	68%	2018	624.1
Lesotho	◑	◑	◑	◑	○				2019	
Liberia	◑	◑	◑	◑	◑				2018	1.5
Lithuania										
Madagascar	◑	◑	◑	◑	◑	169.3	23	86%	2018	
Malawi	○	○	○	○	○				2017	16.4
Maldives	◕	◕	◕	◕	◕				2017	39.1
Mali	●	●	●	●	●		242.4		2017	260.1
Marshall Islands										
Mauritania	●	●	●	●	●	114.4	116.6	0%	2017	98.8
Mexico	●	●	●	●					2015	
Mongolia	◔	◔	◑	◑	◔	0.2	0.2	0%	2019	
Montenegro	◕	◕	◕	○	◕				2018	10.1
Morocco	●	●	●	◔	●					
Mozambique	●	●	●	●	●	3 203.5			2017	
Myanmar	◕	◕	◑	◑	◑				2019	
Namibia	●	◕	◕	◕						
Nauru	◔	◔	◔	◔	◔					
Nepal	◑	◑	◑	◑	○				2019	346.0
Netherlands	●	●	●	●	◔					
New Zealand	○	○	○	○	○					
Niger	◑	◑	◑	◑	◑				2018	91.4
Nigeria	◑	◑	◑	◑	◑				2018	55.7
Oman	●	●	●	●	◔				2018	
Pakistan	◔	◔	◔	◔	○				2018	973.4
Panama	○	○	○	○	○				2018	630.6
Papua New Guinea	○	○	○	○	○				2015	9.5

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○ No financing plan

FINANCE

Annual WASH expenditure (US$ millions, constant 2017 US$)										Non-revenue water[1] (percentage)
National		By source of funding				By subsector				
Year	Expenditure	Households	Government	External	Repayable	Drinking-water	Sanitation	Hygiene	Other	National
2018	7.8		0.2	7.6						
2017	120.5		56.2	7.4	56.9	120.5	<0.1	<0.1		
2016						286.7				53%
2017	132.3		21.7	66.3	44.2	69.6	14.4	48.3		
2017										40%
2016	51.6	5.6	6.6	39.5						
2017	50.7		44.2	2.0	4.5				50.7	46%
2017	1 161.7	935.4	21.9			541.5	620.2			26%
2017	768.1	4.1	764.0			587.6	180.6			34%
2018	3 776.9		1 829.3		1 094.4	1 734.2	1 258	784.7		18%
2017	264.6	181.4	2.4		80.9					73%
2018	584.5			459.2	126.8	502.8	81.7			48%
2016	427.3	197.6	92.9	33.6	103.2	382.1	38.7		6.4	42%
2017	96.7	83.6	2.3	7.3	3.5	41.7	4.0	51.0		
2018										32%
2018	929.0	400.0	174.0	355.0						48%
2018	59.3	17.4	33.4	62.2	0.5					
2018										
										14%
2017	22.9	9.5	3.6	9.8		16.0	6.9			
2018	42.1	9.2	19.8	0.5	12.6					37%
2017	162.7		39.1	123.7						
2015	248.0	192.5	16.6	37.8	1.1	80.3	6.6	145.1	16.1	24%
2017	99.4	1.5	15.0	25.2	57.7	84.5	14.9			54%
										37%
2017			60.7							
										26%
2017	170.4	40.0	5.0	57.4	68.0					44%
										51%
2019	581.4	46.0	346.0	48.8	140.7	302.7	73.9	1.7		38%
2016	5 219	4 638.3	580.8	0.0	0.0	1 510	3 709.1			6%
2018	70.4		5.2	24.1	41.2	60.1	10.3			
2018	354.0		354.3	38.3		46.8	8.9			55%
2017	1 133.7	331.7	683.0	40.4	78.4					55%
										32%
										42%

COUNTRY OR TERRITORY	FINANCE									
	Existence of financing plan					Funding gap to reach national targets			Government WASH budget (US$ millions, constant 2017 US$)	
	Drinking-water		Sanitation		Hygiene	Annual need (US$ millions, constant 2017 US$)	Available (US$ millions, constant 2017 US$)	Funding gap	National	
	Urban	Rural	Urban	Rural	National	National	National	National	Year	Budget
Paraguay	●	●	●	◑	○	170			2018	241.2
Peru	◑	◑	◑	◑	◑	65.8			2018	2 478.2
Philippines	◑	◑	◑	◑	◑				2016	3.4
Sao Tome and Principe									2018	1.8
Senegal	●	●	●	●	●	818.1	278.4	66%	2018	1 163
Serbia	◕	◕	◕	◕	◕				2018	116.9
Seychelles	●	●	●	●	○					
Solomon Islands	○	○	○	○	○				2019	
South Africa	●	◕	●	◕	◕				2019	2 929.4
South Sudan	◕	◕	◕	◕	◕	380			2019	1.0
Sri Lanka	●	○	◔	○	◑		184.3		2018	381.8
Sudan	◑	◑	◑	◑	◑				2019	
Syrian Arab Republic	◑	◑	◕	◕	◕					
Tajikistan	●	●	●	●	●					
Thailand	●	●	●	●	●				2018	175.4
Timor-Leste	◑	◑	◑	◑	◑					
Togo	◑	◑	◑	◑	◑	146.7	9.4	94%	2017	31.6
Trinidad and Tobago	○	○	○	○	○					
Tunisia		●	◕						2017	199.7
Tuvalu	●	●	●	●	●				2018	
Uganda	●	●	●	●	●				2018	200.9
Ukraine	◑	○	○	○	○					
United Republic of Tanzania	●	●	●	●	●	237	154.2	35%	2018	
Uzbekistan	●	●	●	●	○				2018	
Vanuatu			○	○	○				2018	0.1
Venezuela (Bolivarian Republic of)										
Viet Nam	○				◑	150	50	67%		
West Bank and Gaza Strip	◑	◑	◑	◑	○	15	8	47%	2019	
Zambia	◑	◑	◑	◑	◑				2019	91.1
Zimbabwe	◕	◕	◕	◕	◕				2018	35.7

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[1] Average non-revenue water for the three largest water suppliers.
Source: GLAAS 2018/2019 country survey.

FINANCE

Annual WASH expenditure (US$ millions, constant 2017 US$)										Non-revenue water[1] (percentage)
National		By source of funding				By subsector				
Year	Expenditure	Households	Government	External	Repayable	Drinking-water	Sanitation	Hygiene	Other	National
2018	60.0	30.0	30.0							45%
2017	2 478.3	1 055.9	1 102.4	27.9	1 348					39%
2017	437.4		249.4	6.1	181.8	426.9	10.4			
2017										
2016	420.9	209.7	94.5	21.7	89.5	345.8	60.6	0.5		
2018	472.0	326.1	145.9			279.9	114.7	90.9		30%
2018	28.7	12.0	0.4	7.2	8.9	27.4	1.1			
2018	8 099.7	3 382.4	3 922.4		795.0	4 949.8	3 149.9			31%
2019	58.0		1.0	57.0						50%
2018	694.7		381.8	89.9	223.0					25%
										36%
2017						75.5				38%
2017			470.0							30%
2017	28.2		0.1	26.5	1.6	10.0	18.0	0.2		27%
2018	413.0	0.1	0.3		0.0					50%
2015						464.3	169.9	21.3		
2018	215.2		115.7	25.2	74.3	214.6	0.6			
2018										
2018			559.8							37%
										33%
2019	254.3	92.6	45.2	209.1						53%
2018										55%

Annex 8. Summary of responses to GLAAS 2018/2019 ESA survey

	STRATEGIES AND REPORTING			AID AMOUNTS			FLOW TYPES		
ESA	Existence of WASH or water sector strategy	Reports on WASH aid (funds provided and expected results) produced	Reports on WASH aid shared with Ministries of Finance in recipient countries	2017 average aid commitments[1] (US$ millions, constant 2017 US$)	2017 aid disbursements[2] (US$ millions, constant 2017 US$)	2017 aid disbursement allocation for sector strengthening (percentage)	Grants (US$ millions, constant 2017 US$)	Concessional loans (ODA) (US$ millions, constant 2017 US$)	Non-concessional loans (non-ODA) (US$ millions, constant 2017 US$)
African Development Bank (AfDB)	Developing	Yes	Yes	124	226	15%	68	158	
Bill & Melinda Gates Foundation (BMGF)	Yes	No	NA	116	95	20%	95		
BRAC[3]	Yes	Yes	Yes		5				
CARE International[3]	Developing	No	No	106					
European Bank for Reconstruction and Development (EBRD)	No	No	NA						113
European Commission	No	Yes	NA	611	546		401	145	
Finland, Ministry for Foreign Affairs	Yes	Yes	No	5	24		23		
France, Agence Française de Développement (AFD)	Yes	Yes	Yes	980	682	29%	79	603	0
Germany, Federal Ministry for Economic Cooperation and Development (BMZ)	Yes	Yes	Yes	1 424	899	15%	356	515	0
Inter-American Development Bank (IDB)	Yes	Yes	Yes	199	59		16	43	749
IRC[3]	Yes	Yes	Yes		13		13		
Japan International Cooperation Agency (JICA)	Yes	Yes	No	1 482	1 137	12%	255	883	
Netherlands, Ministry of Foreign Affairs (DGIS)	Yes	Yes	Yes	260	195		195		
New Zealand, Ministry of Foreign Affairs and Trade (MFAT)	Developing	Yes	Yes	5	8		8		
One Drop Foundation[3]	Yes	Yes	Yes		6		6		
Portugal, Camões - Institute for Cooperation and Language, I.P.	No	No		8	8		8		
Spain, Agencia Española de Cooperación International al Desarollo (AECID)	No			14	19		19	0	
Sweden, Swedish International Development Cooperation Agency (Sida)	Yes	No		32	103		103		
Switzerland, Swiss Agency for Development Cooperation (SDC) and State Secretariat for Economic Affairs (SECO)	Yes	Yes	NA	125	124	33%	124		
United Nations Children's Fund (UNICEF)	Yes	Yes	Yes	28	28		28		
United Kingdom of Great Britain and Northern Ireland, Department for International Development (DFID)	Yes	Yes	Yes	84	228		226	2	
United Nations Development Programme (UNDP)[3]	No	No	NA		58	11%	58		
United States Agency for International Development (USAID)	Yes	Yes	NA	470	513		513		
Water Supply and Sanitation Collaborative Council (WSSCC)[3]	Yes	Yes	Yes		11		11		
Water.org[3]	Yes	NA	NA		7		7		
WaterAid[3]	Yes	Yes	No		77		77		
World Bank	Developing	Yes	No	1 602	962		61	900	
World Health Organization (WHO)[3]	Yes	Yes	NA		7		7		
World Vision International[3]	Yes	Yes	NA		116				

[1] Aid commitments consist of official development assistance (ODA) and private contributions reported to the Organisation for Economic Co-operation and Development Creditor Reporting System (OECD-CRS), with the exception of CARE International, which reported a 2018 budget for WASH aid in its GLAAS 2018/2019 ESA survey response. Aid disbursements consist of ODA and private contributions reported to OECD-CRS.
[2] Aid disbursements consist of ODA and private contributions reported to OECD-CRS. Aid disbursements from ESAs that did not report aid for water supply and sanitation to the OECD are sourced from GLAAS 2018/2019 ESA survey (BRAC, IRC, One Drop Foundation, UNDP , Water.org, WaterAid, WHO, World Vision International).
[3] All data are based on the GLAAS 2018/2019 ESA survey. Data on aid amounts consist of grants and in-kind services.
[4] Percentages are shown as a proportion of total water and sanitation ODA, which includes regional aid that could not be disaggregated among SDG regions.
[5] WaterAid reported 18% of 2017 disbursements targeted towards Asia.
Sources: GLAAS 2018/2019 ESA survey; OECD-CRS, 2019.

BY SDG REGION[4]							BY PROJECT TYPE			BY SECTOR	
Central and Southern Asia (percentage)	Eastern and South-Eastern Asia (percentage)	Europe and Northern America (percentage)	Latin America and Caribbean (percentage)	Northern Africa and Western Asia (percentage)	Oceania (percentage)	Sub-Saharan Africa (percentage)	Basic systems (percentage)	Large systems (percentage)	Other (percentage)	Water (percentage)	Sanitation (percentage)
				0%		92%		20%	80%	0%	100%
38%	2%		0%	1%		18%	90%	<1%	9%		100%
100%										36%	64%
											100%
2%	0%	15%	9%	26%	3%	39%	24%	46%	29%	35%	65%
42%	9%		0%	1%		39%	77%	7%	16%	74%	26%
2%	10%	0%	32%	23%	0%	32%	6%	59%	35%	64%	36%
6%	10%	5%	8%	48%		13%	21%	46%	33%	49%	51%
			96%				6%	76%	19%	65%	35%
39%	22%	2%	8%	22%	3%	4%	17%	76%	7%	64%	36%
10%	3%			5%		30%	41%	18%	41%	54%	46%
	2%				78%		38%	19%	43%	59%	41%
16%		6%	48%			30%					
	4%					95%	<1%	2%	98%	94%	6%
1%	0%	0%	57%	5%		29%	64%	10%	26%	74%	26%
3%		3%	1%	2%		12%	38%	19%	43%	70%	30%
12%	2%	15%	13%	14%		8%	35%	28%	36%	50%	50%
18%	2%	1%	1%	5%		70%	67%	16%	18%		100%
4%	1%		0%	4%		61%	61%	15%	24%	59%	41%
9%	3%		7%	50%		21%					
6%	4%	0%	2%	37%	0%	44%	22%	67%	11%	83%	17%
						100%				0%	100%
44%	24%		7%			24%					
*5	*5			36%		46%					
34%	14%	0%	2%	0%	0%	49%	13%	57%	30%	61%	39%
									100%	64%	36%

Annex 9. Contributors

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