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FINANCING UNIVERSAL WATER, SANITATION AND HYGIENE UNDER THE SUSTAINABLE DEVELOPMENT GOALS

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

GLAAS 2017 Report

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2017

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Suggested citation. FINANCING UNIVERSAL WATER, SANITATION AND HYGIENE UNDER THE SUSTAINABLE DEVELOPMENT GOALS. UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS) 2017 report. Geneva: World Health Organization; 2017. Licence: CC BY-NC-SA 3.0 IGO.

Cataloguing-in-Publication (CIP) data. CIP data are available at http://apps.who.int/iris.

Design and layout by L'IV Com Sàrl, Villars-sous-Yens, Switzerland.
GLAAS visual identifier design by Ledgard Jepson Ltd, Barnsley, South Yorkshire, England.
Printed in France.

UN WATER

UN-Water Reports

UN-Water is the United Nations (UN) inter-agency coordination mechanism for freshwater related issues, including sanitation. It was formally established in 2003 building on a long history of collaboration in the UN family. UN-Water is comprised of UN entities with a focus on, or interest in, water-related issues as Members and other non-UN international organizations as Partners.

The main purpose of UN-Water is to complement and add value to existing programmes and projects by facilitating synergies and joint efforts, so as to maximize system-wide coordinated action and coherence. 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.

PERIODIC REPORTS

WORLD WATER DEVELOPMENT REPORT (WWDR)

is the reference publication of the UN system on the status of the freshwater resource. The Report is the result of the strong collaboration among UN-Water Members and Partners and it represents the coherent and integrated response of the UN system to freshwater-related issues and emerging challenges. The report production is coordinated by the World Water Assessment Programme and the theme is harmonized with the theme of World Water Day (22 March). From 2003 to 2012, the WWDR was released every three years and from 2014 the Report is released annually to provide the most up to date and factual information of how water-related challenges are addressed around the world.

- ✔ *Strategic outlook*
- ✔ *State, uses and management of water resources*
- ✔ *Global*
- ✔ *Regional assessments*
- ✔ *Triennial (2003–2012)*
- ✔ *Annual (from 2014)*
- ✔ *Links to the theme of World Water Day (22 March)*

UN-WATER GLOBAL ANALYSIS AND ASSESSMENT OF SANITATION AND DRINKING-WATER (GLAAS)

is led and 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 provides substantive evidence for the activities of Sanitation and Water for All (SWA).

- ✔ *Water supply and sanitation*
- ✔ *Global*
- ✔ *Regional and country highlights*
- ✔ *Biennial (since 2008)*

THE PROGRESS REPORT OF THE WHO/UNICEF JOINT MONITORING PROGRAMME FOR WATER SUPPLY AND SANITATION (JMP)

is affiliated with UN-Water and presents the results of the global monitoring of progress towards access to safe drinking-water, and adequate 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.

- ✔ *Status and trends*
- ✔ *Water supply and sanitation*
- ✔ *Global*
- ✔ *Regional and national assessments*
- ✔ *Biennial (1990–2012)*
- ✔ *Annual updates (since 2013)*

UN-WATER PLANNED PUBLICATIONS 2017–2018

- 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
- SDG 6 Synthesis Report 2018 on Water and Sanitation

Foreword

Safe drinking-water and sanitation are crucial to human welfare, by supporting health and livelihoods and helping to create healthy environments. The consumption of unsafe water impairs human health through illnesses such as diarrhoea, and untreated sewage can contaminate drinking-water supplies and the environment, creating a heavy burden on communities.

In recent years, much progress has been made in increasing access to drinking-water and sanitation, but still too many people lack access to safe, sustainable water supply and sanitation services. In 2015, the WHO/UNICEF Joint Monitoring Programme (JMP) estimated that 660 million people still do not have access to improved drinking-water sources, and over 2.4 billion people do not have access to improved sanitation.

The Sustainable Development Goals (SDGs), as part of the 2030 Agenda for Sustainable Development, build upon the many achievements made under the Millennium Development Goals (MDGs), but are more aspirational, extensive and ambitious. Goal 6 is focused on clean water and sanitation. Going beyond "improved" drinking-water and sanitation, Target 6.1 calls for *universal and equitable access to safe and affordable drinking-water,* and Target 6.2 aspires to *access to adequate and equitable sanitation and hygiene for all*, as well as the end of open defecation.

A large financing gap has been identified as one of the greatest barriers to achieving these targets. To meet Targets 6.1 and 6.2, capital financing would need to triple to US$ 114 billion per annum, and operating and maintenance costs need to be considered in addition. Beyond this global figure, there are large variations in financing needs from region to region and country to country. Hence, financing strategies are needed based on evidence and realistic proposals for how to fill the gaps. As part of this effort, the UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS) and Tracking Financing to WASH (TrackFin), both led by the World Health Organization (WHO), are providing evidence for decision-makers on the WASH enabling environment, including governance, monitoring, human resources and finance, to make smarter decisions on water and sanitation financing, including on how to better utilize existing financing.

Investing in WASH can have a beneficial impact across a number of issues covered by the SDGs including health and education. For example, it has been estimated, through expert opinion, that 26% of childhood deaths and 25% of the total disease burden in children under five could be prevented through the reduction of environmental risks, including by reducing unsafe water, sanitation and inadequate hygiene. Specifically, diarrhoeal diseases are among the main contributors to global child mortality, causing about 10% of all deaths in children under five years.[1] WASH also leads to improved nutrition. Moreover, improved WASH in health care facilities leads to a reduction in maternal mortality, as well as increased use of health centers and facilities, and WASH in schools leads to increased attendance for girls. Investing in WASH provides benefits that expand beyond the water and sanitation sector.

This GLAAS report presents an analysis of the most reliable and up-to-date data from 75 countries and 25 external support agencies (ESAs) on the issues related to financing universal WASH access under the SDGs.

We hope that the GLAAS 2017 report will be a useful resource for decision- and policy-makers so that the realizable goal of safe, sustainable water and sanitation services for all can be achieved.

Dr Margaret Chan
Director-General
World Health
Organization

Guy Ryder
Chair, UN-Water
Director-General,
International Labour
Organization

[1] WHO (2017) Don't pollute my future! The impact of the environment on children's health. Geneva: World Health Organization. Available at: http://apps.who.int/iris/bitstream/10665/254678/1/WHO-FWC-IHE-17.01-eng.pdf?ua=1 [Accessed 15 March 2017].

Acknowledgements

UN-Water and the World Health Organization (WHO) gratefully acknowledge the financial support provided by the Department for International Development (DFID), United Kingdom; the Swiss Agency for Development and Cooperation (SDC); the Directorate-General for International Cooperation (DGIS), the Netherlands; the Agence Française de Développement (AFD), France; and the Bill & Melinda Gates Foundation (BMGF) to the UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS) and Tracking Financing to WASH (TrackFin) initiatives.

The preparation of this report involved contributions from hundreds of individuals representing all regions of the world. UN-Water and WHO would like to extend their gratitude to all those individuals and organizations that contributed to the development of the results and report – especially those individuals who coordinated efforts and submitted information from 75 countries and 25 ESAs (Annex G). Every effort has been made to name contributors as best to our available knowledge.

The GLAAS 2017 report FINANCING UNIVERSAL WATER, SANITATION AND HYGIENE UNDER THE SUSTAINABLE DEVELOPMENT GOALS is dedicated to **Piers Cross,** who passed away on 29 March 2017, for his contributions to the WASH sector, his dedication and energy, and above all his friendship.

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Acronyms and abbreviations

ADB	Asian Development Bank
AFD	Agence Française de Développement, France
AMCOW	African Ministers' Council on Water
BFP	Budget Framework Paper
BMGF	Bill & Melinda Gates Foundation
BMZ	Federal Ministry for Economic Cooperation and Development, Germany
CPIA	Country Policy and Institutional Assessment
DFAT	Department of Foreign Affairs and Trade, Australia
DFID	Department for International Development, United Kingdom
DGIS	Directorate-General for International Cooperation, the Netherlands
ESA	External support agency
FCV	Fragility, conflict and violence
GDP	Gross domestic product
GLAAS	Global Analysis and Assessment of Sanitation and Drinking-Water
IDA	International Development Association, World Bank Group
IWRM	Integrated water resources management
JICA	Japan International Cooperation Agency, Japan
JMP	WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation
JSR	Joint sector review
KfW	Kreditanstalt für Wiederaufbau, Development Bank, Germany
LWSC	Liberia Water and Sewer Corporation
MDG	Millennium Development Goal
MOFA	Ministry of Foreign Affairs
MoI	Means of implementation
NGO	Nongovernmental organization
O&M	Operations and maintenance
ODA	Official development assistance
OECD	Organisation for Economic Co-operation and Development
OECD-CRS	OECD Creditor Reporting System
OECD-DAC	OECD Development Assistance Committee
OPEC	Organization of Petroleum Exporting Countries
PEFA	Public Expenditure and Financial Accountability
SDC	Swiss Agency for Development and Cooperation, Switzerland
SDG	Sustainable Development Goal
SECO	State Secretariat for Economic Affairs, Switzerland
Sida	Swedish International Development Cooperation Agency, Sweden
SWA	Sanitation and Water for All
TrackFin	Tracking Financing to WASH
UN	United Nations
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development, United States
WASH	Water, sanitation and hygiene
WASH BAT	WASH Bottleneck Analysis Tool
WHO	World Health Organization

GLAAS summary table of key indicators for WASH financing

VALUE	INDICATOR
CONTEXT	
68%	**Global population using an improved sanitation facility**
91%	**Global population using an improved drinking-water source**
	Countries reporting insufficient financing to meet national WASH targets for:
87% / 90%	Urban / rural sanitation
78% / 90%	Urban / rural drinking-water
WASH BUDGETS AND PLANS	
	Countries reporting existence of a financing plan that is consistently followed for:
34% / 27%	Urban / rural sanitation
42% / 32%	Urban / rural drinking-water
76%	**Countries able to provide WASH budget data**
4.9%	**Annual increase in government WASH budgets, average**
19	**Government WASH budget per capita (US$), average**
0.42%	**Government WASH budget as a percentage of GDP, average**
EXPENDITURES	
56%	**Countries able to provide government expenditure data**
50	**Total WASH expenditure per capita (US$), average**
1.3%	**Total WASH expenditure as a percentage of GDP, average**
57% / 43%	**Breakdown of country WASH expenditure between water / sanitation**
76% / 24%	**Breakdown of country WASH expenditure between urban / rural**
66%	**Percentage of WASH financing derived from households, average**
EXTERNAL SUPPORT	
8.2 billion	**Official development assistance commitments for water and sanitation in 2015 (constant 2014 US$)**
3.8%	**Percentage of total ODA commitments for water and sanitation in 2015**
7.4 billion	**Official development assistance disbursements for water and sanitation in 2015 (constant 2014 US$)**
65% / 35%	**Breakdown of water and sanitation ODA commitments between water / sanitation**
25%	**Water and sanitation ODA commitments directed to basic services**
73% / 24% / 3%	**Breakdown of water and sanitation ODA disbursements between urban / rural / combined**
32% / 36% / 32%	**Breakdown of water and sanitation development assistance between ODA grants / ODA loans / non-concessional loans**
IMPROVING THE USE OF EXISTING FINANCIAL RESOURCES	
	Countries with absorption rates greater than 75% for:
60%	Domestic capital commitments
59%	External donor commitments
	Countries with cost recovery for O&M more than 80% for:
39% / 34%	Urban / rural sanitation
45% / 24%	Urban / rural drinking-water
30% / 35%	**Countries indicating that affordability schemes exist and are widely used for sanitation / drinking-water**
43%	**Average non-revenue water**

Main findings

The GLAAS 2017 report focuses on the key role of financing in the water, sanitation and hygiene (WASH) sector. It is designed to provide a global perspective as the world embarks on achieving the SDGs, particularly SDG 6 relating to clean water and sanitation, which is essential to good health and well-being. It also provides country-specific data for governments to use as they plan investments and allocate resources.

Five key findings emerged from the GLAAS 2016/2017 results:

National WASH budgets are increasing as countries prepare to take on board the SDGs, yet there remains a discrepancy between global aspirations and national realities

Countries are showing a high level of responsiveness to the SDGs, with a majority of countries in the process of setting or planning to set targets that take into account the SDGs in the next few years. Available data on national budgets and expenditure indicate that government allocations and spending for WASH are increasing—annual government WASH budgets are increasing at an annual average rate of 4.9% after adjusting for inflation. This increase in WASH budgets will have positive effects not only in the WASH sector, but also in health, including nutrition, education and economic development. However, more than 80% of countries report insufficient financing to meet national WASH targets, let alone the higher levels of service that are the focus of the SDGs.

The SDGs require greater ambitions for WASH, but there remains a lack of financial sustainability for reaching the unserved and maintaining services

More than one half of countries indicate that household tariffs are insufficient to recover operations and basic maintenance (O&M) costs. For rural sanitation, a greater number of countries reported improvements in cost recovery as opposed to those that reported declines; however, cost recovery remains an issue. While many service providers and communities have access to government subsidies, nearly 20% of countries indicate a lack of any mechanism to cover operational financial gaps, leading to deferred maintenance, deterioration of assets and increased failure rates. Combined with estimated capital investment needs to reach the SDGs that are three times higher than current investment levels, significantly more resources will be required to address the financial gap for WASH investments and O&M. The additional resources will contribute to sustainable WASH services, overall improving health and well-being.

More and better data are available for informed decision-making

Disaggregated financial data are available from an increasing number of countries: 42 out of 75 participating countries were able to provide government expenditure data, compared to 33 out of 94 in the previous GLAAS cycle. Moreover, nearly 70% of countries indicate that data are available and used in decisions for resource allocation for drinking-water and sanitation. Data are also available for WASH and health issues. Over 70% of countries indicate that data are available and used for decisions regarding identifying public health priorities for reducing WASH-related diseases and responding to WASH-related disease outbreaks. However, significant data gaps remain and existing data continue to be fragmented across different ministries and stakeholders. Over two thirds of respondent countries indicate the existence of a financing plan/budget for water and sanitation, but only one third report that the financial plan has been defined, agreed and consistently followed.

Official development assistance (ODA) disbursements for water and sanitation are increasing, but future investments are uncertain

Investments in WASH are investments in public health—ODA to safe, sustainable WASH systems will contribute to achieving gains in health. Water and sanitation ODA disbursements (spending) increased from US$ 6.3 to US$ 7.4 billion from 2012 to 2015. However, aid commitments for water and sanitation have declined since 2012: global aid commitments decreased from US$ 10.4 to US$ 8.2 billion, and aid commitments to sub-Saharan Africa decreased from US$ 3.8 billion to US$ 1.7 billion from 2012 to 2015. Considering the greater needs to make progress towards universal access to safely managed WASH services under the SDG targets, the possibility of future reductions in aid disbursements does not align with global aspirations.

Extending WASH services to vulnerable groups is a policy priority, but implementation is lagging behind

Achieving the SDGs will require additional efforts to reach vulnerable groups, including poor populations and communities living in remote areas or informal settlements. Over 70% of countries report having specific measures to reach poor populations in their WASH policies and plans. However, the implementation of such concrete measures is lagging: few countries indicate that they are able to consistently apply financing measures to target resources to poor populations. Furthermore, while "reducing inequalities in access and services to the poorest and most vulnerable" was considered a very high priority for two thirds of external support agencies (ESAs), aid to basic systems (as a proxy for aid targeted to unserved populations, particularly in rural areas) was only 25% of WASH aid disbursements in 2015. Increasing and sustaining WASH access for vulnerable groups will not only be critical for achieving SDG 6, but also for SDG 3 on ensuring healthy lives and promoting well-being for all at all ages.

Introduction and context of the GLAAS 2017 report

The transition from the MDG to the SDG era calls for a balance between continuity and a notable departure from business as usual. The aspirational and ambitious goals and targets that make up the SDG framework will require a new take on development policies, plans and programmes, on means of implementation and also on monitoring progress.

Sustainable Development Goal 6 on clean water and sanitation, *"by 2030, ensure availability and sustainable management of water and sanitation for all"*, extends the original MDG 7 targets to cover all freshwater issues from the perspective of economic, social and environmental sustainability, in a holistic manner. The first two targets under SDG 6 raise ambitions to increase access to safe, sustainable water supplies and sanitation services. In particular, they aim to "*achieve universal and equitable access to safe and affordable drinking-water for all*" (Target 6.1) and to "*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*" (Target 6.2). The new Targets 6.3–6.6 address issues that include, but go beyond, drinking-water supply and sanitation: wastewater management, water use efficiency, integrated water resources management (IWRM) and aquatic ecosystems' protection and restoration. Targets 6.a and 6.b focus on the means of implementation for achieving SDG 6.

Meeting these targets will require large investments in terms of finance and resources. The World Bank has estimated that globally, current levels of financing for WASH are only sufficient to cover the capital costs of achieving basic universal water, sanitation and hygiene services by 2030. Meeting SDG Targets 6.1 and 6.2 will require a tripling of capital investments to US$ 114 billion per year, not to mention operations and maintenance (O&M) costs, which are key for sustainable services.[1] Investments in WASH will also have positive effects on and contribute to improving other critical areas related to public health covered by the SDGs such as nutrition, economic development, education, and climate resilience.

The financial challenges of meeting the SDGs raise many issues such as which options and opportunities exist to bridge the funding gaps, the nature of financing mechanisms, such as using a mix of public and private financing, how to increase financial efficiency in infrastructure development, service delivery and asset management, and viable approaches to tariff-setting and subsidies that address the dilemma between cost recovery and affordability from economics and human rights perspectives.

This report analyses the current WASH finance situation in countries, with an assessment of funding gaps to reach targets, financial planning and government budgets, as well as different sources of WASH financing (taxes, transfers and tariffs) and expenditure allocations. The policies and actions of ESAs are also highlighted. The report then focuses on funding universal access to WASH, with a discussion of how the targeting and use of existing financial resources can be improved as well as what cost recovery and pro-poor affordability schemes and measures can be deployed to reach those under threat of being left behind.

New results from recently participating countries of the WHO-led UN-Water GLAAS TrackFin initiative during 2015 and 2016 are also presented throughout this report and in Annex B. Previous GLAAS results have shown that there are substantial gaps in our understanding and tracking of financing to water, sanitation and hygiene. WHO launched the TrackFin initiative with the intention to develop and test a common, consistent methodology to track these financial flows at the national level. Strengthening this evidence base can contribute to improved dialogue at the national level between finance and line ministries, as well as better decision-making in funding allocations for priority needs, catalyzing better management of available resources, and attracting additional investment to the sector.

This GLAAS 2017 report is the fourth periodic report, and first thematic report, following on from earlier reports in 2010, 2012, and 2014. It draws on data from 75 countries and 25 ESAs from in-depth surveys that investigated factors related to finance and other elements of the enabling environment, including plans, targets, data availability and measures to reach vulnerable populations. The specific finance focus of the GLAAS 2016/2017 survey has resulted in a lower level of participation than has been customary in recent data collection cycles due to the challenge of providing comprehensive information on WASH financing,

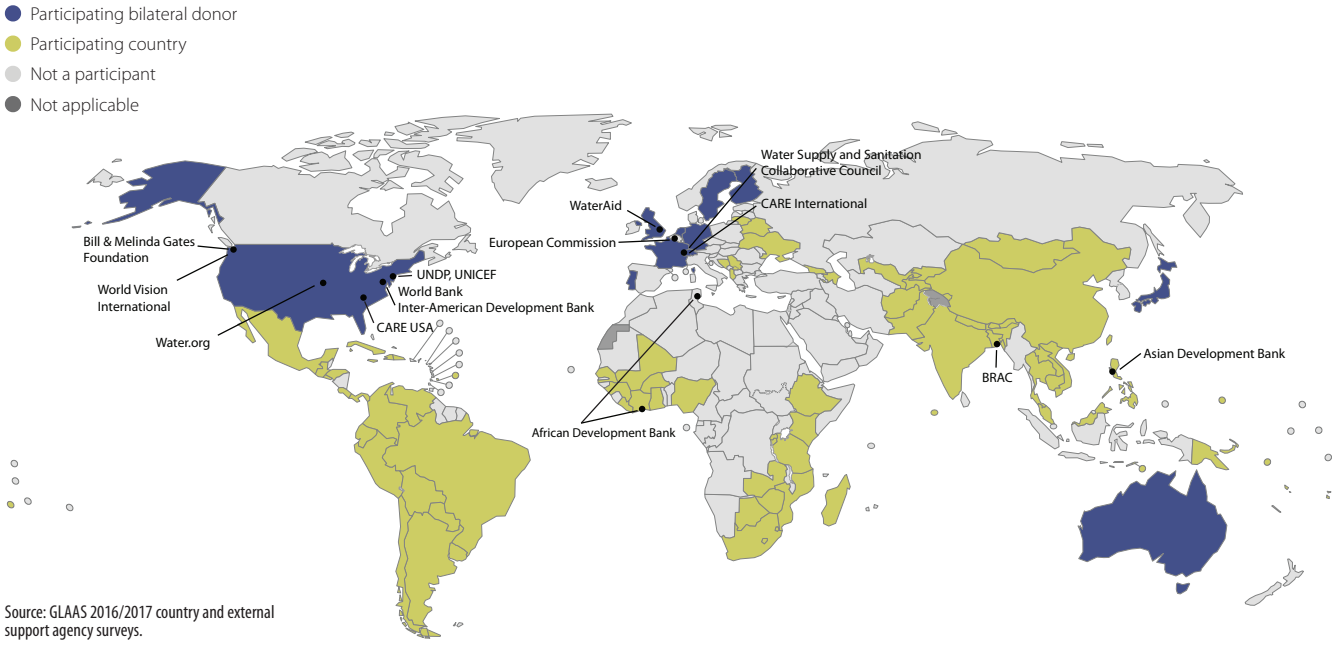
[1] Hutton G and Varughese MC (2016) The Costs of Meeting the 2030 Sustainable Development Goal Targets on Drinking Water, Sanitation, and Hygiene. Water and Sanitation Program Technical Paper, World Bank, Washington, DC. Available at: http://www.worldbank.org/en/topic/water/publication/the-costs-of-meeting-the-2030-sustainable-development-goal-targets-on-drinking-water-sanitation-and-hygiene [Accessed 24 March 2017].

which is often fragmented across ministries and organizations, and the time required to collect this information. It is expected that the level of participation will rebound for the next, general update cycle of GLAAS in 2018/2019. More detailed information about the GLAAS methodology, including the country and ESA surveys,[1] can be found in Annex A.

Figure 1

Country and ESA participation in the GLAAS 2016/2017 surveys

Participation in 2016/2017 Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS)



Source: GLAAS 2016/2017 country and external support agency surveys.

COUNTRIES	EXTERNAL SUPPORT AGENCIES (ESAs)
Afghanistan, Albania, Argentina, Azerbaijan, Bangladesh, Barbados, Belarus, Bhutan, Bolivia (Plurinational State of), Bosnia and Herzegovina, Botswana, Brazil, Burkina Faso, Burundi, Cambodia, Chile, China, Colombia, Costa Rica, Côte d'Ivoire, Cuba, Dominican Republic, Ecuador, El Salvador, Ethiopia, Fiji, Georgia, Ghana, Guatemala, Guinea, Haiti, Honduras, India, Jamaica, Kenya, Kyrgyzstan, Lao People's Democratic Republic, Lesotho, Liberia, Lithuania, Madagascar, Malaysia, Maldives, Mali, Mexico, Micronesia (Federated States of), Mongolia, Mozambique, Nepal, Nigeria, Pakistan, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Rwanda, Senegal, Solomon Islands, South Africa, Tajikistan, Thailand, Serbia, Swaziland, Timor-Leste, Tonga, Ukraine, United Republic of Tanzania, Uruguay, Uzbekistan, Vanuatu, Venezuela (Bolivarian Republic of), Viet Nam, Zambia, Zimbabwe.	African Development Bank (AfDB); Asian Development Bank (ADB); Australia, Department of Foreign Affairs and Trade (DFAT); Bill & Melinda Gates Foundation (BMGF); BRAC; CARE International and CARE USA; European Commission; Finland, Ministry of Foreign Affairs; France, Agence Française de Développement (AFD); Germany, Federal Ministry for Economic Cooperation and Development (BMZ); Inter-American Development Bank (IDB); Japan International Cooperation Agency (JICA); Portugal, Ministry of Foreign Affairs; Swedish International Development Cooperation Agency (Sida); Swiss Agency for Development and Cooperation (SDC) and State Secretariat for Economic Affairs, Switzerland; The Netherlands, Ministry of Foreign Affairs (DGIS); United Kingdom, Department for International Development (DFID); United Nations Children's Fund (UNICEF); United Nations Development Fund (UNDP); United States Agency for International Development (USAID); Water Supply and Sanitation Collaborative Council (WSSCC); Water.org; WaterAid; World Bank; World Vision International.

Purpose of GLAAS

The Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS) is a UN-Water initiative led by WHO. GLAAS objectives are defined as: monitoring the inputs (in terms of human resources and finance) and the enabling environment (in terms of laws, plans and policies, institutional and monitoring arrangements), required to sustain and extend WASH systems and services to all, and especially to the most vulnerable population groups. GLAAS does this at both global and regional levels by collecting information at country level and through existing data sources.

GLAAS has been collecting information directly from governments and ESAs on the status and trends in the enabling environment for sanitation and drinking-water services since 2008, highlighting policy, legal and regulatory frameworks, institutional arrangements, the human resource base for WASH, and financial flows in the national context as well as through international cooperation.

[1] GLAAS and ESA surveys available online at: http://www.who.int/water_sanitation_health/monitoring/investments/glaas-2016-2017-cycle/en/

GLAAS also analyses the factors associated with progress in WASH in order to identify drivers and bottlenecks, highlight knowledge gaps and assess strengths and challenges within and across countries. It aims to facilitate the efforts of government-led platforms to enhance coordination across the various sectors, institutions and actors influencing and providing WASH services.

GLAAS has developed a medium-term strategy (2016–2020) that will support its monitoring activities within this broadened scope of SDG 6 and with an expanded focus. It builds on the guidance of two GLAAS evaluation meetings (2012 and 2015) and on the recommendations of the JMP/GLAAS Strategic Advisory Group. The current report reflects one of the outcomes of both evaluation meetings, the idea that GLAAS produce, alternatingly, general update reports on all GLAAS aspects of the enabling environment (governance, monitoring, human resources and finance) and thematic reports. This first thematic report focuses on the status and trends in financing of drinking-water, sanitation and hygiene infrastructure and O&M.

GLAAS complements other efforts in the wider water and sanitation environment, such as the WHO/United Nations Children's Fund (UNICEF) Joint Monitoring Programme on Water Supply and Sanitation (JMP). GLAAS provides evidence for the Sanitation and Water for All (SWA) High Level Meetings and is leading the monitoring of the SWA Collaborative Behaviours. GLAAS is one of the main data sources for the SWA Collaborative Behaviours indicators, along with World Bank's Country Policy and Institutional Assessment (CPIA), Public Expenditure and Financial Accountability (PEFA) Assessments and the Organisation for Economic Co-operation and Development Creditor Reporting System (OECD-CRS). Both the GLAAS 2016/2017 country and ESA surveys were revised to be able to collect information aligned with the Behaviours. Country profiles for the SWA Collaborative Behaviours are being prepared by GLAAS on behalf of SWA for the April 2017 High Level Meetings.

SWA Collaborative Behaviours and Building Blocks

SWA has identified four Collaborative Behaviours and five Building Blocks for development effectiveness that can improve long-term performance in making progress towards universal access to water and sanitation. The Collaborative Behaviours are:

- Enhance government leadership of sector planning processes;
- Strengthen and use country systems;
- Use one information and mutual accountability platform built around a multi-stakeholder government-led cycle of planning, monitoring and learning; and
- Build sustainable water and sanitation sector financing strategies that incorporate financial data from taxes, tariffs and transfers as well as estimates for non-tariff household expenditure.

While the Collaborative Behaviours are the "how" for improving sector performance, the Building Blocks are the "what." The Building Blocks are:

- Sector policy and strategy;
- Institutional arrangements;
- Sector financing;
- Planning, monitoring and review; and
- Capacity development

GLAAS is well positioned to contribute to monitoring the Collaborative Behaviours and Building Blocks as they align with GLAAS' focus on the enabling environment for WASH. GLAAS has been closely working with SWA on the monitoring strategy and country profiles for the Collaborative Behaviours and continues to collect data on the Building Blocks.

GLAAS is also complementary to the WASH Bottleneck Analysis Tool (WASH BAT) developed by UNICEF to help assess the enabling environment for WASH in countries and develop concrete action items. If a country participates in GLAAS and wants to explore certain topics in more detail, it could conduct a WASH BAT and if a country conducts a WASH BAT before GLAAS, those data can feed into the GLAAS survey. WHO and UNICEF have worked closely to ensure that GLAAS and the WASH BAT are closely aligned.

Monitoring the SDG Means of Implementation

GLAAS is a co-custodian, along with the United National 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 (MoI). GLAAS is well placed for this role as it has been monitoring the WASH enabling environment since its pilot in 2008. For additional information, see Annex C.

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.

Overview of GLAAS 2016/2017 participating countries and improvement of data availability

The WASH sector is heavily fragmented, and it is difficult to centralize data from the many national institutions and supporting partners involved in sector financing. However, an increasing number of countries have been able to provide key data on WASH budgets and expenditures through the GLAAS country survey:

- Availability of government expenditure data has steadily increased from 5% of participating countries in the 2009/2010 GLAAS cycle to 23% in 2011/2012, 35% in 2013/2014, and 56% in the 2016/2017 cycle.
- Availability of household expenditure data in addition to government expenditure data increased from 5% of participating countries in 2011/2012 to 20% in 2013/2014 and 33% in 2016/2017.
- Availability of government WASH budget data increased from 52% in 2013/2014 to 76% in 2016/2017.

The quality of data provided has also shown steady improvement, as countries have been able to provide an increasing level of disaggregation, as well as provide data for more ministries and institutions involved in WASH in country. TrackFin has also helped to improve the quality and level of detail of WASH financing data in implementing countries.

While the volume and quality of WASH financing data continue to improve, comparability of the data between countries and between different cycles of GLAAS remains a challenge. Budget and expenditure data reported may cover different areas of WASH and the broader water sector, and national institutions, ministries, and other agencies for which data are reported differ from cycle to cycle and country to country. A great deal of care was required in the analysis of trends from the previous cycle of GLAAS in order to ensure comparability of results, for example by including only comparable elements of the data in the analysis.

Due to the finance focus of the GLAAS 2016/2017 cycle, there were fewer participating countries (75 countries) compared to the 2013/2014 cycle (94 countries), particularly from low income and sub-Saharan African countries. Table 1 provides an overview of participating countries from the 2013/2014 and 2016/2017 cycles by World Bank income group. It is not surprising that there has been some degree of self-selection in the participating countries depending on the capacity to provide the information requested. GLAAS continues to encourage countries to provide data through a government-led multi-stakeholder GLAAS country process, and will continue to accept country submissions until mid-2017. In addition, support is being provided to an increasing number of countries for the collection and compiling of WASH financing data through TrackFin (see Annex B). Despite the challenges, it is unquestionable that the current GLAAS report provides the most comprehensive information on WASH financing from countries and ESAs to date.

Breakdown of GLAAS participating countries in 2013/2014 and 2016/2017 by World Bank income group

World Bank income group	2013/2014 (n=94)	2016/2017 (n=75)
Low income	29%	20%
Lower middle income	37%	40%
Upper middle income	28%	35%
High income	5%	5%
Not available	1%	—

Financial Planning: Estimating the financing gap and needs to meet the SDGs

Financial sufficiency to meet targets

Despite being a key determinant of public health and economic development, the WASH sector faces major obstacles in attracting sufficient resources to meet its investment needs. In the GLAAS 2013/2014 cycle, during the MDG era, 80% of countries reported that financial resources were insufficient to meet national targets established for drinking-water and sanitation, despite increasing domestic budget allocations. More recent global estimates show a tremendous gap in financing to achieve the water supply, sanitation, and hygiene SDG 6 targets, with capital investment needs alone three times higher than current investment levels.[1]

Results of the GLAAS 2016/2017 country survey support previous findings that the lack of adequate financial resources constrains progress towards national goals. Over 80% of countries report insufficient finance for both urban and rural areas in meeting national targets for drinking-water and sanitation, as well as those for water quality, a major component of SDG 6.

Is financing allocated to water and sanitation improvements sufficient to meet national targets?

	Per cent of countries reporting sufficient finance to meet national targets (n= 70)[2]	
Programme area	Urban	Rural
Drinking-water	22%	10%
Sanitation	13%	10%
Water quality	19%	9%

Source: GLAAS 2016/2017 country survey.

It is important to note that these country estimates of financial sufficiency are based on national targets and levels of service, and therefore, are unlikely to fully consider all the elements of the safely managed standard (accessibility, availability and quality) nor universal and equitable access by 2030, as envisioned in the SDGs. Currently, a majority of reported national WASH targets are based on medium-term plans extending up to 2020 with targets set at levels below universal coverage. Fewer than 20% of countries have set universal access targets for 2030 or sooner; however, a majority of countries[3] are setting or planning to set targets that take into account the SDGs. The lack of adequate financing to meet national targets will be magnified in the future as SDG targets are integrated more fully into national plans.

[1] Hutton G and Varughese MC (2016) The Costs of Meeting the 2030 Sustainable Development Goal Targets on Drinking Water, Sanitation, and Hygiene. Water and Sanitation Program Technical Paper, World Bank, Washington, DC. Available at: http://www.worldbank.org/en/topic/water/publication/the-costs-of-meeting-the-2030-sustainable-development-goal-targets-on-drinking-water-sanitation-and-hygiene [Accessed 24 March 2017].

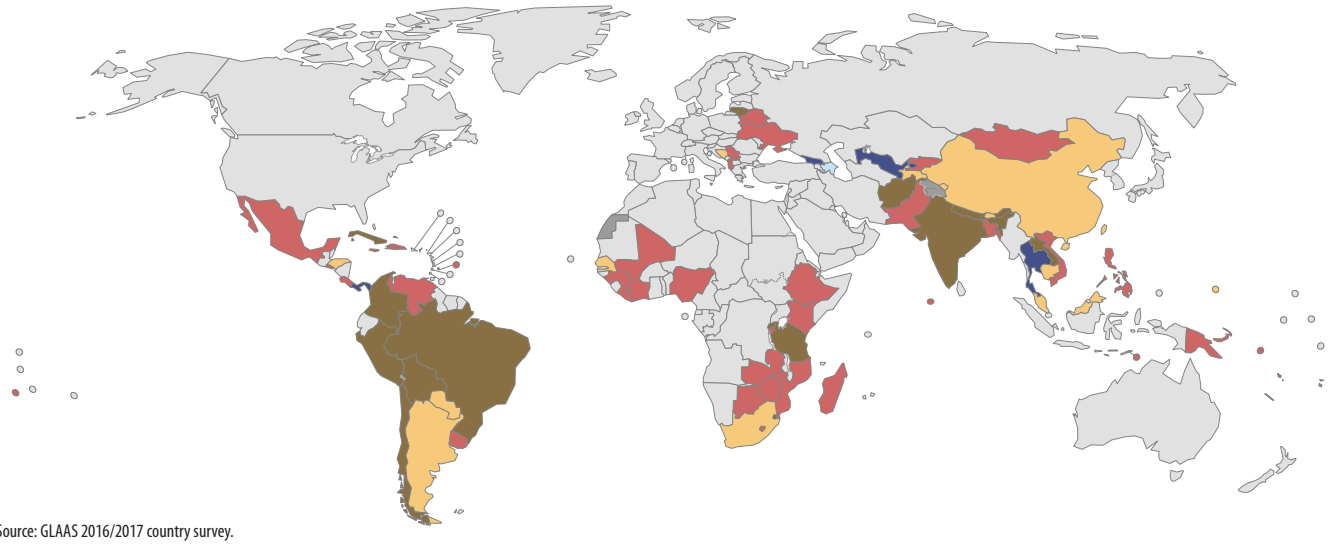
[2] Insufficient finance is defined here as less than 75% of what is needed to meet national targets.

[3] Based on an assessment of 40 countries that reported on this question in the GLAAS 2016/2017 cycle.

Figure 2 **Level of sufficiency of financial resources allocated to sanitation to meet national targets (n=71)**

Is financing allocated to sanitation improvements sufficient to meet national targets?

- More than 75% of what is needed for both urban and rural
- More than 75% of what is needed for urban or rural
- Between 50% and 75% of what is needed
- Less than 50% of what is needed for urban or rural
- Less than 50% of what is needed for both urban and rural
- Data not available
- Not applicable



Source: GLAAS 2016/2017 country survey.

Lack of adequate financial resources threatens attainment of national goals

- In Ecuador, the National Strategy for Water and Sanitation set a ten-year target in 2014 of 100% coverage for water and sanitation services, which requires a total estimated investment of US$ 7.3 billion. The National Strategy indicates that the state is currently investing US$ 350 million per year, which means investments will need to be doubled. For drinking-water, US$ 2.4 billion is needed and for sanitation US$ 4.9 billion is needed (including for wastewater treatment in the 10 largest cities representing 38% of the population). Urban needs are US$ 5 billion, while rural needs are US$ 2.3 billion.
- A Water Sector Infrastructure and Investment Framework in South Africa found that in 2016, a total annual capital investment of 82 billion rand (US$ 6.4 billion) was required for WASH over the next 10 years, but currently available funding is only about 46 billion rand (US$ 3.6 billion) a year, i.e. only 56% of capital needs are currently funded. Also, lack of investment in O&M is cited as a particular problem causing a number of schemes to not function properly. There is an estimated annual sector maintenance shortfall of 44 billion rand (US$ 3.4 billion).
- Papua New Guinea has estimated that the sector needs US$ 100 million for capital expenditures and US$ 20 million for O&M per year. Water PNG has only about 34% coverage of the population in the areas that have been declared Water PNG districts.

Identifying financial needs through national assessments

Responsibilities for the planning, organization, delivery, maintenance and evaluation of drinking-water supply and sanitation services remain fragmented over different public sectors and at different levels of administration. For practical purposes, reference continues to be made to the WASH sector (with hygiene added as a non-service based element), yet a main enabling environment challenge is how to overcome fragmentation and achieve a greater level of cohesion and efficiency. One way to address this challenge is by holding a joint sector review (JSR).

Periodic government-led JSRs aim to bring different stakeholders, including development partners, together to engage in dialogue, review status, progress and performance, and take decisions on priority actions. A JSR also provides an opportunity to discuss the current financial situation for WASH as well as upcoming needs. Due to the fragmented nature of the WASH sector in which multiple institutions can play leading roles in the provision of services, periodic JSRs have been effective in highlighting issues and creating substantial changes in policy, strategy, and programming – especially contributing to the development of financing strategies in a number of countries.

More than 60% of responding countries indicate that the government has conducted a JSR in the past three years (i.e. 2014–2016). However, few countries explicitly mentioned finance as a topic covered in these reviews. Both Kenya and Liberia noted that WASH financing had been covered specifically in their most recent JSR. Additionally, Costa Rica and Madagascar noted that JSRs had led to investment plans, and in Mozambique, the JSR sparked awareness of the need to mobilize investments to expand WASH systems that were experiencing increasing demand. Further information and guidance on JSRs and specific case studies are available online.[1] Public expenditure reviews are also an opportunity for governments to analyse the effectiveness of public finance, including for water and sanitation.[2]

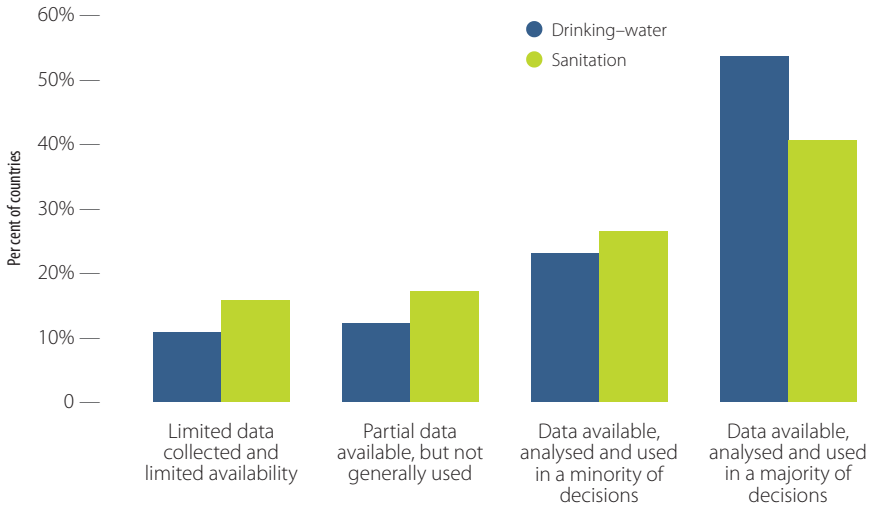
JSRs, finance and target setting in Pakistan

In early 2016, the Parliament of Pakistan adopted a resolution declaring the SDGs to be national development goals, which created momentum at both the national and provincial levels to assess the current situation and develop a baseline. From there, provinces are using JSRs to discuss their current WASH status and levels of financial expenditures. The reviews, along with the use of an SDG costing tool, will contribute to setting national and provincial WASH targets by June 2017.

Data availability for decision-making

Lack of data is often cited as an impediment to financial planning and performance tracking. For WASH investment planning, data needed to estimate future needs and resources can include information such as: coverage levels and targets, predicted population growth, an up-to-date inventory of assets and their current condition, cost and performance data, availability of external funds, domestic budget execution performance, and estimated trends in demand for services. The availability of information for decision-making was cited by countries as relatively good, with nearly 70% of countries indicating that data are available, analysed and used (at least partially) for decisions regarding resource allocation for sanitation and drinking-water (Fig. 3). However, countries did not report on the quality of the information or whether it was used specifically for decisions in rural or urban areas. Countries are also using data in decisions regarding WASH and health. Over 70% of countries indicated that data are available, analysed and used (at least partially) for identifying public health priorities for reducing WASH-related diseases, and for decisions regarding response to WASH-related disease outbreaks, over 80% of countries report using data in their decision-making.

Figure 3 **Are data collected and used to inform decisions on resource allocations? (n= 65)**



Nearly 70% of countries indicate that data are available and used for decisions for resource allocation for sanitation and drinking-water.

Source: GLAAS 2016/2017 country survey.

However, when asked specifically about the availability of WASH expenditure reports, many countries still indicate difficulties in gathering consolidated data, such as financial information on WASH across ministries and committed versus disbursed information on external finance. For example, Cambodia reports that the WASH sector has no sector-wide approach and that there is no

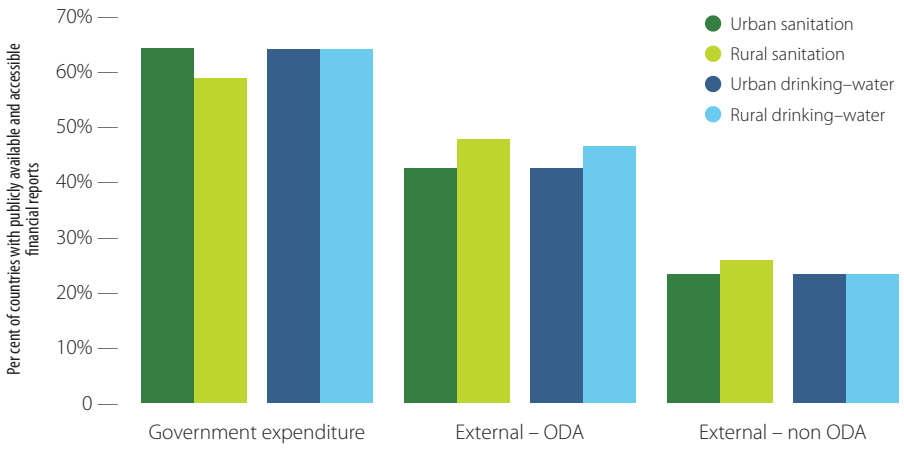
[1] Danert K, Furey S, Mechta M and Gupta S (2016) Effective Joint Sector Reviews for Water, Sanitation and Hygiene (WASH). A Study and Guidance – 2016. Water and Sanitation Programme of the World Bank, Washington, DC. Available at: http://www.rural-water-supply.net/_ressources/documents/default/1-757-3-1463486911.pdf [Accessed 8 March 2017].

[2] More information on public expenditure reviews can be found here: http://wbi.worldbank.org/boost/tools-resources/public-expenditure-review [Accessed 24 March 2017].

consistent financial reporting system among departments in the ministries. In addition, it was noted that development partners and nongovernmental organizations (NGOs) only report on activities and outcomes, but not on expenditures. Similarly, Zimbabwe indicates that disaggregated reports for non-ODA expenditures are not publicly available and are only submitted to the Ministry of Finance on an ad hoc basis, or only upon request. The government is currently in the process of strengthening the coordination architecture which seeks to improve transparency of ODA, non-ODA and government expenditures.

The issue of data availability is an element of the fourth SWA Collaborative Behaviour: build sustainable water and sanitation sector financing strategies that incorporate financial data from taxes, tariffs and transfers as well as estimates for non-tariff household expenditure. Financial data, including from expenditure reports, are a key element for this behaviour to be adopted by both governments and ESAs.

Figure 4 **Availability of expenditure reports, by subsector (n= 73)**



Source: GLAAS 2016/2017 country survey.

A majority of countries indicate limited availability of reports on external aid expenditures for WASH, and more than one third of countries report limited availability of reports on government expenditures for WASH.

Obtaining ODA and NGO financial data through TrackFin: Lessons from countries

External financing remains essential for improving access to WASH in many countries. In the GLAAS 2016/2017 cycle, international public transfers represent 12% of non-household WASH revenue sources (in 42 countries), and 10 out of 25 countries with comprehensive WASH expenditure data indicate a contribution of at least 20% of total WASH funding from international public transfers. Similarly, NGOs are important contributors to the sector. By 2015 in Mali, NGO contributions surpassed those of projects and programmes carried out by the government, with NGOs providing 966 new water points compared to 591 from the government.

However, information on NGO financial contributions is not always available at the level of national institutions in charge of planning and monitoring. In the first phase of TrackFin in Ghana, it was not possible to obtain financial data on NGO voluntary contributions, and only 16 of the 82 known NGOs in the sector were able to provide information in the second phase. The situation was relatively similar in Mali, as only five NGOs reported data during the first phase of TrackFin, representing only 4% of total expenditure, thus not fully reflecting NGO contributions.

Similarly, data on international public transfers in the sector, whether bilateral or multilateral, are not always available at government level. In the implementation of TrackFin, notably in Burkina Faso, Ghana and Mali, it was found that the data available from national institutions indicated amounts significantly lower than the disbursements amounts reported to the OECD Development Assistance Committee (OECD-DAC) by development partners. For example, in Mali, disbursements by donors for sectoral government departments amounted to CFA francs 48 billion (US$ 96 million) from 2012 to 2014, while OECD-DAC data indicated an additional CFA francs 8.5 billion (US$ 17 million) of drinking-water funding unknown to the government, corresponding to about 15% of total donor funding. The government also has access to non OECD-DAC donor funds, representing around 5% of total public transfers.

Several reasons for the difference between government and OCED-DAC data have been identified over the past few years as part of TrackFin:

- Some development partners, who usually communicate the commitment status of their programmes at the level of the ministries of foreign affairs and/or finance on an annual basis, do not disaggregate expenditure by subsector, particularly when these programmes include several activities;
- Financial information, if available at the level of ministries in charge of finance, is not necessarily communicated to sectoral ministries and there is no mechanism facilitating exchange of financial data;
- Many projects and programmes are implemented directly by development partners or through their own project structures, most of which do not communicate their financial data to national authorities;

- Some ODA is channeled directly through NGOs that carry out their own activities without reporting amounts spent at the national level. Thus, the amounts disbursed by donors to NGOs are reported to OECD, but are not known to national authorities and sometimes even to donor country offices if transfers have been made from the donor's headquarters; and
- Some institutional and technical support activities, technical assistance or studies are carried out and accounted for in ODA totals, but these contributions are not always communicated to national authorities.

Thus, sectoral institutions at the national level, which are responsible for coordinating and planning the development of the sector, are not always informed of commitments and disbursements, and this financial information is often difficult to collect and disaggregate. These data will be even more important with the implementation of SDG Target 6.a, which aims to develop international cooperation and capacity building support for developing countries. The main objective of this target is to encourage genuine collaboration between technical and financial partners and national institutions. Collaboration between different sector actors is also a key principle of the Sanitation and Water for All partnership.

Several experiences and practices make it possible to envision improvements in data transparency:

- Several NGO groups, Coalition of NGOs in Water and Sanitation in Ghana, the Forum of International NGOs in Mali, and the National Coalition – International Campaign for Water and Sanitation in Mali, are mobilizing efforts to encourage better collaboration between their members to share their plans and data with national institutions;
- Some donors, including the Agence Française de Développement (AFD), are encouraging the NGOs they fund to improve communication with national authorities about their data;
- Several technical and financial partners systematically and regularly exchange their financial data with national institutions. For example, in Mali, AFD, the Kreditanstalt für Wiederaufbau, (KfW – German development bank), and the European Union regularly communicate with the government on the status of projects being implemented. For instance, AFD disburses funding only at the request of the national institution in charge and regularly organizes data reconciliation on disbursements with the government to ensure common figures;
- Some donors, who do not routinely disclose their disaggregated financial data to sectoral authorities, despite very good technical collaboration, were able to provide detailed data through TrackFin; and
- Some countries, such as Madagascar with the Permanent Technical Secretariat for the Coordination of Aid, have established coordination frameworks at the central level with development partners, donors and international NGOs, using a database as a key instrument to centralize subsector commitments and disbursements disaggregated by subsector and regions and updated on a quarterly basis.

Development and implementation of financial plans for WASH

Investment programmes define and prioritize capital needs, match expected resources with costs of infrastructure and O&M, and improve intra-governmental coordination, transparency of budgeting and reliability of expenditure forecasts. These programmes can also be linked to a strategic financial planning process that identifies: the desired level of services, the potential sources of revenue (e.g. users, taxpayers, donors), priority areas and project costs, how revenue is to be allocated among different costs and functions (capital investment in infrastructure versus recurrent O&M costs, drinking-water supply versus sanitation), and strategies to address identified financial gaps. Such strategies should comprehensively cover each subsector with clear priorities and an identification of costs and revenue sources.

Over two thirds of countries surveyed indicate the existence of a financing plan/budget for drinking-water and sanitation. However, only one third of countries reported that a financial plan has been defined, agreed, and consistently followed, i.e. allocation of funds is forthcoming and the capacity to implement these plans/projects has been developed.

Countries report the use of a range of WASH investment programmes/budget frameworks. National budgeting processes for sector ministries are the most often cited, with 43% of countries indicating that WASH is identified in an annual budgeting process and 11% of countries indicating the identification of WASH in multi-year budget or expenditure frameworks.

Over one third of countries cited the existence of a comprehensive sector development plan, national action plan, water agenda, or similar sector planning document that guides investment planning and may be more closely linked to a strategic financial planning process on investment needs, sources of financing, and strategies for financing future needs (Table 3).

One third of countries report the use of sector development or action plans to identify investment needs, financing sources, and strategies for future financing (Table 3).

Table 3 **Level of financial plan/framework implementation for WASH (n= 74)**

		Level of implementation (number of countries, urban sanitation*)		
Financial planning framework for WASH	**Countries using framework**	Insufficient	Partial	Consistent
National annual budgeting process	43%	10	10	12
Sector development or investment plans/agenda	35%	13	5	8
Multi-year/medium-term budget/expenditure framework	11%	4	0	4
Tariff law/policy	3%	0	1	1
No financial plan	8%	—	—	—

*Urban sanitation shown as a proxy indicator for financial plan implementation levels across WASH services.
Source: GLAAS 2016/2017 country survey.

In some countries, there may be several plans each covering a specific area e.g. separate plans for drinking-water, sanitation and hygiene, separate plans for urban and rural areas, each with different levels of adoption and implementation, an annual WASH plan, and a strategic investment plan for hygiene promotion for financial planning.

South Africa's national WASH budget process

In South Africa, the National Treasury, with input from stakeholders, publishes an annual Division of Revenue Act, which provides comprehensive budgets for all government activities. An Integrated Development Plan sets out a municipality's high level plans, and Water Services Development Plans give more detail regarding water services. The National Treasury, with sector input, calculates future needs and municipalities are given budgets, which include grants for capital investment (infrastructure) and O&M, for the next three years.

Government budgeting for WASH

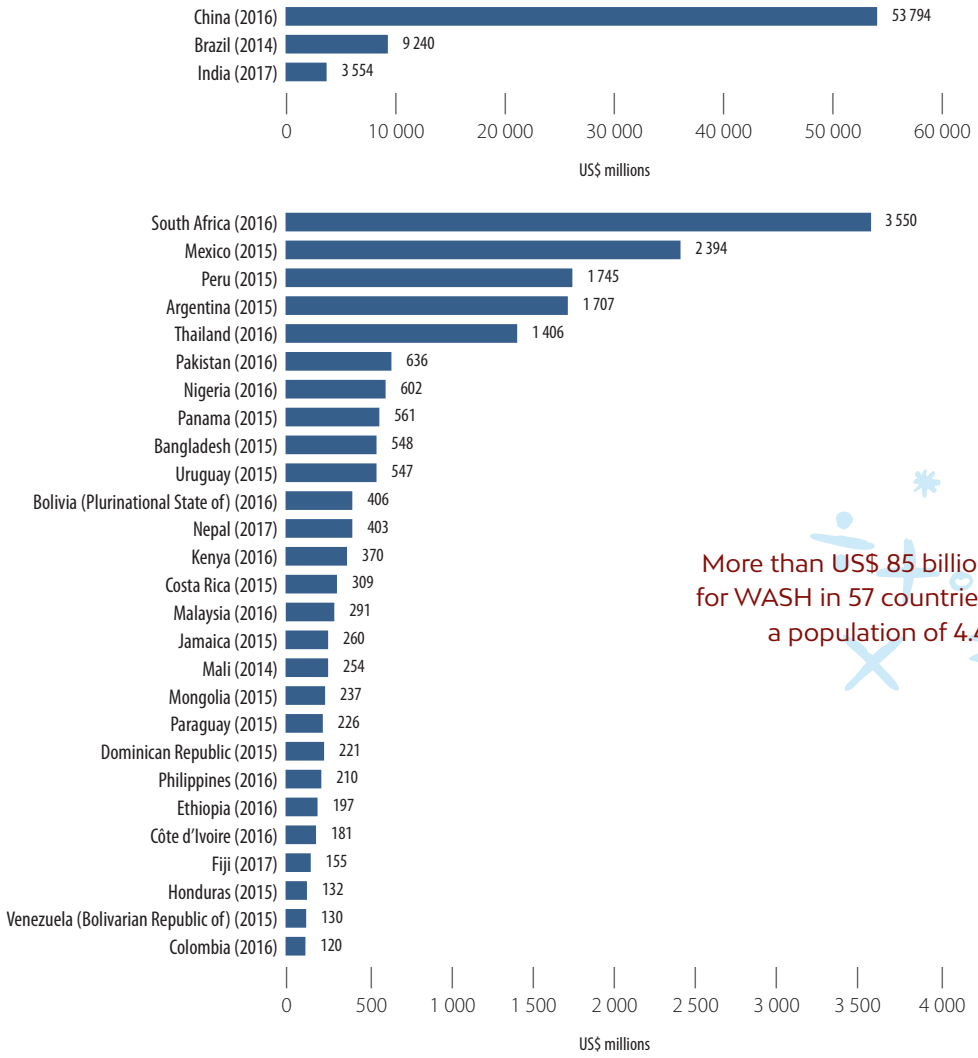
WASH government budgets

Both government budget and expenditure trends can be indicators of priorities in national policy and action. The GLAAS country survey requests the most recent annual line ministry budgets for water, sanitation and hygiene to determine the level of public funds being allocated to WASH as well as historical budget trends. Data from both the GLAAS 2013/2014 and 2016/2017 cycles suggest that government budgets and expenditures are increasing to address the growing needs of the sector.

In the GLAAS 2016/2017 country survey, a total of 57 countries provided WASH-specific budgets for government ministries and/or institutions, or provided an aggregated national budget for WASH services. Nearly one half of these countries also presented these budgets disaggregated for water and sanitation. Separate hygiene promotion budgets were provided by 12 countries. The 57 countries represent 4.4 billion people and report US$ 85 billion in annual budgets for WASH (for the most recent budget year). A range of fiscal budget years was reported from 2014 to 2017. Three countries, China, Brazil, and India representing 2.9 billion people, report US$ 67 billion in annual budgets for WASH.

Figure 5

Reported WASH budgets, most recent fiscal year (n= 57)



More than US$ 85 billion is budgeted for WASH in 57 countries representing a population of 4.4 billion.

Note that WASH budget data are not always comparable between countries as data may not be reported for all ministries involved in WASH, subnational/national and service provider data may not be reported, and the scope of activities covered may differ by country.

Exchange rates for currency conversion were downloaded from the World Development Indicators database (originally sourced from the International Monetary Fund, International Financial Statistics) of the World Bank in early February 2017. For conversion of 2016 and 2017 budget figures, the average exchange rates for 2015 were used, as these were the most recent rates available from this dataset at the time of analysis.

Additional countries with a national WASH budget less than US$ 100 million include: Georgia (97), Afghanistan (92), Senegal (87), Uzbekistan (68), United Republic of Tanzania (61), Albania (60), Rwanda (57), Guinea (56), Lithuania (51), Swaziland (47), Burkina Faso (45), Zambia (39), Lesotho (36), Lao People's Democratic Republic (26), Madagascar (24), Cambodia (22), Liberia (20), Solomon Islands (19), Tajikistan (16), Bhutan (14), Serbia (13), Maldives (12), El Salvador (11), Tonga (10), Bosnia and Herzegovina (10), Timor-Leste (9), Burundi (3), and Vanuatu (2).

Source: GLAAS 2016/2017 country survey.

While data quality has improved with each successive GLAAS survey, it is important to note that some countries may only report budgets for a few sector ministries and institutions, and a few countries only reported a collective budget for all of WASH. WASH budget allocations may also be under-reported due to the lack of disaggregated budgets for certain ministries and the potential exclusion of municipal and service provider budgets even where these may be significant. Budgets may also 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. For example, Brazil reported a US$ 9.2 billion water-related budget for 2014 inclusive of water, sanitation, drainage, solid waste management, water resources management, and hygiene/health promotion.

Budget data are summarized by SDG region[1] in Table 4 and present a global average government budget per capita allocated to WASH of US$ 19, and an overall WASH allocation (as a per cent of gross domestic product (GDP)) of 0.42%. Direct comparisons among regions are limited due to the lack of a complete data set, however, the data do suggest that the relatively higher income countries in the Latin America and Caribbean Region allocate higher WASH budgets per capita than lower income countries in sub-Saharan Africa.

Table 4 Summary of WASH budgets, by SDG region

SDG Region	Number of countries	Aggregate WASH budget (US$ millions)	WASH budget per capita (US$)	WASH budget as % GDP
WORLD	**57**	**85 089**	**$ 18.97**	**0.42**
(excluding China and India)	55	27 741	$ 15.40	0.39
• **Sub-Saharan Africa**	17	5 629	$ 9.50	0.52
(excluding South Africa)	16	2 078	$ 3.88	0.27
• **Latin America and the Caribbean**	15	18 007	$ 33.23	0.42
• **Eastern Asia and South-Eastern Asia**	8	55 761	$ 34.25	0.47
(excluding China)	7	1 967	$ 8.68	0.19
• **Central Asia and Southern Asia**	8	5 274	$ 3.10	0.20
(excluding India)	7	1 720	$ 4.11	0.33
• **Europe and Western Asia***	5	231	$ 9.76	0.19
• **Oceania§**	4	185	$ 100.67	3.36

*The SDG regions of Northern America and Europe and Western Asia and Northern Africa are combined; since there is no representation from Northern America or Northern Africa, these are deleted from combined title.
§Budget data provided by Fiji and Tonga included funding for capital and operational costs of the public water services authority, which is likely to have skewed Oceania numbers upwards compared to other regions.
Source: GLAAS 2016/2017 country survey.

Government budget allocations

Twenty-five countries reported government budget allocations at least partially between drinking-water and sanitation, with 42% allotted to sanitation services. Only limited data were available for budget allocations concerning WASH in health care facilities and in schools (Table 5).

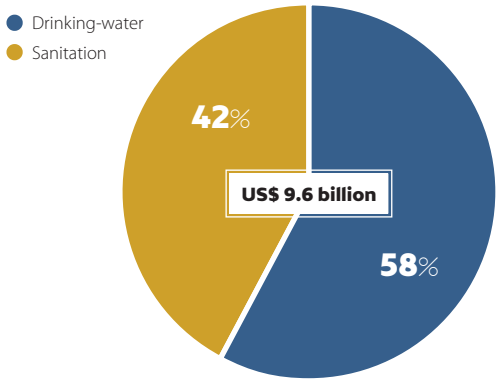
Table 5 WASH government budget allocations

Disaggregated budget	Number of countries	Aggregate WASH budget (US$ millions)
Drinking-water	25	5 574
Sanitation	25	3 979
Hygiene promotion	12	89
WASH in health care facilities	5	27
WASH in schools	6	225

Source: GLAAS 2016/2017 country survey.

Forty-two per cent of government budgets were allocated for sanitation (Fig. 6).

Figure 6 Budget allocations for WASH disaggregated between drinking-water and sanitation (n= 25)



Source: GLAAS 2016/2017 country survey.

[1] More information on SDG regional groupings: https://unstats.un.org/sdgs/indicators/regional-groups/ [Accessed 24 March 2017].

Government budget trends

The data available on national budgets and expenditure, though limited, indicate that government allocation and spending for drinking-water and sanitation is increasing and thus suggest that WASH prioritization has improved. The average annual rate of budget increase for 17 countries that provided data to GLAAS in 2013 and 2016 is 4.9% after adjusting for inflation (i.e. using local price indexes), and using constant currency exchange rates. A majority of countries report increased WASH budgets or expenditure, including:

- Bangladesh reported an increase in its government budget for WASH from US$ 308 million to US$ 548 million from their financial year 2013 to 2015. The Department of Public Health Engineering and four large Water Supply and Sewerage Authorities: Dhaka, Chittagong, Khulna, and Rajshahi, are responsible for water supply and sanitation facilities throughout the country. These five institutions alone reported a combined budget increase from 20.2 to 30.3 billion taka (US$ 259 to US$ 389 million) from 2013 to 2015.

- In Peru, the Ministry of Housing, Construction, and Sanitation budget increased from 914.3 to 1 358 million soles (US$ 287 to US$ 427 million) from 2013 to 2015. While regional government budget allocations for WASH decreased from 489.2 to 363.3 million soles (US$ 153 to US$ 114 million), local government budget allocations increased from 2 882 to 3 797 million soles (US$ 906 million to US$ 1.2 billion) from 2013 to 2015.

- In Lesotho, the Water and Sewerage Company budget allocation increased from 107.9 to 157.7 million loti (US$ 8.5 to US$ 12.4 million) from 2013 to 2017. During this same period, the Department of Rural Water Supply increased from 107.1 to 217 million loti (US$ 8.4 to US$ 17 million).

- In Bhutan, district budgets increased from 290 to 410 million ngultrum (US$ 4.5 to US$ 6.4 million), while the budget of the Ministry of Works and Human Settlement increased from 393 to 430 million ngultrum (US$ 6.1 to US$ 6.7 million) from 2013 to 2016. The Ministry of Education and the Ministry of Health reported decreases in WASH budget allocation from 93 to 51 million ngultrum (US$ 1.4 to US$ 0.79 million). Overall government budget allocation increased from 812 to 905 million ngultrum (US$ 12.7 to US$ 14.1 million) from 2013 to 2016, however, this nominal increase in WASH budget was offset by inflation to show a decrease in WASH budget in real terms.

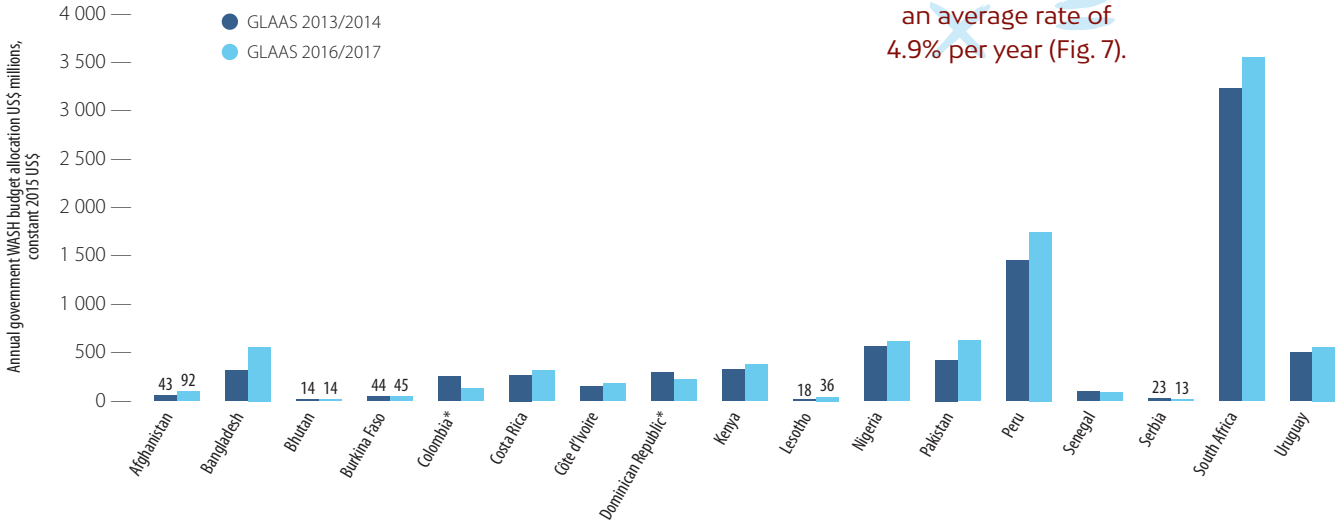
- In Pakistan, provincial budgets for WASH rose from 36 billion to 63 billion Pakistani rupees (US$ 350 to US$ 613 million) from fiscal year 2012 to 2016.

Seventeen countries that responded to both the GLAAS 2013/2014 and 2016/2017 country surveys provided comparable government WASH budget information between both reporting years. The assessment ensured the same ministries were included, and that the exclusion or inclusion of regional and local government budgets was consistent over both reporting years.

These 17 countries, representing a population of 830 million, reported WASH budgets of US$ 8 billion in 2013 for budget years ranging from 2012 to 2013. These same countries report WASH budgets of US$ 9.1 billion in 2016 for budget years ranging from 2015 to 2017. Twelve out of the 17 countries reported government WASH budgets rising faster than the local price index.

Figure 7 **Reported government WASH budgets, US$ millions, constant 2015 US$**

Government WASH budgets are increasing at an average rate of 4.9% per year (Fig. 7).



*Colombia and Dominican Republic provided 2013 and more recent budget data in GLAAS 2016/2017 country survey response.

Note: Only common and comparable (i.e., same ministries reported in both surveys) responses from GLAAS 2013/2014 and 2016/2017 cycles are included. Also, reported budget years varied among respondents, thus these values do not necessarily reflect 2013 and 2016 budget years. See Annex D for reported budget years.

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

However, despite increasing WASH budgets, a majority of countries still estimate that financing allotted to drinking-water, sanitation and hygiene improvements remains insufficient to meet nationally determined WASH needs. For example,

- Kenya notes that budget allocations for water supply infrastructure of 33 billion Kenyan shillings (US$ 340 million) per year are a quarter of the required investment needs of 120 billion Kenyan shillings (US$ 1.3 billion). In addition, major gaps were reported in sewerage funding, where out of more than 200 urban centers in Kenya, only about 30 have sewerage networks and treatment plants.

- South Africa estimates a capital and O&M shortfall of approximately US$ 6.3 billion per year, despite a US$ 3.6 billion annual budget.

- In Madagascar, the Ministry of Finance and Budget and the Secretariat for the Coordination of External Aid estimate that only 38% of US$ 516 million in WASH investment needs for 2017–2019 are currently funded.

Furthermore, based on results from TrackFin in Ghana, national budgets do not necessarily equate with expenditure. For example, wide disparities were observed in Ghana between budget and expenditure, with the exception of salaries, for which a match between budget and expenditure was generally achieved.

Targeting setting in Lesotho with budget constraints

Setting and costing targets in Lesotho can be a challenge due to the budgeting process, which is often the limiting factor. National WASH targets are set based on achieving universal access as enshrined in Lesotho Vision 2020, but there are no costing mechanisms or frameworks in place to assess the impact or to take into account the SDGs. The budget is prepared based on a Budget Framework Paper (BFP) that has linkages to national objectives and priorities, as well as the SDGs. However, the BFP sets a non-negotiable ceiling to be observed when preparing the targets. The BFP process is often not followed when allocating the resources, which then calls for the targets to be adjusted to the available budget and leaves a funding gap with the original targets. This limitation of resources is a constraint to aligning national targets with global indicators.

Sources of financing for WASH

National expenditures and sources of funds

Estimating national WASH expenditures requires information and coordination among the many different WASH sector institutions and levels of government, service providers, nongovernmental organizations and external development partners. The sources of financing for drinking-water and sanitation services can include:

- Households – includes household tariffs and fees paid to service providers and repayable finance raised by public utilities, as well as household investment in self-supply solutions (e.g. private or community wells, water tanks), and household level sanitation.

- Taxes (government) – funds originating from domestic taxes that are channeled to the sector by central, regional and local governments, and repayable finance borrowed by governments other than ODA.

- Transfers (external sources) – funds from international donors and charitable foundations. Transfers include grants and concessional loans, which include a grant element in the form of subsidized interest rate or a grace period.

In the GLAAS 2016/2017 country survey, respondents were requested to provide annual WASH expenditure data from the most recent available fiscal year for the sector by revenue source (i.e. households, government, external sources) and by service type (i.e. drinking-water, sanitation, urban and rural). Revenues derived from repayable financing sources were also requested, though these were not disaggregated between repayable financing for public utilities versus financing borrowed by governments.

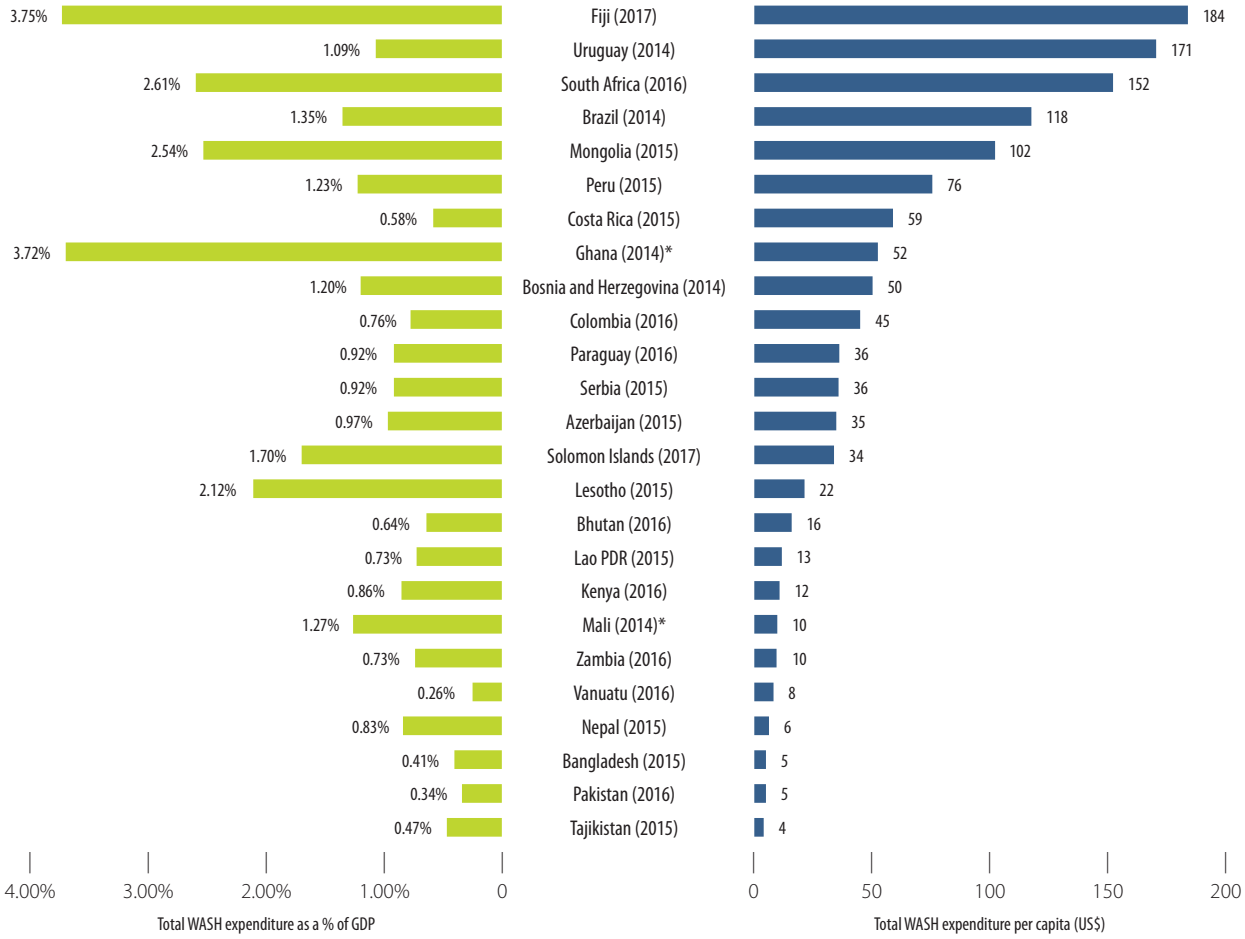
While expenditure data were received from 52 countries (out of 75 country respondents), there is a wide variation in response completeness due to challenges in obtaining information from all WASH funding sources. For instance, while data on utility tariffs are readily available in many countries, the payments made by households for rural WASH services and out-of-pocket household expenditures are more difficult to obtain. In addition, aggregation of household expenditures for WASH at the national level is not commonly performed or compiled, nor is a centralized information system used. As such, household contributions are provided as estimates in many cases. For example, the Government of Nepal estimated household contributions by multiplying the number of households in both urban and rural areas by an estimated average annual household tariff payment of 1 200 rupees (US$ 12) for urban areas and 300 rupees (US$ 3) for rural areas.

To improve tracking of financial flows, the GLAAS TrackFin initiative has developed a detailed methodology for tracking financing to WASH and developing WASH accounts at the national level. Currently, several countries are implementing the TrackFin methodology to gain a better understanding of financial flows to WASH (see Annex B). It was not expected that countries responding to the GLAAS country survey undertake such an intensive study as outlined in the TrackFin methodology, however, calculating estimated expenditures involved similar types of estimation methods as TrackFin and draws on some of the same suggested data sources.

Twenty-five countries were able to provide WASH expenditure data sourced from households, government, and external sources in the GLAAS 2016/2017 country survey. The 25 countries represent a population of 875 million with a total reported WASH expenditure of US$ 43 billion, and an average of US$ 50 WASH expenditure per capita (Fig. 8). It should be emphasized that these expenditures include both capital and O&M expenditures.

Average annual WASH expenditure is reported at
US$ 50 per capita, and 1.27% of GDP for 25 countries.

Figure 8 **Total WASH expenditure as a per cent of GDP and per capita (25 countries, population of 875 million)**



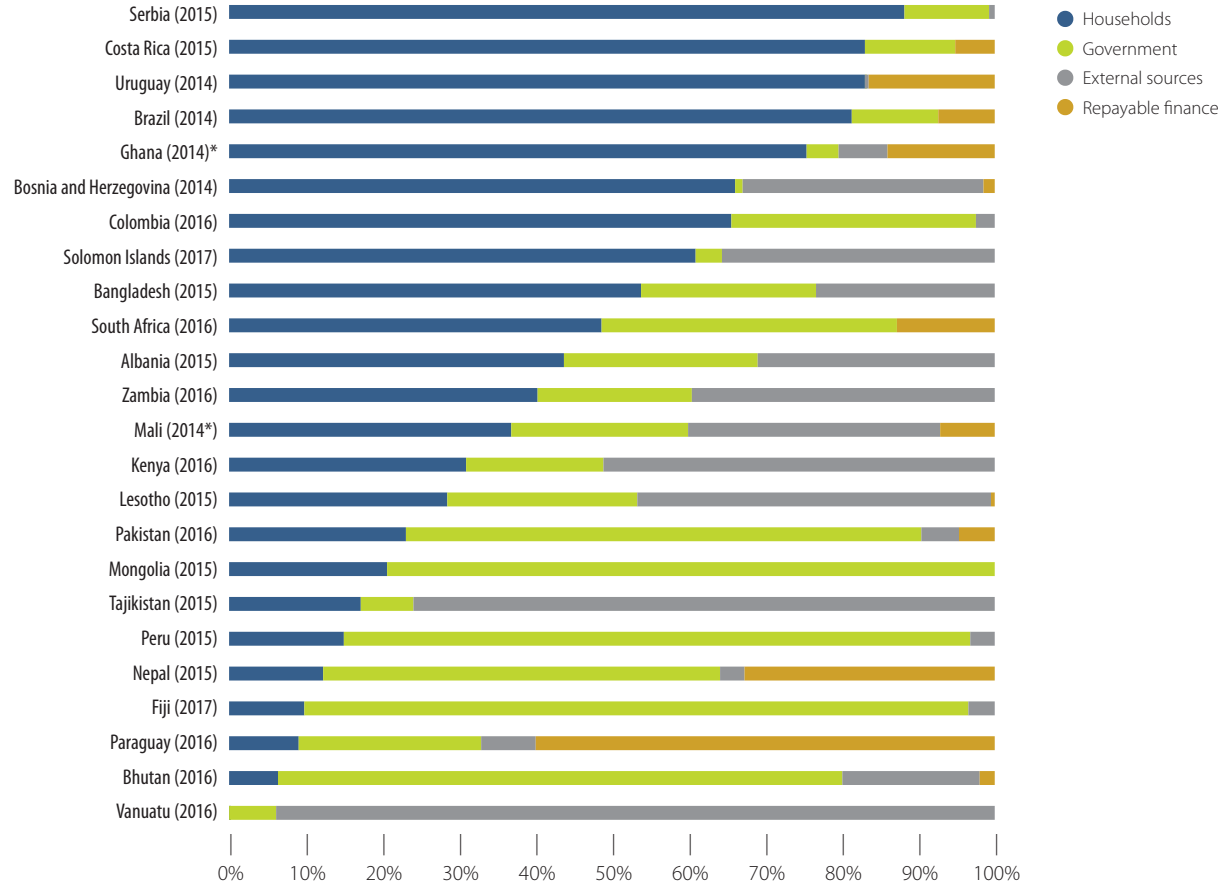
Sources: GLAAS 2016/2017 country survey; TrackFin, 2017 where indicated with an asterisk (*).

More detailed results (Fig. 9) show that the sources of finance can vary widely by country: some countries report major contributions from households (e.g. Brazil, Costa Rica, Serbia, Uruguay), others report more reliance on external aid (e.g. Kenya, Lesotho, Tajikistan), and a few countries report that national finance supports the majority of WASH expenditures (e.g. Bhutan, Fiji, Pakistan, Peru). Repayable sources of finance were considered separately to highlight the relative level of borrowing compared to other revenue sources. Repayable sources of finance are significant in a number of countries including Nepal, Paraguay, South Africa, and Uruguay.

Overall external aid for these 25 countries amounted to only two per cent of total WASH expenditure, in part because a majority of the respondent countries that were able to provide data on household contributions are categorized as middle income countries and receive relatively small amounts of development aid for WASH. A broader group of respondent countries and dependence on external aid is discussed in Public Expenditure: Respective share of government and external contributions.

Figure 9

Sources of financing for WASH



Source: GLAAS 2016/2017 country survey, TrackFin (2017) where indicated with an asterisk (*).

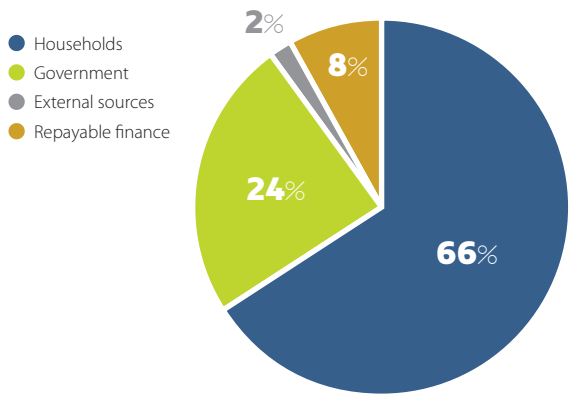
Data from 25 countries indicate that two thirds of their WASH financing was derived from household contributions.

Household contributions

Past data have suggested that a large proportion of WASH financing comes from household contributions, predominantly tariffs, but also in the form of household investments in self-supply solutions, such as wells, water tanks and household sanitation. In the GLAAS 2014 report, a breakdown of WASH financing for 19 countries indicated that nearly 75% was derived from household sources. The GLAAS 2016/2017 country survey further supports this finding by estimating that 66% of WASH financing originates from household sources, based on the responses from 25 countries, representing US$ 43 billion in annual expenditure for WASH (Fig. 10).

Figure 10

Sources of financing (25 countries, US$ 43 billion)



Sources: GLAAS 2016/2017 country survey; TrackFin Ghana and Mali studies, 2017.

While household contributions via tariffs and self-supply are the predominant source of financing for WASH, aggregation of household WASH expenditures at the national level is not commonly performed or compiled. The countries that could provide some information estimated national household expenditures for WASH through living standards measurement surveys, service provider user reports, and extrapolated data from tariff reviews and national statistics (e.g. average water consumption). For example, in Ghana, household data were compiled from a living standards survey where data on household water and sanitation expenditures (e.g. expenditures on toilets, public toilets, pipe-borne metered water, public standpipes, bottled water, etc.) were aggregated into different categories.

It is acknowledged that some of the respondent countries may have underreported household contributions, as comprehensive data are not always available. While some countries provided data on both tariffs and self-supply, a majority of countries providing household contribution data could only provide tariff data, which may be a small percentage of household contributions in less developed areas without formal service providers, where households may make significant investments. This is illustrated by the data available from seven countries (Table 6); however, very few countries could provide estimates of household investments in self-supply.

Data from seven countries show household investments in self-supply are significant.

Table 6 **Tariffs versus payments for self-supply (US$ millions)**

Country	Year	Tariffs	Self-supply (non-tariff)
Bangladesh	2015	110	317
	2013	45	133
Brazil	2014	19 172	340
Fiji	2017	16	2
Ghana*	2014	87	978
Mali*	2014	40	22
Pakistan	2016	116	98
	2012	94	44
Peru	2015	178	227

Sources: GLAAS 2013/2014 and 2016/2017 country surveys; TrackFin, 2017 where indicated with an asterisk (*).

Public expenditure: Respective share of government and external contributions

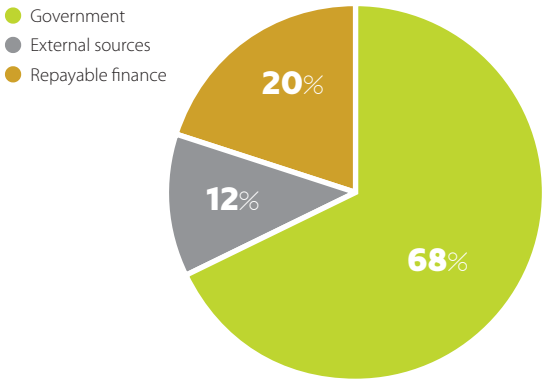
Forty-two of 75 participating countries provided estimates of financing for WASH originating from government taxes, external ODA and voluntary grants, and repayable finance. A separate breakdown among these sources is presented due to lack of complete data on household contributions (Fig. 11). These 42 countries represent a population of 1.3 billion and reported nearly US$ 24 billion in WASH financing (excluding household contributions) in the most recent year for which data were available.

Excluding WASH expenditures sourced through household contributions, government-coordinated WASH expenditure averaged US$ 18 per capita and 0.42% of GDP for the 42 countries. Notably, government financing via taxes comprised nearly 70% of the non-household financed WASH expenditures.

It is acknowledged that for some countries, government expenditure on WASH is under-reported due to difficulties in obtaining information. Underreporting can be due to missing data for one or more WASH subsectors, incomplete data from sub-national governments, or the lack of disaggregated WASH expenditure data at some national ministries.

While external aid comprises only 12% (US$ 2.8 billion) of non-household WASH revenue sources across this subset of 42 countries, its impact is significant. External aid comprised a majority of non-household WASH financing in 18 out of the 42 respondent countries. Figure 12 illustrates the breakdown of non-household financing sources in more detail.

Figure 11 **Breakdown of non-household sources of WASH finance (42 countries, US$ 24 billion)**

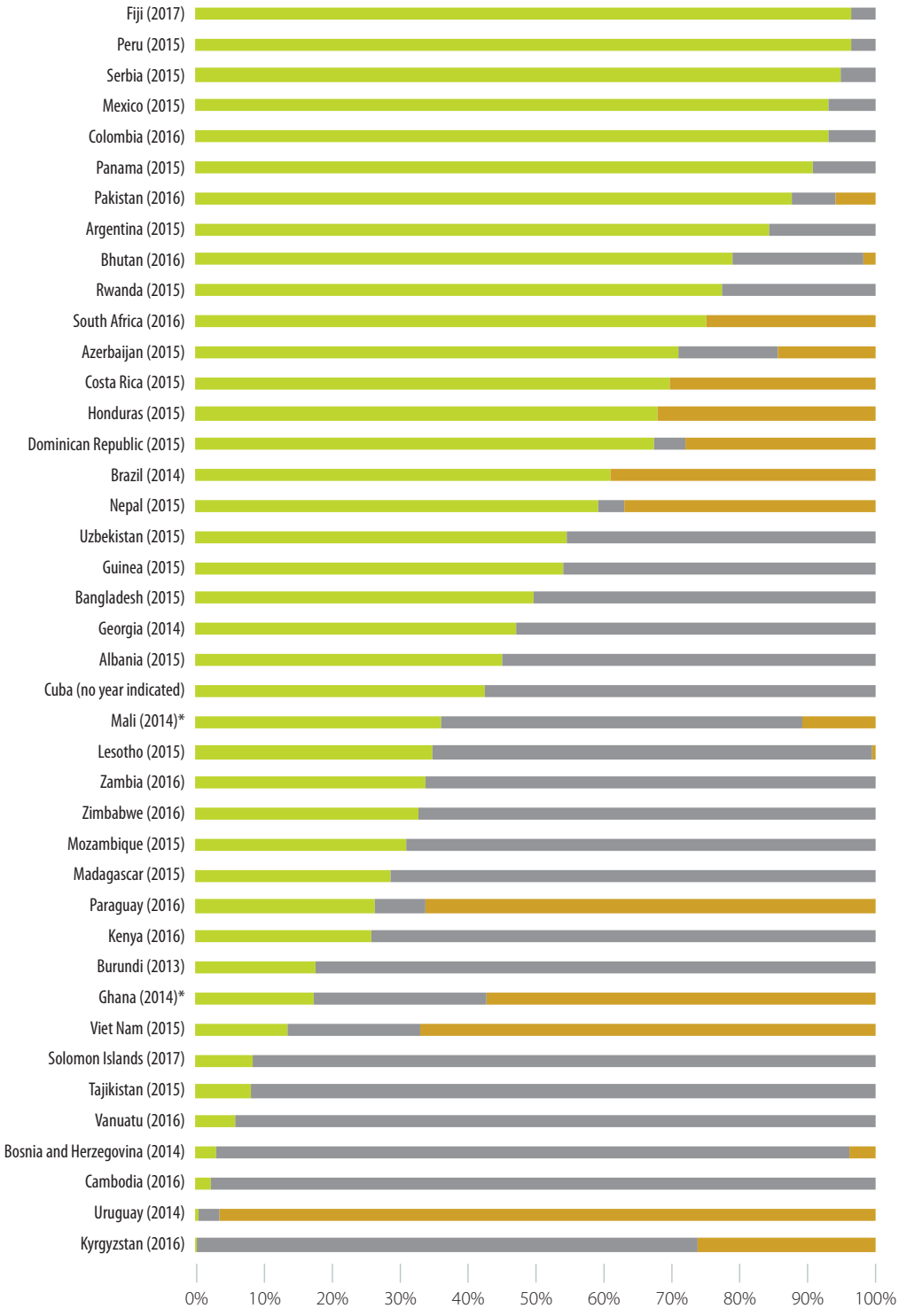


Sources: GLAAS 2016/2017 country survey; TrackFin Ghana and Mali studies, 2017.

Government financing (taxes) comprises nearly 70% of non-household WASH revenue sources for 42 countries.

Figure 12

Breakdown of non-household sources of WASH financing (taxes, external sources and repayable finance)



Many countries remain dependent on external financing sources.

Sources: GLAAS 2016/2017 country survey; TrackFin, 2017 where indicated with an asterisk (*).

It is also noted that several countries show high reliance on repayable finance as compared to other sources of non-household financing. For instance, in Uruguay, the expenditure data are reported from the country's two formal service providers (Obras Sanitarias del Estado and Intendencia Montevideo) that rely primarily on tariffs and loans as their sources of financing, and do not receive significant government or external transfers. With household contributions excluded, Fig. 12 vividly highlights this difference in financing sources.

Of the 25 countries that reported WASH financing from households, government, and external sources, 10 countries (44%) indicated that more than 20% of WASH financing is received from external sources (Table 7).

Table 7 **Eleven countries receiving 20% or more WASH financing from external sources**

Country (year)	WASH expenditure from external sources	Disbursement (US$ millions)
Kenya (2016)	51%	279
Bangladesh (2015)	23%	184
Mali (2014)	33%	55
Bosnia and Herzegovina (2014)	32%	61
Zambia (2016)	39%	61
Albania (2015)	31%	34
Tajikistan (2015)	76%	28
Lesotho (2015)	46%	21
Solomon Islands (2017)	36%	7
Vanuatu (2016)	94%	2

Source: GLAAS 2016/2017 country survey; TrackFin Mali study, 2017.

External aid flows to water and sanitation

Globally, over US$ 11 billion in ODA grants and loans (US$ 7.4 billion), non-concessional loans/credits (US$ 3.4 billion), and other funds[1] (over US$ 300 million) from high income countries (bilateral aid, multilateral development banks, NGOs, and private foundations) was disbursed (i.e. spent) on water and sanitation in 2015. While external aid flows comprise a low proportion of global expenditures on WASH, in some countries, the amount of aid received from external sources is significant and may even be the largest source of WASH financing.

Allocation of global aid commitments

ODA grant and loan commitments from donors reporting to the OECD-CRS totaled US$ 192 billion in 2015 (US$ 214 billion at constant 2014 US$), up from US$ 172 billion in 2012 – an increase of 24%. However, despite the large increase in overall aid, commitments for water and sanitation decreased from US$ 10.4 to US$ 8.2 billion (constant 2014 US$), a 21% decrease from 2012 to 2015.

Several major multilateral institutions, including the World Bank, the European Commission, and the African Development Bank reported large decreases in ODA commitments for water and sanitation in 2015, though none reported a major policy or priority shift away from water and sanitation. In fact, as a result of a record amount of multi-year loan commitments made in 2012 (US$ 6.4 billion globally), actual ODA disbursements have been steadily rising for water and sanitation from US$ 6.3 to US$ 7.4 billion from 2012 to 2015.

Table 8 **ODA grants and concessional loans, 2012 and 2015 ODA commitments**

	Aid commitment (US$ billions, constant 2014 US$)		
	2012	2015	Change
Total ODA	171.8	214.6	24%
Water and sanitation ODA	10.4	8.2	-21%

Source: OECD-CRS, 2016.

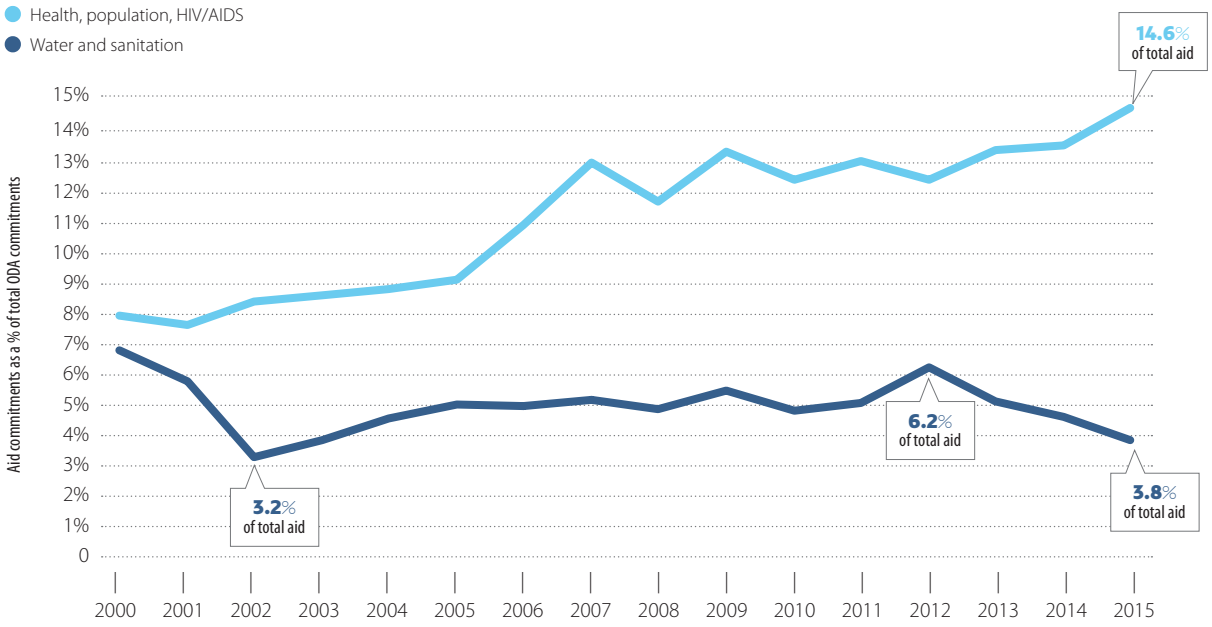
From 2012 to 2015, overall development aid commitments increased over US$ 40 billion, while aid commitments for water and sanitation have decreased by US$ 2.2 billion (Table 8).

The multi-year cycles of project aid commitments may contribute to the wide variations in ODA loan commitments from year to year; however, it is noted that the proportion of aid allocated to water and sanitation has steadily declined since 2012 with respect to other development priorities, such as health, refugees, and humanitarian assistance.

[1] Source: GLAAS 2016/2017 external support agency survey.

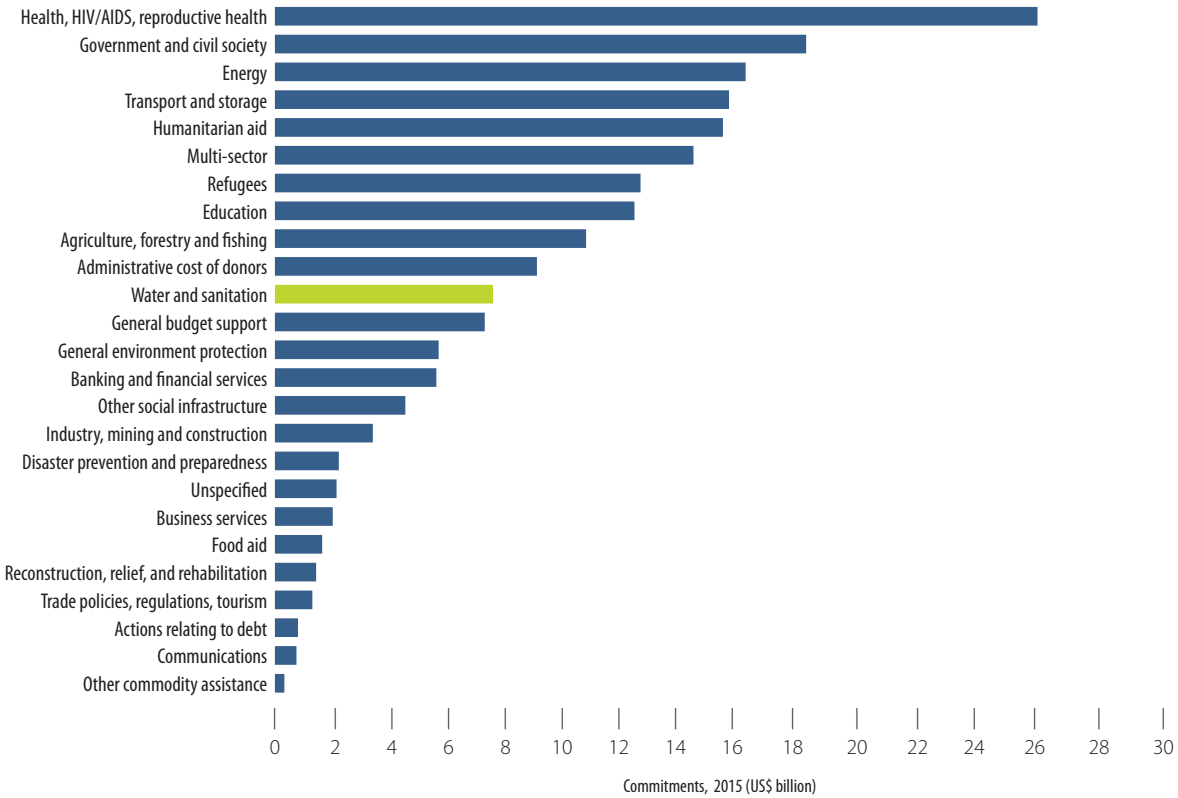
External aid commitments for water and sanitation have declined from 6.2% to 3.8% of total aid commitments between 2012 and 2015 (Fig. 13).

Figure 13 **Comparison of water and sanitation development aid commitments to health, population and HIV/AIDS over time**



Source: OECD-CRS, 2016.

Figure 14 **Comparison of water and sanitation development aid in 2015 relative to other sectors**



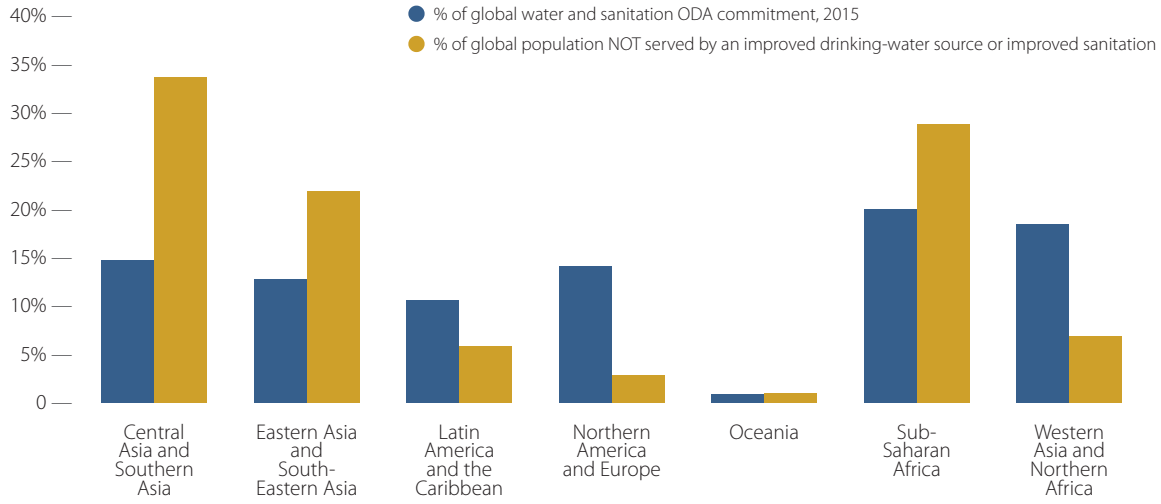
Source: OECD-CRS, 2016.

Geographic distribution of aid

Eighty-five per cent of the global population without access to improved sanitation or drinking-water from an improved source lives in three SDG regions: Central Asia and Southern Asia, East and South-Eastern Asia, and Sub-Saharan Africa. However, aid commitments to these three regions were only 48% of global ODA for water and sanitation in 2015 (Fig. 15). These regions contain China and India, both middle income countries, which collectively house a high proportion of the unserved for sanitation, but received just over 3% of water and sanitation aid commitments in 2015. Conversely, three relatively high coverage countries – Jordan, Iraq, and Tunisia – received over US$ 800 million in aid commitments (11% of global aid for water and sanitation) for medium and large sewerage projects, desalination systems and research, and rural drinking-water systems. Also, Ukraine was the recipient of a large US$ 900 million concessional ODA loan commitment to fund the modernization of a sewage treatment plant, more than one half of the entire ODA commitment for water and sanitation to sub-Saharan Africa in 2015.

Figure 15

Regional targeting of aid versus regional drinking-water and sanitation coverage



Source: OECD-CRS, 2016; WHO/UNICEF JMP, 2015.

In 2015, sub-Saharan Africa received the largest share of aid commitments for water and sanitation (over US$ 1.7 billion) of any region. Countries in sub-Saharan Africa did not reach the MDGs for either drinking-water or sanitation, and as of 2015, 319 million people lacked access to improved drinking-water sources.[1] However, aid commitments to the region have declined from 38% in 2012 to 20% of overall water and sanitation ODA in 2015, or from US$ 3.8 billion to US$ 1.7 billion (Fig. 16).

Increased focus on fragile states

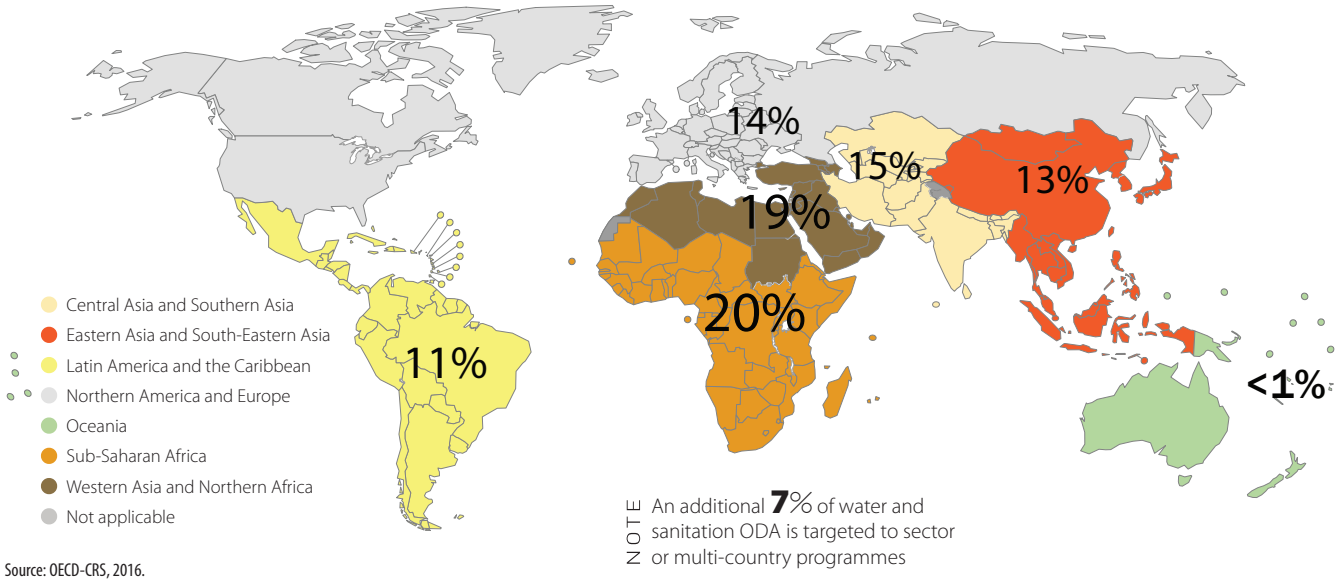
Several ESAs indicate that future efforts and resource allocations will deepen in fragile states providing additional opportunities for investment in the water sector. The World Bank's International Development Association (IDA) 18 allocation[2] to fragile, conflict and violence (FCV) affected countries will rise from US$ 7.2 to US$ 14.4 billion. There will also be a US$ 1.5 billion financing facility to support service improvements in countries hosting large numbers of refugees. While this IDA funding is for all sectors, it is an opportunity to expand the depth of support for the water sector in FCV affected countries. World Vision has plans to increase its focus in fragile state contexts in such places as the Democratic Republic of the Congo, Somalia, South Sudan, as well as countries in the Middle East responding to the Syria crisis. The African Development Bank plans to increase partnerships in fragile states with other active organizations to synergize and leverage expertise to provide efficient and effective services. UNICEF is also involved in humanitarian contexts. As a result of UNICEF's advocacy efforts to link development and humanitarian interventions, the capacity of 11 national governments to deliver protected, reliable access and sufficient WASH services to girls, boys and women in humanitarian situations increased during the past two years.

[1] WHO/UNICEF Joint Monitoring Programme (2015) Progress on Drinking-Water and Sanitation—2015 Update and MDG Assessment. World Health Organization, Geneva. Available at: http://www.who.int/water_sanitation_health/publications/jmp-2015-update/en/ [Accessed 31 March 2017].

[2] Further information on International Development Association (IDA) 18 is available online at: http://documents.worldbank.org/curated/en/348661486654455091/Report-from-the-Executive-Directors-of-the-International-Development-Association-to-the-Board-of-Governors-Additions-to-IDA-Resources-Eighteenth-Replenishment [Accessed on 8 March].

Figure 16

Regional breakdown of water and sanitation aid commitments, 2015



Source: OECD-CRS, 2016.

Note that SDG regional groupings were used for the analysis to ensure consistency with SDG reporting. See Annex A for additional information about SDG regions.

Aid commitments for water and sanitation to sub-Saharan Africa have declined from US$ 3.8 billion to US$ 1.7 billion from 2012 to 2015.

Specific targets for financial or technical assistance

A majority of ESAs have established quantitative targets for their WASH programmes to track and report results of their programmes, either to their governing body, to parliament or to the public. Most of these targets are defined in terms of populations receiving new or improved drinking-water and/or sanitation services, though other types of targets are used, including: budget targets, number of treatment plants, water points or latrines constructed or rehabilitated, number of people trained (e.g. hygiene extension workers), number of countries and local areas where agreed reforms are being implemented, and number of institutions that have gained/strengthened knowledge and capacity to formulate and implement relevant policies, laws and strategies.

The timing of the GLAAS 2016/2017 ESA survey found many ESAs in the midst of developing new strategies and goals for WASH in order to better align with the evolving global water architecture, sustainability, climate resilience, and the SDGs. As such, some ESAs were not able to provide specific targets, but were in the process of developing or revisiting their targets for WASH support.

Table 9 summarizes targets from 15 ESAs that aim to reach (in aggregate) over 350 million people with new or improved access to drinking-water and sanitation by 2020. Some ESAs had separate targets for drinking-water and sanitation (e.g. the United States Agency for International Development (USAID), AFD), which have been combined in the table, while other ESAs specified a breakdown between providing new access versus a mix of populations receiving new services and populations receiving service quality improvements.

Fifteen ESAs reported specific targets for delivering new or improved drinking-water and sanitation services to over 350 million people by 2020.

Table 9 **Summarized ESA targets for new or improved access to drinking-water and sanitation by 2020**

ESA	Population with new services	Population with improved service levels	Funding or other targets (if any)	Time frame
African Development Bank	85 million			2016–2025
Asian Development Bank	50 million		An increase of at least 25% of total water lending on sanitation, wastewater management and river clean-up projects	2011–2020
BRAC			Activity (construction and rehabilitation) targets for 73 sub-districts and 35 towns	Until 2020
AFD (France)	2.5 million per year	5.5 million per year		2014–2018
BMZ (Germany)	10 million per year			Until 2030
Inter-American Development Bank	2.25 million households			2016–2019
JICA (Japan)	10 million per year		Human resources development for water supply (1 750 people)	2013–2017
DGIS (Netherlands)	80 million			By 2030
Sida (Sweden)	60 million			By 2030
UNDP			Human resources and institutional capacity development (600 people and 250 institutions)	2016–2017
DFID (United Kingdom)	60 million			By 2020
USAID (United States)	16 million			2013–2018
Water.org	20 million			2017–2020
Water Supply and Sanitation Collaborative Council	16 million people accessing improved sanitation facilities and handwashing facilities			2017–2020
World Vision	More than 20 million people with access to a basic water source and more than 20 million people with access to basic sanitation facilities		Other targets for water points (new and rehabilitated), sanitation in schools and health care facilities and hygiene promotion	2016–2020

Source: GLAAS 2016/2017 ESA survey.

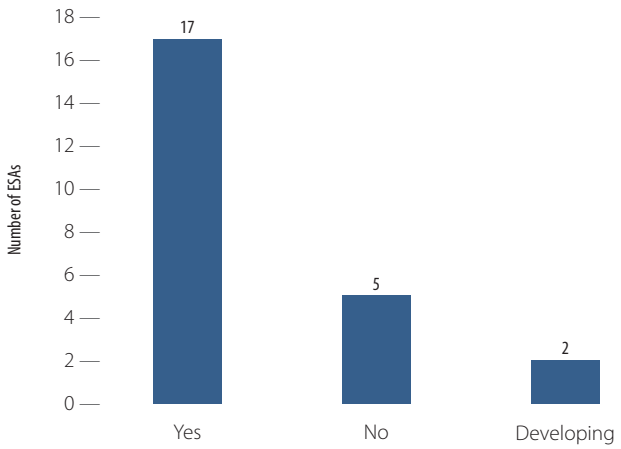
Between 2017–2021, WaterAid is focusing its programming support on strengthening the sustainability of WASH services. Its research, policy and programming work aim to strengthen the systems and capabilities to produce the step change in the WASH sector's performance.

External support agency strategies

Most ESAs reporting to GLAAS had established a separate, multi-year WASH sector development strategy (Fig. 17). Almost all of these strategies (79%) were centered around the objective of expanding and improving sustainable access to safe drinking-water and sanitation services.

Common objectives mentioned in ESA sector strategies included: WASH financing and mobilizing private sector investment (33% of ESAs); sector strengthening (including governance, policy and leadership) (33%); and water resources management (including integrated water resources management, sustainable management of water resources and transboundary water resources management), which is the focus of SDG Target 6.5 (29%).

Figure 17 **Number of ESAs with a separate, multi-year WASH/water sector development strategy (n=24)**



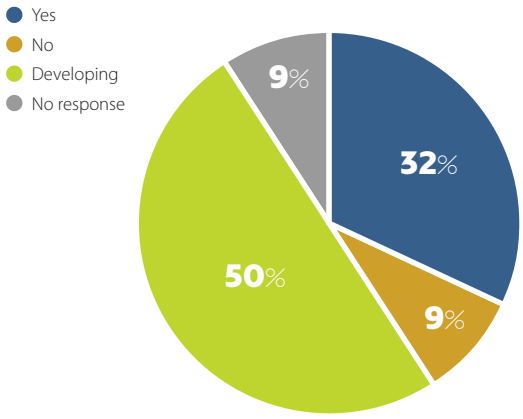
Source: GLAAS 2016/2017 ESA survey.

With the adoption of the SDGs in 2015, all of the ESAs reporting to GLAAS had begun the process of aligning their WASH strategies with the new global development agenda. Of the 25 ESAs surveyed, nine had already revised their internal policies to be fit-for-purpose for supporting governments to meet the SDGs, and the remaining 16 were currently in the process of doing so. This indicates good harmonization and coordination amongst respondent ESAs in relation to the global development agenda for WASH.

Almost all of the ESAs responding to the survey were expecting internal monitoring and reporting tools to be updated to reflect the new development strategy (i.e. a revision of internal strategy would be accompanied by an update of internal monitoring and reporting indicators). Seven ESAs had updated their monitoring and reporting systems and another 11 were in the process of doing so (Fig. 18).

Figure 18

Percentage of ESAs that have revised internal monitoring and reporting systems to align with the SDGs (n=22)



Source: GLAAS 2016/2017 ESA survey.

External support agency priorities

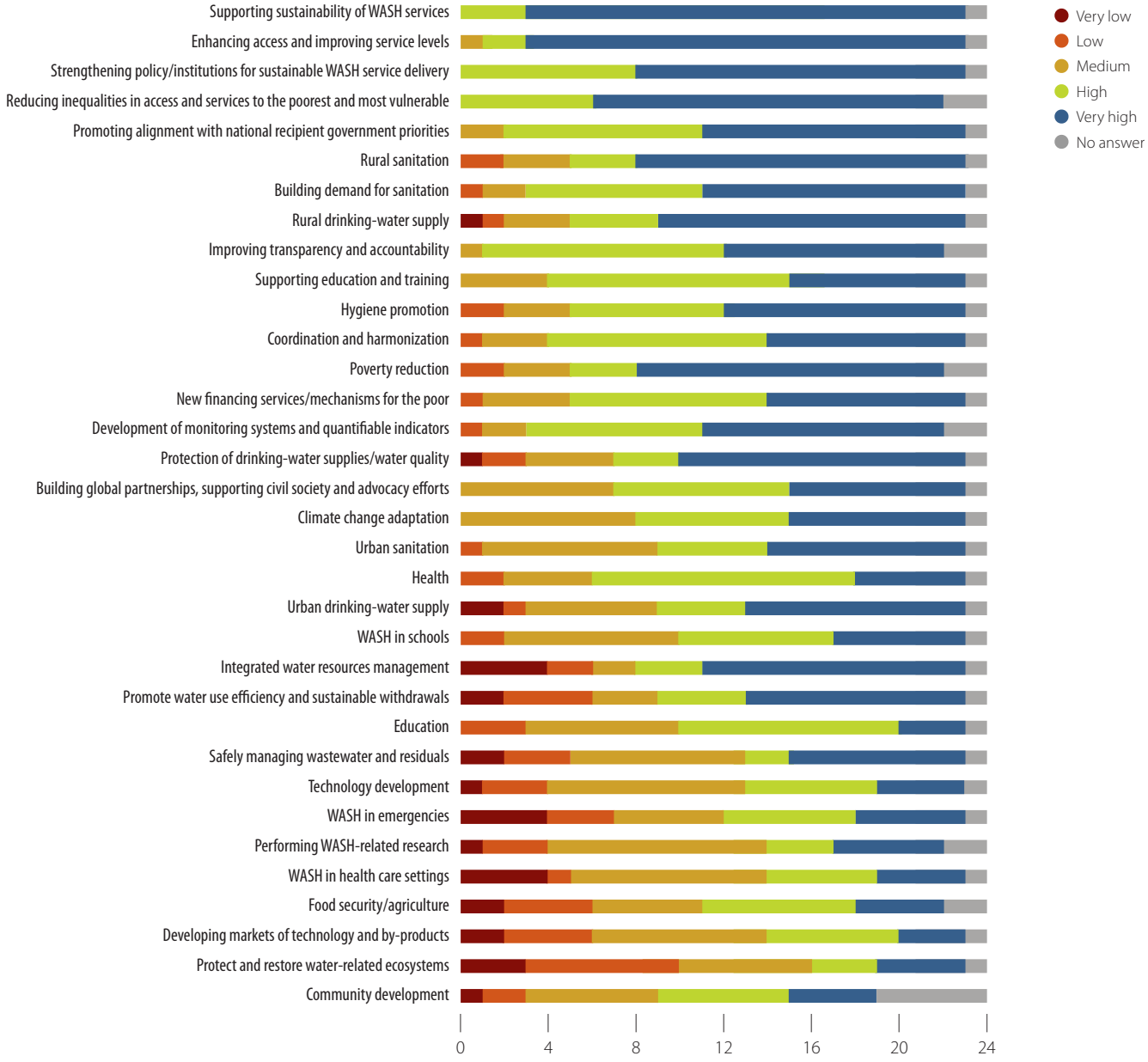
There was a degree of diversity across ESAs when it came to priority areas within WASH, as shown in Fig. 19. Different organizations tended to have their own areas of priority; for example, the Bill & Melinda Gates Foundation focuses on technological innovations to promote sanitation services, while the African Development Bank prioritizes the issues of water security and transboundary water management. Organizations such as development banks and Water.org focus heavily on WASH financing and leveraging private sector investments, while other ESAs such as BRAC and AFD provide support to countries for WASH service delivery. Five areas within the WASH sector emerged as high priorities for the majority of ESAs (Fig. 19):[1]

- Supporting sustainability of WASH services: 20 out of 24 ESAs reporting to GLAAS rated this area as a 'Very high' priority, and another three ESAs rated this as a 'High' priority;
- Enhancing access and improving service levels: 20 out of 24 ESAs rated this as a 'Very high' priority;
- Strengthening policy/institutions for sustainable WASH service delivery: 15 out of 24 ESAs rated this as a 'Very high' priority, and another eight rated this as a 'High' priority;
- Reducing inequalities in access and services to the poorest and most vulnerable: 16 out of 24 ESAs rated this as a 'Very high' priority, and another six rated this as a 'High' priority;
- Promoting alignment with national recipient government priorities: 12 out of 24 ESAs rated this as a 'Very high' priority, and another nine rated this as a 'High' priority; and
- Rural sanitation: 14 out of 21 ESAs rated this as a 'Very high' priority.

[1] This analysis does not include data from Portugal.

Figure 19 A snapshot of main global WASH priority areas for ESAs (n=24)

What are the main areas of global priority for your strategy and activities in the WASH sector?



Source: GLAAS 2016/2017 ESA survey.

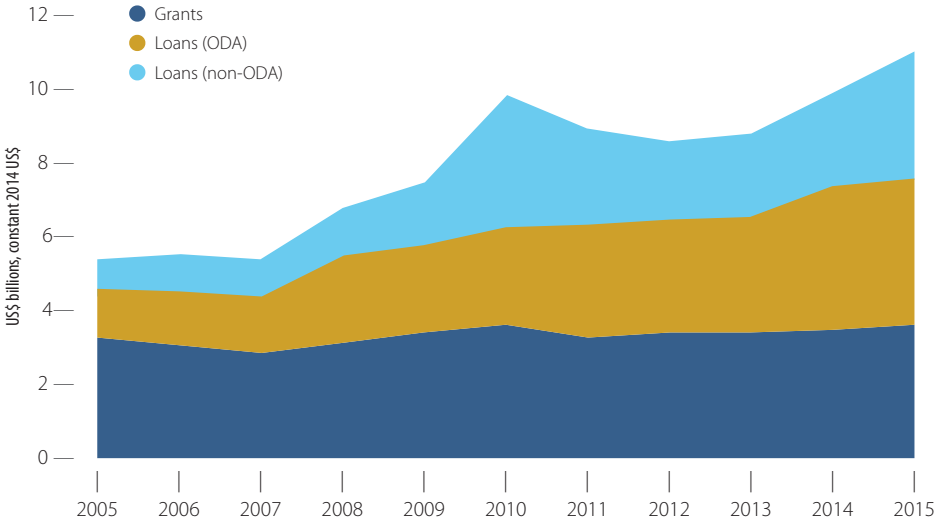
ESAs generally engaged in development activities in their highest priority water/WASH areas. For example, AFD has been promoting sector strengthening efforts by supporting water sector reform in Jordan through €150 million of sectoral budget support. Similarly, Germany, through the Ministry for Economic Cooperation and Development (BMZ), has been supporting international integrated water resources management efforts through development cooperation in Egypt, Jordan, Morocco, and Tunisia.

Repayable Financing

External support for drinking-water and sanitation includes the use of repayable finance, primarily concessional loans classified as ODA[1] 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.

ESAs reporting to OECD-DAC indicate that both ODA loan disbursements and non-concessional loan disbursements to water and sanitation have increased, rising from US$ 5.2 billion to US$ 7.4 billion from 2012 to 2015 (Fig. 20).

Figure 20 **Trends in ODA grants, ODA loans and non-concessional lending (disbursements)**



Source: OECD-CRS, 2016.

Asian Development Bank Water Financing Programme to increase lending target

In line with the merger of ADB's Asian Development Fund with its ordinary capital resources balance sheet, which boosts ADB's financial capacity to support the investment needs of its developing member countries, the ADB Water Financing Programme annual lending target is being increased from US$ 2 billion to US$ 3 billion starting in 2017. The Asian Development Fund provides concessional loans (longer loan maturities and lower interest rates) and grants to low income countries while ordinary capital resource loans are provided to middle income countries at market-based rates.

In addition to loan assistance from development partners, other forms of repayable finance can be used, including commercial bank loans, bonds, equity, and microfinance. Commercial bank loans are funds offered for capital investments by banks with a repayment schedule with interest. In the developed world, long-term infrastructure lending is common, but much rarer in developing countries where it can be short-term and expensive. Bonds are a mechanism whereby capital funds can be raised from a lender who is promised full repayment with periodic interest payments. Bonds can be sold at any time, giving rise to a bond market. Equity is the raising of financing in a private company by issuing shares, which can be sold on a stock market, and where the holder expects to receive a share of the profits. Microfinance is the offering of relatively small loans for shorter periods to communities and households. Microfinance programmes have been established in several developing countries for groups unable to obtain credit through other sources.

[1] For a loan to qualify as ODA, it must, among other things, be concessional in character and must 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 (e.g. grace period, maturity, and interest) and a discount rate of 10%.

Water.org reaches 4.5 million people through WaterCredit

WaterCredit leverages local financial institutions by building their capacity and confidence to deliver contextually-relevant loans for toilet construction or water supply connection. Up-front access to credit is a challenge encountered by many low income households. Since 2003, Water.org partners have disbursed one million WaterCredit loans. Ninety-three per cent of those borrowers are women and 74% of those borrowers live in rural areas. Sixty-two per cent of borrowers earn US$ 2 or less per day. Moreover, the WaterCredit approach mobilizes consumer resources: an investment of US $15.7 million in philanthropic subsidies leveraged by partners has resulted in US$ 220 million in commercial and social capital disbursed in the form of water and sanitation services loans – a return of roughly 14 times the investment.

Non-concessional development loans are issued primarily by several multilateral development banks, France, Germany, and the European Commission (Table 10) and comprised 32% of total development assistance to water and sanitation in 2015. In comparison, loans classified as ODA comprised 36% of total development assistance to water and sanitation.

The highest proportion of non-concessional loans are made to the following SDG regions: Latin America and the Caribbean (48%), Eastern Asia and South-Eastern Asia (22%), and Western Asia and Northern Africa (19%). Less than one per cent of non-concessional lending is targeted to sub-Saharan Africa.

Table 10

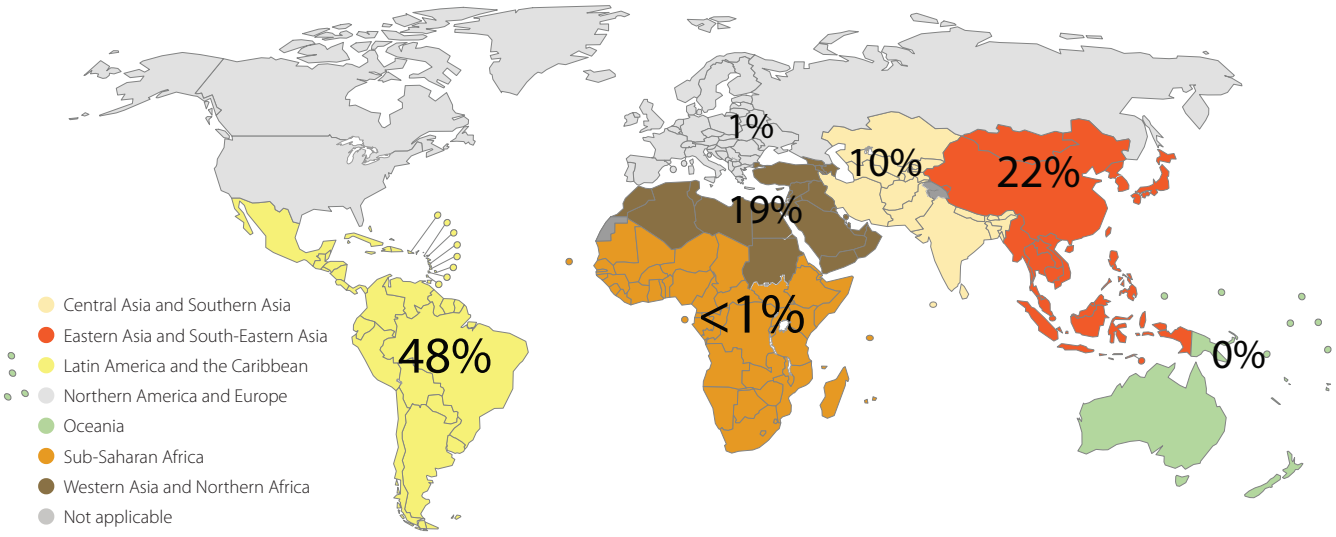
Multilateral banks providing an annual average of more than US$ 25 million in non-concessional lending commitments for WASH, 2013-2015 annual average

Multilateral development bank	Average 2013–2015 commitments (US$ millions, constant 2014 US$)
International Bank for Reconstruction and Development	2 305
Asian Development Bank	1 160
Inter-American Development Bank	775
Islamic Development Bank	504
African Development Bank	197
International Finance Corporation	176
European Bank for Reconstruction and Development	99
OPEC Fund for International Development	37

Source: OECD-CRS, 2016.

Figure 21

Regional distribution of non-concessional lending, 2015 disbursements

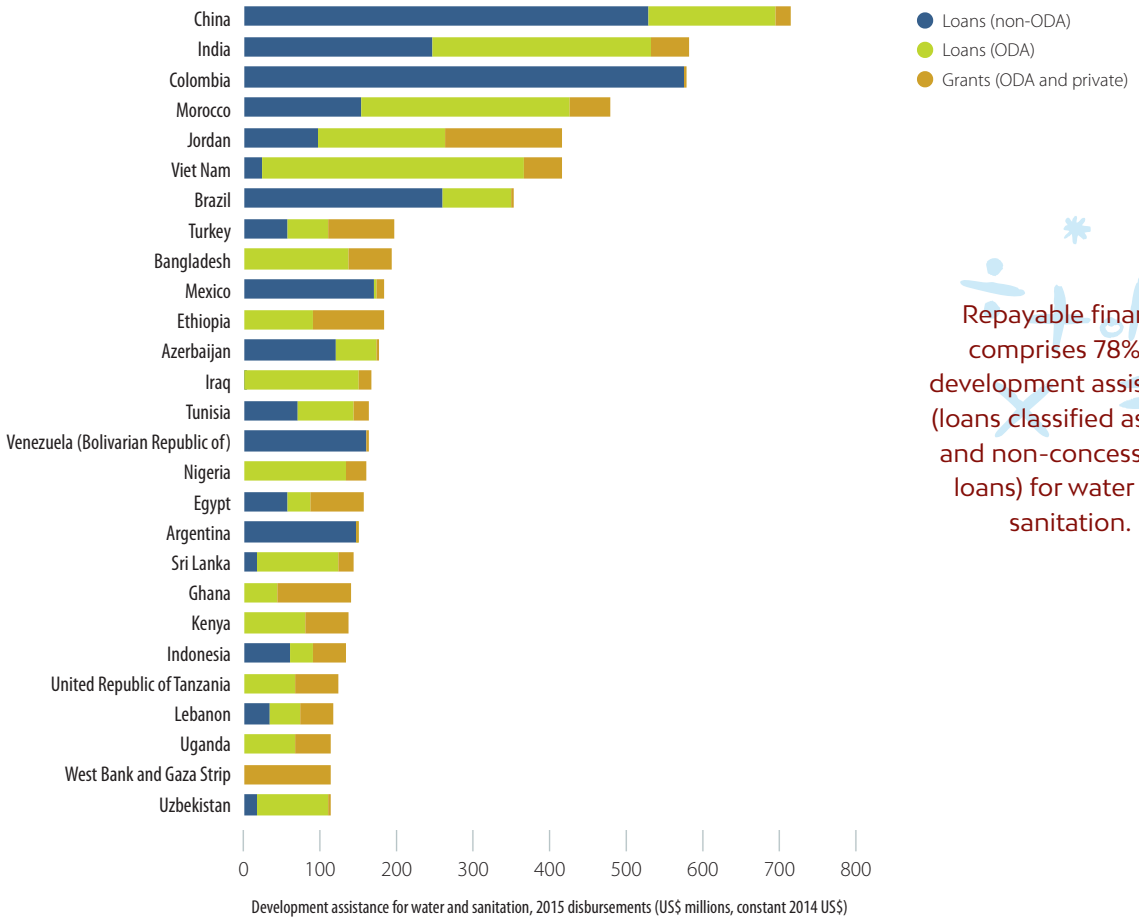


Source: OECD-CRS, 2016.

Note that SDG regional groupings were used for the analysis to ensure consistency with SDG reporting. See Annex A for additional information about SDG regions.

Figure 22

Top recipients of development assistance for water and sanitation (greater than US$ 100 million in disbursements in 2015), grants versus loans



Repayable finance comprises 78% of development assistance (loans classified as ODA and non-concessional loans) for water and sanitation.

Source: OECD-CRS, 2016.

Involving the private sector in water programmes: The Netherlands Sustainable Water Fund

Through the Sustainable Water Fund, companies based in the Netherlands and partner countries are involved in 22 water projects in 17 countries. These public-private partnerships have generated more than €60 million of additional investment in WASH in developing countries. One example of a successful public-private partnership is the pro-poor water supply project in Cebu, the Philippines. Together with local partners and the International Red Cross, Vitens Evides International is working to improve access to clean drinking-water by constructing a water network in the slums of Cebu. An innovative microfinance system, in which users make small daily payments for water consumption, will help fund the connection fee and ensure the provision of safe and affordable water to the city's poorest. The project will connect a total of 80 000 people to the drinking-water network.

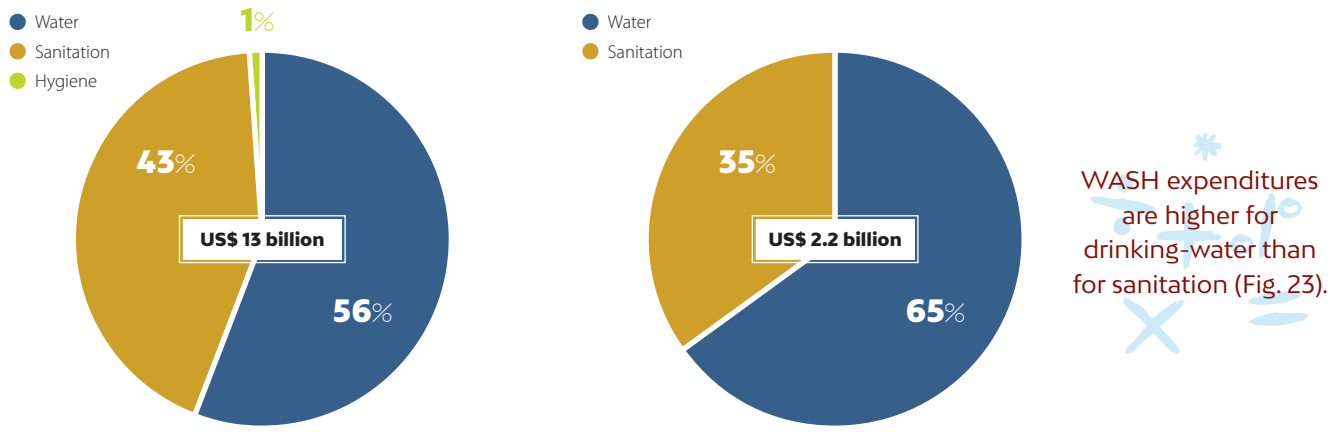
Allocation of expenditures

The breakdown of expenditures among different types of services and types of investment can identify issues with financial targeting and whether there is a need to adjust allocations of resources to better align with identified needs.

Sanitation versus drinking-water

GLAAS has monitored the breakdown of expenditures between drinking-water and sanitation at the global level since 2010. Results have shown that despite lagging levels of sanitation coverage, non-household expenditures (government and external support) for sanitation have typically been one half the level of expenditures for drinking-water services. The most recent GLAAS 2016/2017 country survey data suggest that non-household expenditures for sanitation remain below allocations for drinking-water at 43% of non-household WASH expenditures, but higher than the estimated expenditures of 27% from the GLAAS 2011/2012 cycle. Additionally, disaggregated data from 37 ESAs indicate that sanitation receives only 35% of allocable sanitation and drinking-water development aid (Fig. 23).

Figure 23 **Expenditures for sanitation versus drinking-water**



Note: Data from India have been excluded from the chart on the left, but if included, the expenditure breakdown would be 47% to sanitation and 53% to drinking-water.
Sources: GLAAS 2016/2017 country survey; OECD-CRS, 2016; GLAAS 2016/2017 ESA survey.

While water received more ODA than sanitation, it should be noted that many ESAs consider sanitation a very high priority (see Fig. 19) and mobilize significant technical assistance and programmatic support, if not financial support for capital investment, for sanitation. Some examples include:

- One of the United Kingdom's Department for International Development's (DFID) main WASH priorities is ensuring sustained behaviour change in sanitation and hygiene, and developing effective solutions for the delivery of sanitation services to the poor.
- The Asian Development Bank has been actively working on expanding demand for sanitation through convening the Asian Sanitation Dialogue to motivate governments to expand budgets for sanitation, as well as increasing its own investment in fecal sludge management over the past three years.
- USAID supports the Sanitation Service Delivery project, which works to create a self-sustaining, private sector fueled sanitation market in urban and peri-urban areas of Benin, Côte d'Ivoire, and Ghana to increase the use of improved sanitation and increase the use of safely managed fecal waste services at scale.

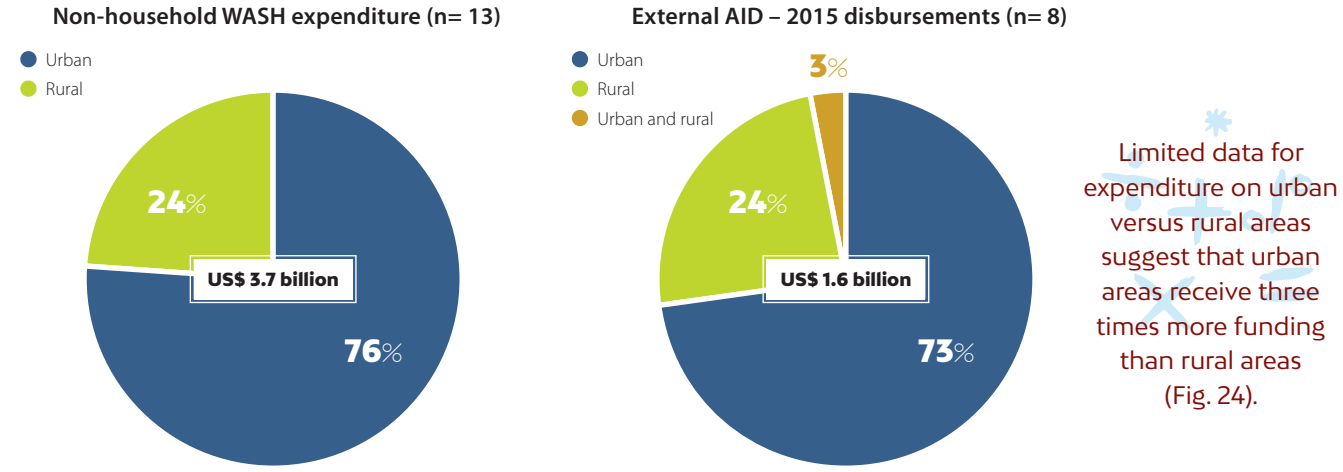
Focus on sanitation – The Bill & Melinda Gates Foundation

The Bill & Melinda Gates Water and Sanitation programme priorities include developing non-sewered sanitation approaches, identifying new delivery models, and advocating for public policies that support improved sanitation in densely populated areas. Ultimately, better sanitation will be key to ensuring healthy, sustainable cities in the developing world, and the approaches that prove successful can be adapted and extended to rural communities. Because the innovations the Foundation supports can be most immediately valuable in densely populated areas, the main focus is on urban sanitation. Most sanitation projects are in South Asia and sub-Saharan Africa, where the burden of inadequate sanitation is greatest. For example, in Senegal, the Foundation continues to support urban sanitation market mechanisms to drive down the cost of pit emptying for consumers. A partnership with the National Sanitation Office of Senegal (ONAS), which is the national utility company, has supported the roll out of an innovative call center that matches demand for pit emptying to local supply and has proved this model can be effective. Also, in 2016, the Foundation brought together many investments which engage decision-makers at city level. The city efforts have established key sites for learning and the introduction of fecal sludge management regulation, public-private partnerships, corporate social responsibility, household sanitation financing and systematic desludging.

Urban versus rural

GLAAS has monitored urban versus rural expenditures at the global level since 2012. Current data from 13 countries, totaling US$ 3.7 billion in non-household WASH expenditures, indicate that urban expenditures account for more than three times rural expenditures, despite lower access to sanitation and drinking-water in rural areas. Only eight ESAs could disaggregate aid flows between urban versus rural communities and also report that WASH development aid for urban areas is three times the aid for rural areas. This statistic is relatively unchanged from the GLAAS 2013/2014 cycle, and is likely the result of government allocations and aid targeted for higher budget, large urban infrastructure projects versus the lower project costs of rural infrastructure.

Figure 24 **Expenditures for urban versus rural WASH**



Limited data for expenditure on urban versus rural areas suggest that urban areas receive three times more funding than rural areas (Fig. 24).

Sources: GLAAS 2016/2017 country survey; OECD-CRS, 2016; GLAAS 2016/2017 ESA survey.

Hygiene promotion

Only six[1] of the 52 countries that reported WASH expenditures provided disaggregated government expenditures for hygiene. These six countries represent 204 million people and collectively spent US$ 63 million (US$ 0.31 per capita) on hygiene promotion. While no ESA was able to disaggregate funds for hygiene promotion, nearly one half of the 24 ESAs surveyed[2] indicated that hygiene promotion and behaviour change are very high priorities (Fig. 19). For example, WaterAid's current strategy from 2015-2020 places an emphasis on hygiene behaviour change as one of four key strategic areas.

[1] Bangladesh, Bhutan, Guinea, Kyrgyzstan, Senegal, and Serbia.

[2] This analysis does not include data from Portugal.

Capital expenditure and recurrent operation and maintenance costs

With limited financial resources available to the sector, governments, municipalities, and local communities must strike a balance between new investment to provide service to the unserved and recurrent expenditure to sustain existing investments. As the coverage and quality of services provided increases, so do the costs for staffing, electricity, parts, and supplies to operate and ensure the long-term viability of the existing systems and assets. Household user fees and tariffs are applied to cover some or all of the operating and capital costs for service provision; however, household tariffs do not fully recover the costs of service in a majority of respondent countries, and in many cases, the operational financing gap is covered through government subsidies. Subsidies and other mechanisms for cost recovery are discussed in more detail in the section Cost recovery.

A recent study estimated the annual O&M for basic WASH services will rise from US$ 4.2 billion per year to US$ 31.1 billion per year between 2015 and 2030 and will outweigh capital costs for basic WASH services by 1.4 times by 2029.[1] Limited data from the GLAAS 2011/2012 cycle indicated 31% of total expenditure from all financing sources was spent on O&M.[2] While capital versus O&M expenditure disaggregation was not requested in this cycle of the GLAAS country survey, qualitative information was received by several countries (Table 11).

Capital versus O&M in government budgeting and policy

Country	Capital vs. O&M financing
South Africa	Fifty-five per cent of budgets are targeted for capital and 45% for O&M subsidies.
United Republic of Tanzania	Five per cent of total sanitation and drinking-water expenditures were spent on O&M.
Nepal	WASH policy indicates that local bodies allocate 20% of the budget for sanitation and 20% for functionality of WASH services, however, information about the actual amount allocated and spent was not available.[3]
Albania	The government has budgeted US$ 3 million for subsidies and US$ 57 million (US$ 23 million from the government, and US$ 34 million from external sources) for capital investment in fiscal year 2016.

Source: GLAAS 2016/2017 country survey.

Basic versus large systems

Development aid (i.e. ODA) reported to the OECD can be disaggregated among several different purpose codes, including aid for basic and large drinking-water and sanitation systems. While large systems include large urban distribution networks and/or treatment facilities, basic drinking-water systems include rural water supply schemes using handpumps, spring catchments, gravity-fed systems, rainwater collection, storage tanks, and small distribution systems typically with shared connections/points of use, urban schemes using handpumps, 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 water and sanitation systems can serve as a proxy indicator for aid that reaches previously unserved populations and the poor, due to their relatively low cost and accessibility by individuals and communities in unserved and non-networked areas. Development aid to basic systems comprised US$ 1.9 billion out of US$ 7.4 billion (25%) in water and sanitation ODA disbursements for 2015. Aid disbursements for basic systems rose from US$ 1.4 billion in 2010 to US$ 1.9 billion in 2015 (Fig. 25), but have risen more slowly than overall disbursements for water and sanitation.

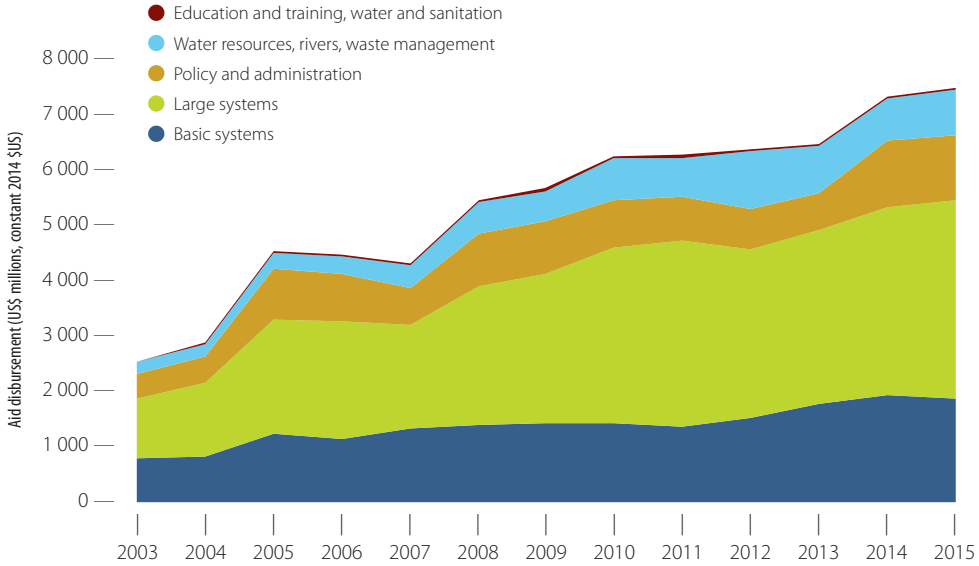
[1] Hutton G and Varughese MC (2016) The Costs of Meeting the 2030 Sustainable Development Goal Targets on Drinking Water, Sanitation, and Hygiene. Water and Sanitation Program Technical Paper, World Bank, Washington, DC. Available at: http://www.worldbank.org/en/topic/water/publication/the-costs-of-meeting-the-2030-sustainable-development-goal-targets-on-drinking-water-sanitation-and-hygiene [Accessed 24 March 2017].

[2] Out of 11 countries with US$ 12.6 billion in expenditure.

[3] Government of Nepal (2014) Water Supply, Sanitation, and Hygiene, Second Joint Sector Review, Sector Status Report 2014, Government of Nepal, Ministry of Urban Development, Sector Efficiency Improvement Unit (SEIU), page 22.

Figure 25

Breakdown of water and sanitation aid disbursements by purpose type (2003–2015)



Source: OECD-CRS, 2016.

Aid disbursements for basic WASH services have ranged from 22% to 27% of total WASH aid since 2010, and were 25% of total WASH aid in 2015 (Fig. 25).

Sector strengthening

Only four of 24 ESAs[1] were able to provide estimates of aid allocations targeted to sector strengthening, totaling US$ 135 million in 2015. Both BRAC and the Swiss Agency for Development and Cooperation (SDC) estimated that 10% of their development aid is composed of activities to improve sector governance, capacity and monitoring. UNDP's focus is on working with the governance aspects of the sector, thus 85% of its development aid in 2015 was for activities related to policy-making, strategy development, coordination mechanisms, decentralization, capacity development, and tariff setting. France (AFD) reported that nearly one third of its development aid in 2015 was targeted to sector strengthening.

While no other ESAs provided quantitative aid allocations on sector strengthening, several ESAs noted in the GLAAS 2016/2017 ESA survey that sector strengthening activities would become an increasing focus in the future. This focus on sector strengthening is aligned with the four SWA Collaborative Behaviours. For instance:

- UNICEF notes that its WASH programming is moving more to supporting the enabling environment, with a gradual shift away from supporting direct service delivery (except in humanitarian contexts). It is expecting to provide support to 15 countries in 2017 to implement the WASH BAT.
- WaterAid plans to expand its advocacy and programming work on sector strengthening.
- JICA will address institutional and organizational capacity development for the water sector and water utilities. JICA will continue to support the expansion of access to safely managed drinking-water in rural areas by strengthening community participation and administrative support systems, and highlighting the importance of sanitation and hygiene behaviour.

[1] The four ESAs are: BRAC, France (AFD), Switzerland (SDC & SECO), and UNDP. This analysis does not include data from Portugal.

Financing universal access

Universality, the provision of WASH services to all, including vulnerable populations, in a sustainable fashion is a central tenet of the SDGs. Providing universal access under the SDGs may require not only additional financing, but an improvement in the use of existing financial resources to extend and sustain services.

Improving the use of existing financial resources

Cost recovery

One half of respondent countries indicated that user tariffs are insufficient[1] to recover O&M costs. Despite policies and regulation to fully cover O&M costs in some countries, many service providers and communities continue to struggle to balance the recovery of costs and affordable tariffs for services.

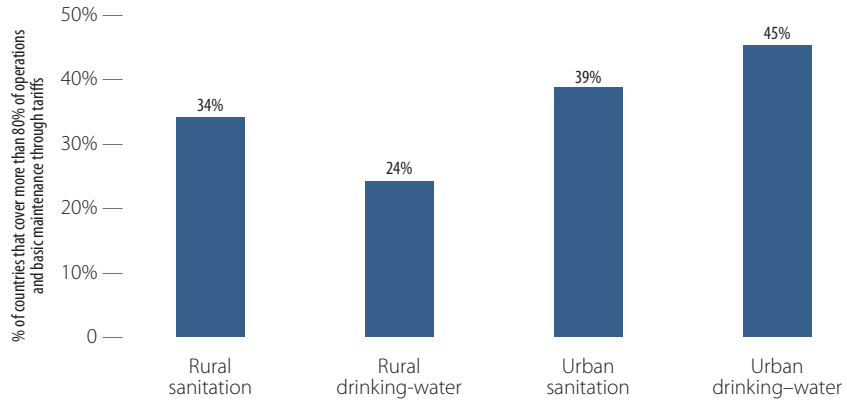
> "All water supply state enterprises are responsible for setting tariffs to generate sufficient revenue to meet cost recovery for all water supply and wastewater services, but this tariff should be within the constraints of affordability and willingness to pay of customers."
>
> Lao People's Democratic Republic Ministerial Decision No. 37/PM

While GLAAS results indicate low cost recovery overall, especially in rural areas, it is also clear that cost recovery rates can differ greatly within countries from municipality to municipality.

> "Larger municipalities are able to better recover costs than smaller municipalities with less capacity. The National Treasury, with Department of Water and Sanitation input, specifies the O&M budget requirements, but neither agency is responsible for setting or enforcing adequate (i.e. cost reflective) tariff structures; these are set by the municipalities."
>
> South Africa GLAAS 2016/2017 country survey

Fewer than one half of countries indicate that tariff revenues cover the majority[2] of operation and basic maintenance costs.

Figure 26 **Are O&M costs covered (over 80%) by tariffs? (n= 64)**



Source: GLAAS 2016/2017 country survey.

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

[2] Defined as over 80% recovery of O&M costs.

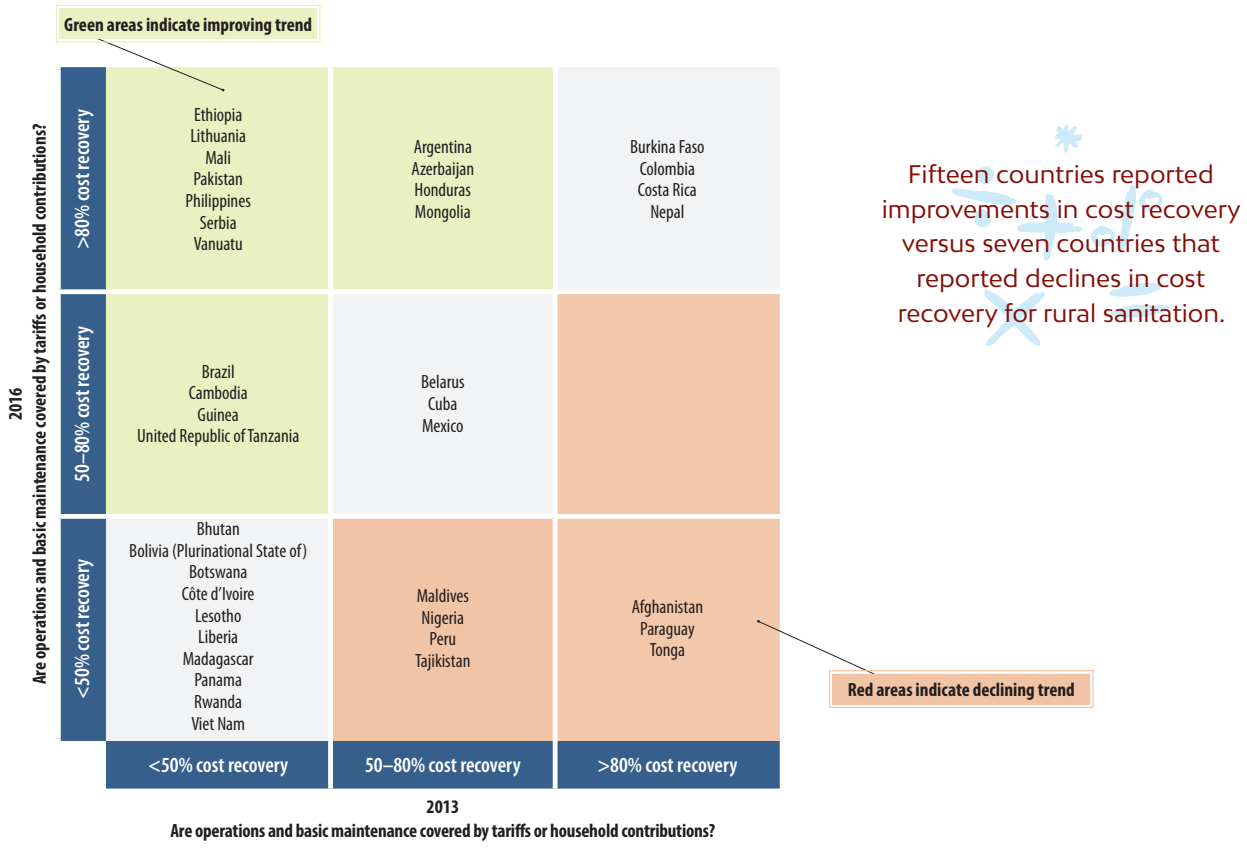
Use of national or local government revenue to subsidize insufficient cost recovery was the most often cited approach by GLAAS 2016/2017 country survey respondents.[1] For instance, in Nepal, Water Users and Sanitation Committees are the operators of rural water supply schemes and collect tariffs to recover O&M costs. If the cost recovery is insufficient, they can supplement through an O&M fund or request funding assistance from the local village or municipal government. The committees of small town water supply schemes recover both O&M and capital costs.

Many countries also cite the lack of any mechanisms for effective cost recovery or to address operations-related financial gaps, leading to deferred maintenance, deterioration of assets, and increased failure rates.[2] In Serbia, a survey conducted by the Standing Conference of Towns and Municipalities – Association of Local Authorities among public utilities (and intended for the GLAAS process) showed that only 20% of public utilities cover their operational gap through cross subsidies from other activities and/or from their budgets. The remaining operational gaps were not covered. Other reported means to cover operational costs include:

- Transfers from capital funds (Honduras); and
- Cross financing among other services, e.g. water/sewer/electricity (Maldives and Zimbabwe).

While O&M cost recovery rates for rural sanitation are lower than for urban sanitation and drinking-water, global trends indicate an improvement in cost recovery from 2013 to 2016. Figure 27 below illustrates this case for rural sanitation, where a greater number of countries reported improvements in cost recovery as opposed to those that reported declines in cost recovery (15 countries versus 7 countries, respectively) from 2013 to 2016. The same analysis done for urban sanitation shows an equivalent number of countries reporting cost recovery improvements as the number reporting declines. However, the same analysis done for urban and rural drinking-water supply suggests declining trends for both urban and rural areas.

Figure 27 **O&M cost recovery trends, rural sanitation, 2013-2016 (n=39)**



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

[1] Albania, Azerbaijan, Bangladesh, Belarus, Bhutan, Brazil, Dominican Republic, Fiji, Madagascar, Mali, Mexico, Mongolia, Nepal, Nigeria, Senegal, United Republic of Tanzania, Uzbekistan, Venezuela (Bolivarian Republic of).

[2] Bosnia and Herzegovina, Cambodia, Ecuador, Jamaica, Lesotho, Liberia, Mali, Mongolia, Panama, Serbia, Tajikistan, Vanuatu.

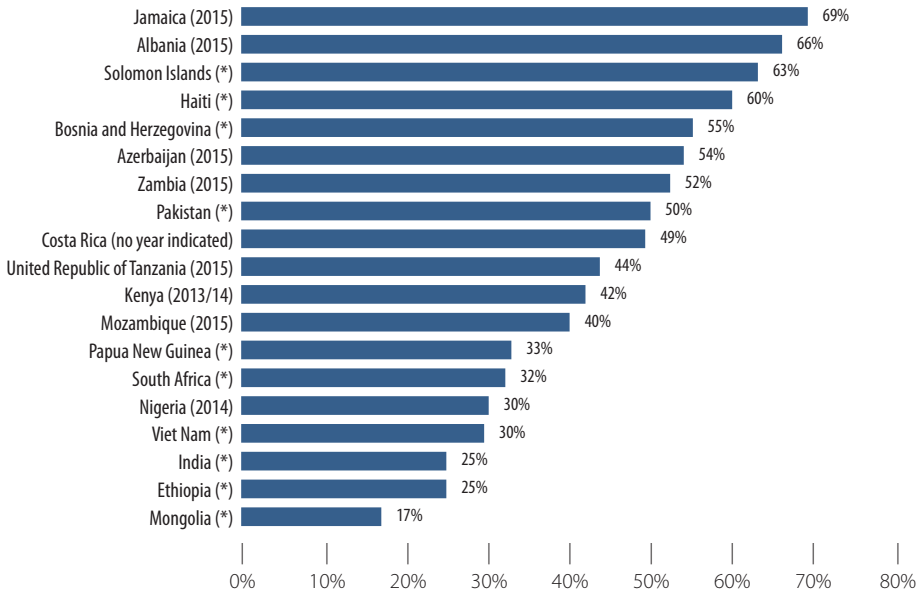
Institutional efforts to improve cost recovery can include the review and adjustment of tariff structures, improving bill collection, reducing non-revenue water, and/or improving operational efficiency.

- **Conducting tariff reviews** – The review and adjustment of tariffs occurs either at the national level (i.e. regulatory authority) or by each municipality/service provider. The GLAAS 2016/2017 country survey indicates that 68% of respondent countries have a regulatory authority that is responsible for setting urban tariffs for either/both drinking-water and sanitation. GLAAS 2011/2012 survey results indicate that over one half of urban utilities indicated that tariffs are not regularly reviewed or are not adjusted after review.

> "In Colombia, the tariff frameworks issued by the Commission for the Regulation of Drinking-Water and Basic Sanitation recognize the recovery of 100% of the reference costs and have had three stages (information gathering, comparative efficiency and meeting targets). In Colombia, there are two categories of tariff frameworks (for large providers serving more than 5 000 subscribers, and for small providers) that have been successfully implemented in the large municipalities where 75% of the country's urban population is concentrated. In rural areas and smaller municipalities, the implementation is low."
>
> Colombia GLAAS 2016/2017 country survey

- **Reducing non-revenue water** – Reducing non-revenue water can help to increase utility efficiency and allow more funds to be made available for maintenance and further investment, as well as reduce the strain on scarce water resources. Nineteen countries provided information on an optional question in the GLAAS 2016/2017 country survey that queried the level of non-revenue water either as a national average, or as an average of the three largest water suppliers. Among these 19 countries, average non-revenue water was 43%.

Figure 28 **Reported average non-revenue water (average for the most recent year; average for the three largest water suppliers indicated with an asterisk (*))**



Source: GLAAS 2016/2017 country survey.

Japan development cooperation underscores the importance of reducing non-revenue water

The Japanese International Cooperation Agency underscores the importance of non-revenue water reduction, implementing technical cooperation projects in many countries, such as Bangladesh, Egypt, India, Jordan, Kenya, Malaysia, Myanmar, Nicaragua, Nigeria, Paraguay, Peru, Rwanda, Samoa, the Solomon Islands, and Viet Nam. In these projects, dedicated sections or teams for non-revenue water management and countermeasures were established, and training was provided to foster skilled staff and create Standard Operating Procedures, guidelines, action plans and roll out plans. In the Solomon Islands, the non-revenue water ratio was reduced from 56% to 18% in more than 15 pilot areas. In Peru, the non-revenue water ratio was reduced from 38% to 25%, and from 26% to 18% in two pilot areas respectively.

- **Operational efficiency** – Improving the efficiency of service providers can lower costs and reduce the finance gap. Efficiencies can be gained through programmes such as: structured asset management, which highlights preventive maintenance and leads to lower operating costs; resource recovery programmes that reclaim heat or power, or produce a new revenue stream (e.g. reclaimed solids); or staff training to build capacity and improve systems and procedures. Many governments and utilities have adopted performance indicators to help monitor operational indicators and improve the efficiency of service delivery.

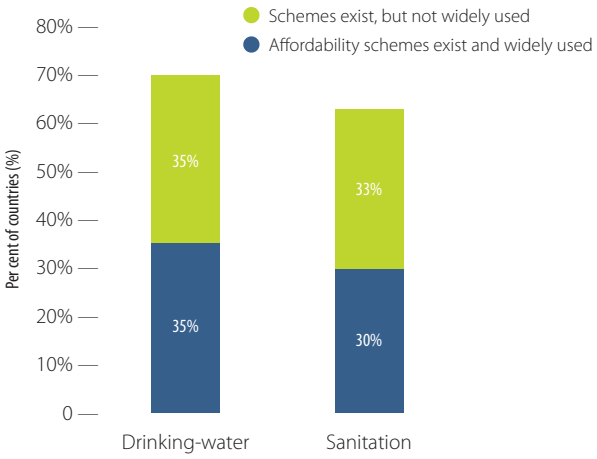
Maintaining affordability

Affordability is a key element of the humans rights to water and sanitation; however, poor populations, vulnerable populations and people living in remote communities or informal settlements often do not have the financial means to obtain or connect to existing water and sanitation services, let alone pay for the cost to sustain these services. Countries responding to the GLAAS 2016/2017 survey were requested to indicate whether affordability schemes exist for water and sanitation and provide examples of these schemes where they exist.

Over 60% of countries indicate that affordability schemes exist for drinking-water and sanitation services, however, only half of these schemes are widely used.

Figure 29

Existence of financial schemes to make access to WASH more affordable to vulnerable groups (n= 67)



Source: GLAAS 2016/2017 country survey.

Types of affordability schemes

The three most commonly cited affordability schemes reported by countries are:

- Government subsidies for infrastructure and O&M to support affordable tariffs;[1]
- Reduced tariffs for specific population groups; and
- Block tariff structures, with a highly subsidized first block (e.g. 0 to 7 cubic meters) to cover basic needs.

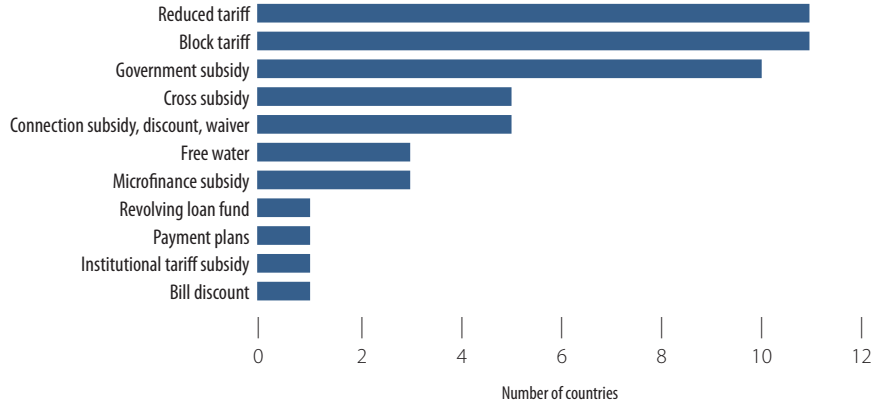
Other examples of the affordability schemes cited by countries include:

- Reduced, subsidized, or waived connection fees (Cote d'Ivoire, Kyrgyzstan, Mali, Senegal, Uruguay);
- Free water for the poorest (Fiji, South Africa, United Republic of Tanzania);
- Subsidies for microfinance institutions (Cambodia, Madagascar, Senegal);
- Revolving loan funds (Philippines);
- Bill discounts (Honduras);
- Payment plans (Zimbabwe); and
- Institutional tariffs subsidies (Madagascar).

[1] Fees charged to household, commercial, industrial, and institutional users for service provision and usage, either as a flat rate, a per volume charge, or as a combination of these.

Figure 30

Prevalence of affordability schemes (n= 43)



Source: GLAAS 2016/2017 country survey.

The use of **government subsidies** is cited by several respondent countries as a means to assist municipal governments, local communities, and service providers that are not able to fully recover the costs of investment and O&M through user tariffs. For example, Mexico indicates that municipal governments do not necessarily recover the costs of investment and O&M from tariffs and depend on subsidies to recover costs. Government subsidies can also be used to provide infrastructure and/or direct subsidies to users. In Lesotho, urban and rural water supply and sanitation are highly subsidized by the government through public standpipes using prepaid meters.

Reduced tariffs (also known as: social tariffs, solidarity tariffs, lifeline rates and preferential tariffs) are provided for vulnerable or disadvantaged populations, such as the elderly, people living with disabilities, war veterans, or people with low household income levels, or low tax value of property owned, and are based on a socioeconomic condition. Both centralized and local tariff reduction schemes exist, and both local service providers (municipalities) and regional providers adopt policies of tariff subsidies (e.g. Brazil, Serbia) and can do so at their own discretion. However, central policy may also mandate tariff reduction or bill discounts. For example, in Honduras, all service providers are mandated to provide a 25% discount to the elderly in their bills for drinking-water and sewer. In Lithuania, the Law for Social Aid for Low Income People and Solitary People ensures compensation for eligible population groups if family expenses for drinking-water and sanitation exceed 2% of family income. Local municipalities and service providers may cover the cost of these reduced tariffs from the local budget, cross-subsidies among users, or direct subsidies from the national government.

Block tariff structures (also known as stepped tariffs, ascending tariffs, tiered tariffs) are based on water use levels, i.e. different charges for different levels of water use, with a highly subsidized first block (e.g. 0 to 7 cubic meters) designed to cover basic needs. Higher water use customers pay more for water use that exceeds basic needs, though preferential tariffs for one or more blocks may still apply in the case of low income users. While block tariffs are an affordability scheme, it should be noted that block tariffs require a metered connection, which is often out of reach for poor populations or people living in informal settlements or remote areas.

The high cost of connecting to services in Liberia

The **cost of connecting** to a drinking-water supply or centralized sewerage system can be prohibitively expensive for low income households. For example, the Liberian government and development partners subsidize the Liberia Water and Sewer Corporation (LWSC), which is responsible for providing water and sanitation services in urban areas. With the subsidy, the services provided by LWSC are fairly affordable, however, the cost of a piped connection to individual homes for both sanitation and drinking-water from the LWSC is high, making it difficult for low income households to connect to the LWSC network. Several countries in addition to Liberia also reported the use of reduced, subsidized, or waived connection fees to ensure accessibility of services to low income populations.

Free water schemes were noted in three countries, Fiji, South Africa, and the United Republic of Tanzania. In Fiji, the Water Authority of Fiji, a government authority, provides free coverage to about 25 338 households that have been confirmed to have incomes of less than US$ 30 000. Free rural water schemes by the Department of Water & Sewerage include free water tanks, and a subsidy programme for rainwater harvesting. South Africa's national free basic service policy ensures that no one is denied basic

water (25 litres per person per day) or basic sanitation (a ventilated improved pit latrine or better). This policy is implemented in all South African municipalities and provided 2.4 million households with free basic water and 2.1 million households with free basic sanitation in 2015.

Cambodia, Madagascar, and Senegal indicate subsidy support for **microfinance institutions** that provide loans to low income households that need to finance latrine construction or connect to a local water supply.

Cross subsidies were cited by several countries as being used to ensure access to drinking-water and sanitation services by users in conditions of poverty and extreme poverty. Cross subsidies mean that some users pay more for services provided, while target beneficiaries pay less. Cross subsidies are implemented either among users (whereby higher tariffs are applied for users in higher water blocks or tariffs are assigned according to income classification), or among regions. Brazil uses tariff subsidies between locations with the highest economic profitability and localities with a deficit or with a lower financial return. Cross subsidies can also be applied across services. In Maldives and Zimbabwe, cross subsidies are used between water, sewer, and electricity services.

Zimbabwe uses a mix of affordability schemes in both rural and urban settings

In rural areas of Zimbabwe, affordability schemes include government investment in WASH facilities, capital and rehabilitation costs, while consumers pay the preventive O&M costs. Targeted subsidies for the most vulnerable groups such as the elderly, people living with disabilities and child-headed households are available to make WASH investment more affordable. In urban settings, affordability schemes, especially for the poor and vulnerable, include the use of block tariffs, differential rates/charges between high and lower income levels, easy and long-term payment plans (installment plans), and in some cases, the government bearing all capital costs to reduce cost recovery requirements.

Use of committed funds

Improving the absorption of domestic and external capital commitments is a way to increase funding resources for new sector infrastructure and capital maintenance; however, lengthy procurement processes and capacity limitations hinder the full utilization of allocated funds in many countries.

Domestic capital commitments

Complex procurement processes and delayed disbursements from finance ministries were most often cited as obstacles in improving the efficient and timely use of domestic capital financing allocated for WASH. While nearly 60% of countries indicated high utilization rates (i.e. above 75%) of allocated funds,[1] many cite continuing administrative challenges to obtaining funds and implementing capital projects. As reported by countries in the GLAAS 2016/2017 country survey, notable issues concerning the absorption of national funds for WASH include:

- Delays in procurement due to complex procedures, length of procurement process, extended negotiations (which cause late release of funds and limited time to spend within financial year for which funds have been allocated);
- Delayed or incomplete release of funds from the national finance ministry;
- Administrative/funding release procedures too lengthy or too complex (e.g. project proposal requirements);
- Lack of administrative/financial/technical resource capacity for advanced planning, and to design and manage projects;
- Lack of private sector/companies, equipment, and qualified personnel in the market;
- Project delays due to logistical challenges in remote areas;
- Land tenure compensation and land ownership issues (Costa Rica, Nepal, Papua New Guinea); and
- Securing clearances, licenses and permits from partner institutions (e.g. environmental impact).

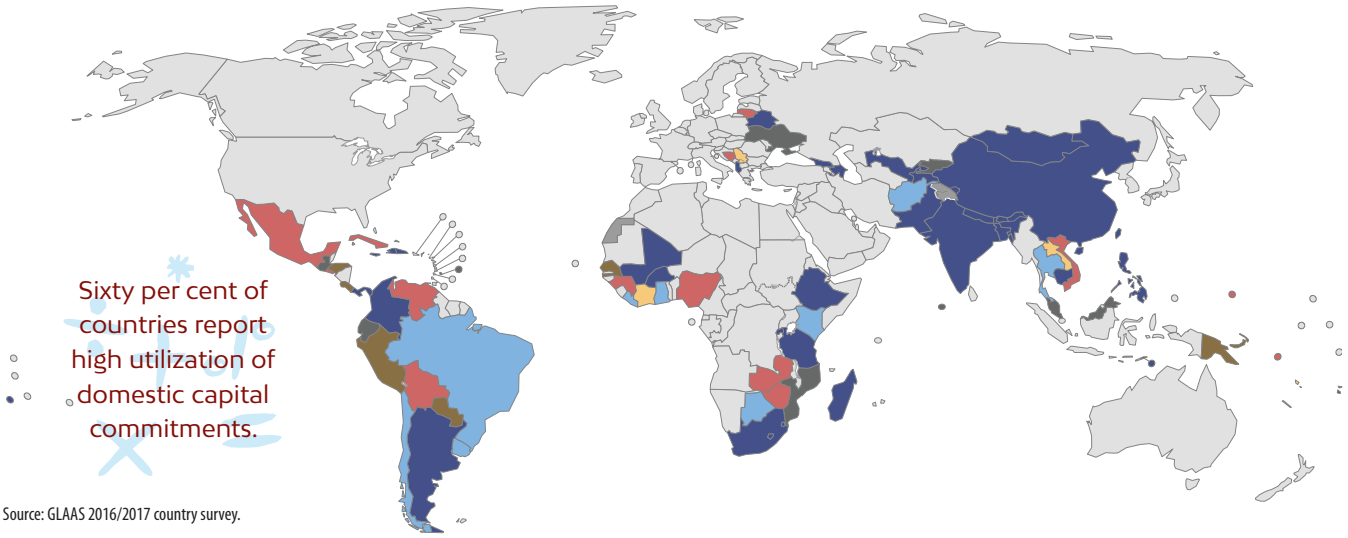
[1] Eight countries reported over 90% utilization of domestic capital commitments for WASH: Azerbaijan, Bangladesh, Bhutan, Chile, Mozambique, Solomon Islands, South Africa, and United Republic of Tanzania.

Figure 31

Estimated percentage of domestic capital commitments utilized (sanitation)

What is the estimated percentage of domestic capital commitments utilized (three-year average)?

- >75% of domestic capital commitments for both urban and rural
- >75% of domestic capital commitments for urban or rural
- 50–75% of domestic capital commitments
- <50% of domestic capital commitments for urban or rural
- <50% of donor capital commitments for both urban and rural
- No response to question provided
- Not applicable
- Data not available



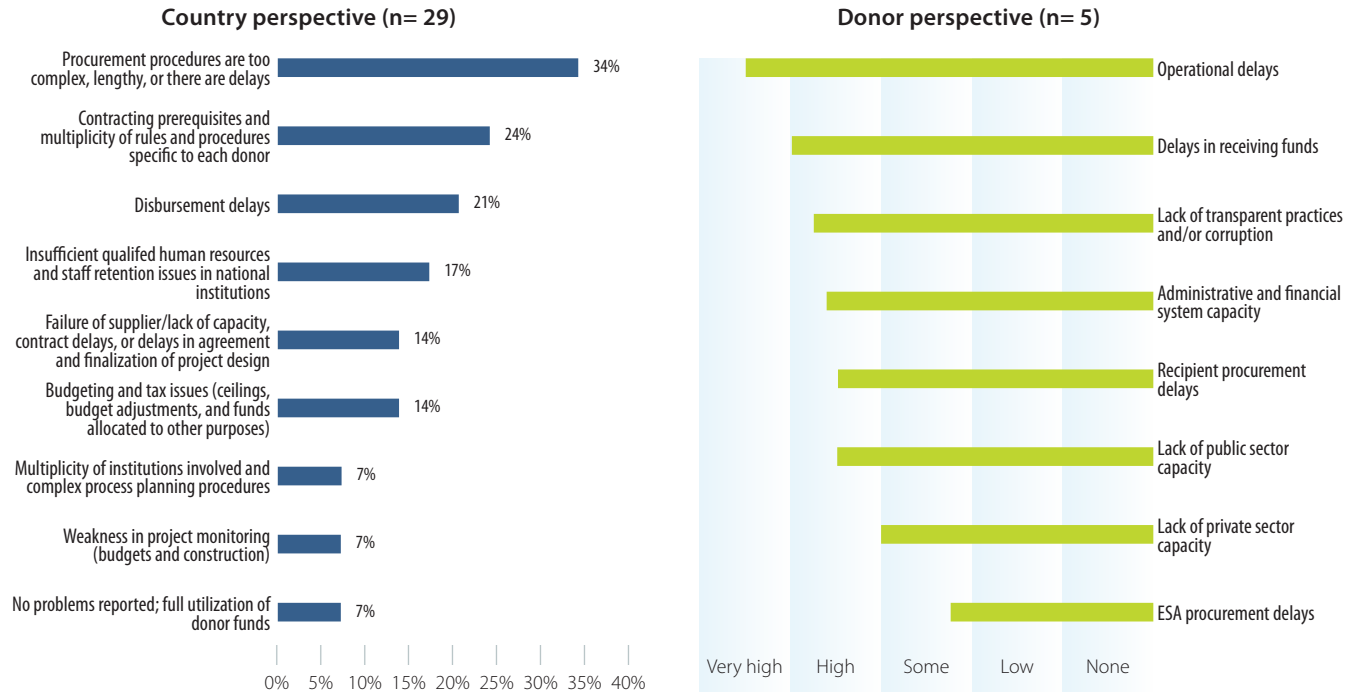
Source: GLAAS 2016/2017 country survey.

External fund absorption

GLAAS data indicate that 60% of countries absorb a high percentage (i.e. above 75%) of donor capital commitments across both drinking-water and sanitation. Countries and ESAs cite several issues related to slow or delayed disbursement and procurement (Fig. 32). In response to slow disbursements, ESAs report a range of actions that are taken to improve implementation and increase disbursement levels. Some examples include:

- Strengthening the capacity of executing agencies in terms of procurement and project management, e.g. administration, accounting;
- Project implementation support;
- Budget neutral time extensions, rescheduling milestones;
- Financing technical studies with grants prior to the approval of a loan, so that studies are ready before the financing for the infrastructure is available;
- Staff training and capacity development on donor specific procedures, and to solve problems/increase efficiencies;
- Decentralizing procurement; and
- Delays compensated with new programming.

Figure 32 **Problems reported by developing country governments and donors with under-utilization of donor capital commitments[1]**



Sources: GLAAS 2016/2017 country survey; GLAAS 2016/2017 ESA survey.

Countries cite procurement procedure complexity and multiplicity of rules specific to each donor as the top two reasons for under-utilization of donor commitments, while several donors cite operational delays as problematic.

In the Bolivarian Republic of Venezuela, loan disbursements are subject to the Annual Foreign Indebtedness Act each year, which in some cases is not aligned with disbursements established in the loan agreements, thus necessitating applications for loan extension.

Improved targeting towards vulnerable populations

The MDG target for water and sanitation called for the proportion of the population without access to safe drinking-water and basic sanitation to be halved; however the JMP reported[2] in 2015 that "in many countries and regions, progress has been made towards the MDG target without significantly reducing inequalities." In order to reduce inequalities and to make progress towards universal access, most countries (55 out of 74 responding countries[3]) have specific measures for reaching poor populations in their WASH policies and plans. However, monitoring of progress to extend services to poor populations takes place in only half of responding countries (47% and 55% respectively for sanitation and drinking-water), and few countries (19% and 27% respectively for sanitation and drinking-water) are consistently applying financial measures to target resources to poor populations. The results disaggregated by World Bank income group (Table 12) show consistent trends from the previous cycle of GLAAS,[4] with countries in lower income groups less able to consistently apply specific measures to target resources to poor populations.

[1] If donor capital commitments were under-utilized, please provide a brief explanation of the types of bottlenecks that delay or prohibit the use of committed funding (GLAAS 2016/2017 country survey). What are the main reasons commitments for WASH have not been disbursed within the fiscal year they were scheduled? (GLAAS 2016/2017 ESA survey).

[2] UNICEF/WHO Joint Monitoring Programme (2015) Progress on sanitation and drinking water – 2015 update and MDG assessment. World Health Organization, Geneva. Available at https://www.wssinfo.org/fileadmin/user_upload/resources/JMP-Update-report-2015_English.pdf [Accessed 8 March 2017].

[3] This analysis does not include Swaziland.

[4] Results and percentages shown cannot be directly compared to those from the 2013/2014 cycle due to differences in the set of responding countries.

Table 12

Measures to extend services to poor populations by World Bank income group

	World Bank income group	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**	**74**	**74%**	**47%**	**19%**
	Low income	15	73%	33%	7%
	Lower middle income	29	66%	48%	10%
	Upper middle income	26	85%	58%	27%
WATER	**All responding countries**	**74**	**74%**	**55%**	**27%**
	Low income	15	73%	53%	20%
	Lower middle income	29	66%	48%	14%
	Upper middle income	26	85%	69%	38%

80–100%
60–79%
40–59%
0–39%

Notes:
1. The percentages shown are calculated with the total number of responding countries in the income group as the denominator.
2. Results for high income countries are not shown disaggregated due to the small number of responding countries in this income group. They are included in the overall results.

Source: GLAAS 2016/2017 country survey.

Countries were most likely to target poor populations in their policies and plans. Other types of vulnerable populations commonly targeted in WASH policies and plans are shown in Figure 33. However, financial measures to support vulnerable populations existed on average in less than two thirds of countries that targeted these populations in their policies and plans, and these financial measures were applied consistently in only about a quarter. Financial measures to support vulnerable populations were most common for drinking-water for populations living in slums or informal settlements (54%); however, consistent application of these financial measures was low at 22%.

Social strategies toward equitable water supply and sanitation in Lao People's Democratic Republic

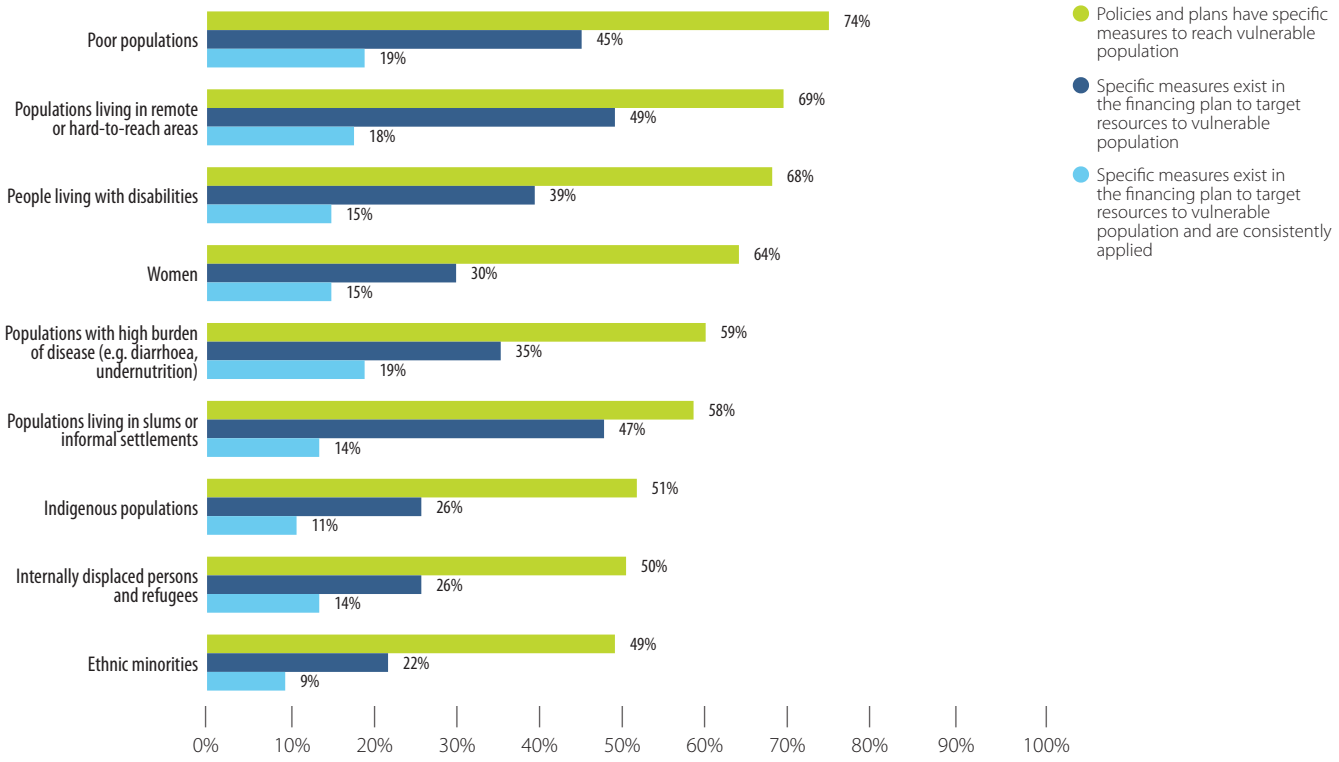
Lao People's Democratic Republic has made significant progress in increasing access to WASH services over the past 20 years and has met its MDG targets. However, significant disparities remain between urban and rural populations: while 94% of the urban population had access to improved sanitation facilities in 2015, only 56% of the rural population did. With over two thirds of the national population living in rural areas, a targeted approach for extending WASH services is needed. Lao People's Democratic Republic reports the application of specific social strategies in rural areas to improve equitable access to WASH services, which includes:

- Planning and targeted budget allocations towards equitable water supply and sanitation with emphasis on vulnerable and poor populations in remote locations without road access;
- Participatory planning processes including informed choice on technologies and management options, more gender-sensitive solutions, and greater responsiveness to local cultural traditions;
- Incorporating social and cultural dynamics of rural villages in developing WASH services approaches such as demand creation, Community-led Total Sanitation, Participatory Hygiene and Sanitation Transformation, and sanitation marketing; and
- Local accountability introduced on rural water services between village committee levels, water services providers, and users/consumers.

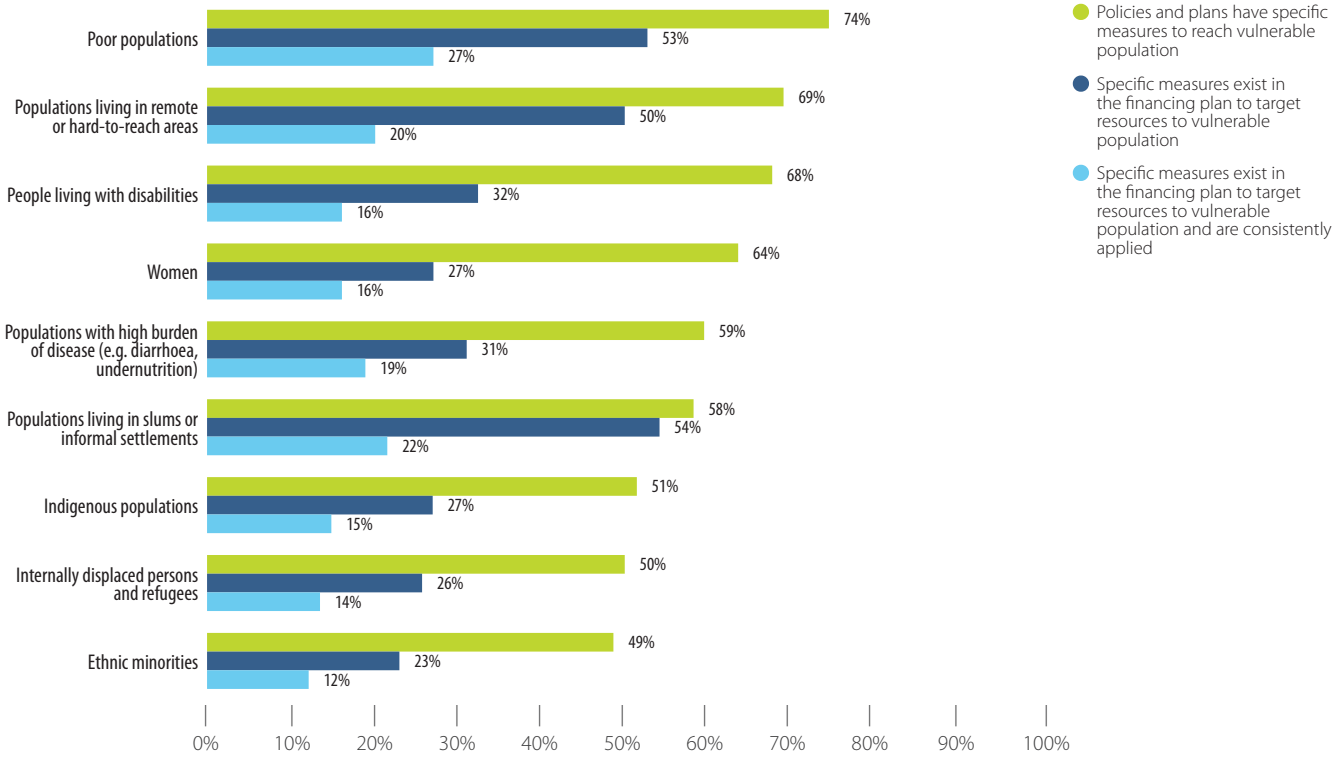
Figure 33

Percentage of countries with specific measures for vulnerable populations in their WASH policies and plans compared to the percentage of countries with financial measures targeting these population groups existing and consistently applied (n=74)

(a) Sanitation



(b) Drinking-water



Source: GLAAS 2016/2017 country survey.

Utilizing alternative sources of finance

While improving the use of existing financial resources is a key element for funding the SDGs, governments and development partners may also consider alternative sources of finance for the increasing costs of meeting the SDGs.

One alternative source is blended finance, which is the strategic use of public taxes, development grants and concessional loans to mobilize private capital flows to emerging and frontier markets, and it offers opportunities to increase the role of commercial financing for the WASH sector. Blended finance measures can come in many forms, but include grants, concessional loans, and credit enhancements such as guarantees to help "crowd in" private investment. For example, grants can be offered to provide technical assistance or to support capacity building activities. Concessional loans can be combined with commercial finance to soften lending agreements and to provide liquidity to lenders. Public finance can also be used to provide partial guarantees to commercial lenders.

Blended finance in practice is likely to be combined with other innovative measures. Output-Based Aid is a form of aid where funds are only released after a service is delivered. This mechanism provides an incentive for the recipient to deliver the expected service, although it does not overcome the need for initial investments. Smart subsidies can be used to target specific objectives, such as help to finance water connections to poorer households, or to expand microfinance initiatives. Grouped financing measures can be used to pool risk and lower borrowing costs.

Blended finance and other forms of innovative financing have shown benefits and should be scaled up. This will require collaboration between governments, donors and water service providers, to help raise awareness of the benefits, to improve transparency, to develop policies that support efficient and effective services, and to work to catalyze private finance.[1]

Commercial financing may also be an alternative financing source; however it has thus far played a limited role in the WASH sector. There are several reasons for this. First, water service suppliers must be considered creditworthy to access commercial funds. Due to the inefficiencies already described (such as low cost recovery), utilities often do not have the financial surplus required to cover repayments. Gaps in capacity may mean some utilities are unable to provide audited financial statements that lenders require. Second, investment returns in the water sector are relatively low, but in developed countries, these returns are often reliable and low-risk, and are attractive for long-term investors. However, in developing countries, these risks are higher, reducing their appeal to commercial lenders. Private finance for small utilities or rural communities can be hampered by their relatively small size. Finally, the water sector typically requires long-term investments that can be at odds with the short to medium term nature of commercial bank lending.

Increasing the role of private and commercial finance in the WASH sector is expected to result in improved technical, operational and management efficiencies, which increases credit worthiness, and therefore access to commercial finance, producing a virtuous cycle. Enhancing commercial finance in the WASH sector requires innovative financing measures, such as blended finance.

[1] Leigland J, Trémolet S, and Ikeda J (2016) Achieving Universal Access to Water and Sanitation by 2030. The Role of Blended Finance. World Bank, Washington, DC. Available at: http://documents.worldbank.org/curated/en/978521472029369304/Achieving-universal-access-to-water-and-sanitation-by-2030-the-role-of-blended-finance [Accessed 8 March 2017].

Conclusion

Through SDG 6, ensuring access to sustainable water and sanitation for all is firmly established in the UN's 2030 Agenda for Sustainable Development. Sustainable water and sanitation contribute to greater livelihood opportunities, improved human welfare and a healthier environment through their many cross-cutting impacts, such as on economic development, better health and nutrition, climate resilience and education. Policy- and decision-makers, managers, practitioners and regulators must not lose sight of this larger view. This does not relate to impact indicators alone and is equally true for the components that make up the enabling environment for achieving targets under all 17 Goals. Transformation will require these components to be coherent and mutually reinforcing.

One of these components is the set of financial sources, pathways and mechanisms in support of expanding, upgrading, operating and maintaining drinking-water supply and sanitation services. While countries continue to make progress towards increased access to sustainable WASH services, financial resources remains a critical issue, and more effort is needed for both attracting new resources and better utilizing existing resources. The current level of WASH financing is not sufficient to fund plans inspired by the SDGs and falls short of future requirements. This gap poses a real threat to the possibility of achieving the SDGs by 2030 – not only the aspirational goal of safely managed systems, but also of providing access to the unserved.

Nearly two thirds of countries that participated in the GLAAS 2016/2017 cycle have undertaken a recent comprehensive and inclusive sector review and many are in the process of integrating the SDGs at the national level. Most countries have financial plans for WASH and national budgets are increasing by an average of 4.9% above inflation annually, demonstrating a solid commitment to WASH services. However, two thirds of countries report that these financial plans are not consistently followed. Furthermore, 80% of countries surveyed reported inadequate funding to meet their national targets – a gap that is slightly more pronounced for rural drinking-water supply and sanitation as compared to urban services. This funding gap will be magnified as countries integrate the SDGs more fully into their national plans and targets. Given the financial challenges and the level of ambition in the global SDG targets, the process of national target setting for WASH is vital to ensure that resource allocation reflects the need to extend coverage to those unserved as well as to upgrade existing services to be safely managed. Yet persistent fragmentation of roles and responsibilities in drinking-water supply and sanitation clouds the full financial picture, and even though 60% of responding countries reported recent joint sector reviews, financial issues were only on the agenda of a few of these events.

Households continue to be the major source of WASH financing in the countries surveyed, placing a heavy burden on the most vulnerable and the poor. To achieve the SDGs, a focus on equity and providing sustainable services to vulnerable populations is needed. The GLAAS 2016/2017 cycle has shown that rural services receive a smaller share of funding than urban services, and while countries have plans to reach disadvantaged populations, the plans are not often fully implemented. Vulnerable groups, including poor populations and people living in remote areas or informal settlements, should not be overlooked in national WASH plans.

Cost-recovery for service maintenance and asset management remains a challenge, meaning that O&M can suffer, putting existing services at risk. Often, these existing services represent achievements made during the MDG period. Existing financial resources can be better harnessed, and several examples have been shown in this report. Fifteen of 39 countries have made impressive strides towards improving cost recovery through a smart use of tariffs and subsidies. Other measures have included reductions in non-revenue water and increases in operational efficiency. For many utilities, balancing a solid basis for cost recovery with affordability of services for vulnerable groups is a challenge, and several mechanisms related to tariff setting, targeted subsidies and pro-poor policies are being tested by governments.

As more financing becomes available in the sector, absorption capacity will need to be improved. Data availability, from governments, donors and NGOs is a critical element in better using existing resources. A first step in better utilizing resources is understanding what is available and where it is coming from. TrackFin is providing invaluable insights and in-depth knowledge of WASH financial flows at the national level. The data are generally available, yet, compiling them remains a challenge, with not all stakeholders making their data readily available in a transparent manner.

ESAs have made large commitments to support WASH programmes in recent years, resulting in a positive impact for millions of people, and ESA survey respondents note commitments to provide WASH services to 350 million by 2020. However, ODA commitments are decreasing, and many countries rely heavily on external financing, with some countries receiving over 50% of their WASH financing from external sources. New financial models are needed if Agenda 2030 is to be achieved. An area that would benefit from ESA support is that of increasing domestic resource mobilization, especially as some ESAs are working to align their policies with SDGs and also towards sector strengthening and improving the enabling environment, rather than on providing funds for technical solutions. Governments will also need to prioritize improving domestic revenue and resource mobilization.

Attracting new sources of finance, while also improving existing sources, is key. Repayable finance offers a promising pathway for countries to meet the SDG targets. Sources of repayable finance have traditionally been deterred from WASH because of fears over low and risky returns. Blended finance, where funds from public or philanthropic sources are used to lower barriers and incentivize private investments, has been trialed with success and has the potential to be scaled up to help bridge the finance gap.

The GLAAS 2017 report concludes on a positive note. Despite the enormous challenges faced by the global WASH community, innovations in technology, finance and governance show that these challenges can be overcome and that the SDGs can be achieved.

Annexes

Annex A: Methodology and validation

Introduction

GLAAS findings in this report summarize data collected from 75 countries and 25 external support agencies surveys. The GLAAS survey data are complemented by data from TrackFin studies in Ghana and Mali, as well as data from OECD-CRS on water and sanitation aid flows. Table A.1 shows the 75 participating countries by SDG region. Regional analyses in this report use SDG regions 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. The GLAAS survey data will also be used to create ESA, regional and country highlights, working in close collaboration with the countries and ESAs.

Countries participating in the GLAAS 2016/2017 country survey by SDG region (n=75)

SDG region	Countries participating in the GLAAS 2016/2017 country survey
Central Asia and Southern Asia	Afghanistan, Bangladesh, Bhutan, India, Kyrgyzstan, Maldives, Nepal, Pakistan, Tajikistan, Uzbekistan
Eastern Asia and South-Eastern Asia	Cambodia, China, Lao People's Democratic Republic, Malaysia, Mongolia, Philippines, Thailand, Timor-Leste, Viet Nam
Latin America and the Caribbean	Argentina, Barbados, Bolivia (Plurinational State of), Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Jamaica, Mexico, Panama, Paraguay, Peru, Uruguay, Venezuela (Bolivarian Republic of)
Northern America and Europe	Albania, Belarus, Bosnia and Herzegovina, Lithuania, Serbia, Ukraine
Oceania	Fiji, Micronesia (Federated States of), Papua New Guinea, Solomon Islands, Tonga, Vanuatu
Sub-Saharan Africa	Botswana, Burkina Faso, Burundi, Côte d'Ivoire, Ethiopia, Ghana, Guinea, Kenya, Lesotho, Liberia, Madagascar, Mali, Mozambique, Nigeria, Rwanda, Senegal, South Africa, Swaziland, United Republic of Tanzania, Zambia, Zimbabwe
Western Asia and Northern Africa	Azerbaijan, Georgia

Country survey process

National governments expressed their interest in participating in the GLAAS 2016/2017 cycle or were invited to participate by the respective WHO Regional Office, WHO Country Office or regional partner, such as IRC and the African Ministers' Council on Water (AMCOW). Participation in the country survey was voluntary and involved data collection, supported in most cases by multi-stakeholder review workshops, data validation and subsequent exchanges with the GLAAS team at WHO. The GLAAS 2016/2017 country survey results were submitted between October 2016 and February 2017 for a majority of countries. Some additional country surveys were submitted in March 2017. Data collection with the GLAAS 2016/2017 country survey will remain open until mid-2017 to feed into the planned GLAAS 2018/2019 report that will cover all aspects of the enabling environment.

Country survey

As part of the GLAAS strategy from 2016-2020, GLAAS reports will alternate between a report with a specific thematic focus and a report covering all four GLAAS themes: governance, monitoring, human resources and finance. The GLAAS 2017 report is the first thematic report with a focus on finance. To cater for the finance focus and reduce the reporting burden on countries, the GLAAS 2016/2017 country survey has two versions: 1) a short version that has a complete section on finance and a few key required questions from the remaining sections and 2) a long version that has complete sections on governance, monitoring, human resources and finance. Countries chose to complete either the long or short version of the survey. Newly participating GLAAS countries were encouraged to complete the long version to establish a baseline.

The GLAAS 2016/2017 country survey was revised to better align with the SDGs, including covering integrated water resources management in some questions, as well as to be a better data source for monitoring the SWA Collaborative Behaviours. Aspects that were strengthened or added in the revised GLAAS 2016/2017 survey include the enabling environment for wastewater, WASH in health care facilities and regulation.

External Support Agency survey and responses

The ESA survey, which complements the data received from countries and other sources such as OECD, was also revised for the GLAAS 2016/2017 cycle for the first time since the start of the GLAAS initiative. It was reviewed and revised by an outside expert group consisting of representatives from NGOs, universities, and multilateral and bilateral donors. The objectives of the revision were to make the survey more suitable for monitoring the SWA Collaborative Behaviours, adapt it to SDG global reporting requirements, and make it more relevant for different types of ESAs.

Twenty-five ESAs, representing development banks, multilateral organizations, bilateral donors, private foundations and NGOs, responded to the GLAAS 2016/2017 ESA survey. These ESAs represent over 80% of bilateral development assistance to water and sanitation, and almost 90% of multilateral development assistance to water and sanitation. ESA survey data were received from November 2016 until March 2017.

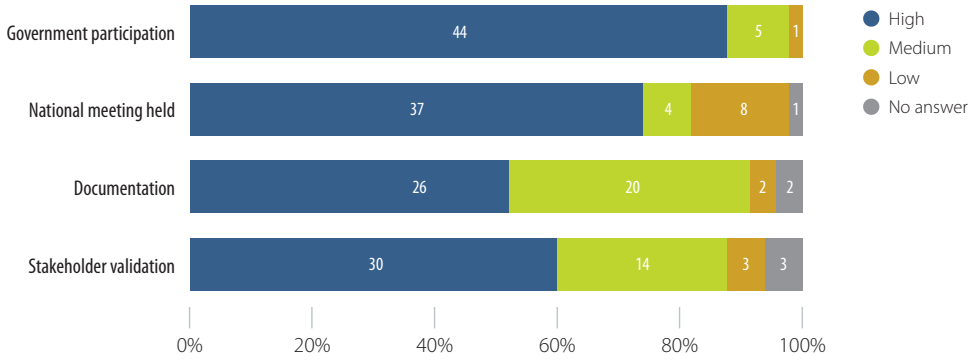
ESA survey data have been validated with the respondent ESAs during the process of developing individual ESA highlights that were prepared for the SWA High Level Meeting in April 2017.

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 54 out of 75 countries submitted the country feedback form.[1] In rating the effectiveness[2] of the financing component of the survey, a rating of "*Excellent*" or "*Good*" was provided by 57% of countries; ratings of "*Satisfactory*" or higher were provided by 83% of countries. Qualitative information provided by countries will contribute to the further improvement of GLAAS in the next cycle.

In an attempt to ensure 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 50 out of 75 countries submitted the data collection processes form.[3] Figure A.1 shows the aggregated results for the 50 responding countries. Nine out of ten countries (88%) indicated that the GLAAS country process was government-led with at least two ministries involved. Multi-stakeholder review was conducted by 88% of countries as part of the validation process, although approximately one third of these countries indicated that they were not able to include all partners in the review. Just over half of countries indicated that a majority of responses were based on government documents or referenced materials; a further 40% indicated that documentation was incomplete.

Summary of responses to the GLAAS data collection processes form (n=50)



Note: Data labels in the bars indicate the number of countries.

[1] http://www.who.int/entity/water_sanitation_health/monitoring/investments/glaas-country-feedback-form-2016.doc

[2] Countries were asked to rate how well the survey is able to assess the situation in country for the four GLAAS themes (governance, monitoring, human resources, and financing) on a 5-point scale (*"Excellent", "Good", "Satisfactory", "Moderate", "Poor"*).

[3] http://www.who.int/entity/water_sanitation_health/monitoring/investments/glaas-data-collection-processes-form2016.doc

Data quality review

All 75 GLAAS country submissions were reviewed for internal consistency, completeness, and data entry errors. Countries were contacted through the respective WHO regional and country focal points for clarification and follow-up of any data issues that were identified. In some cases, several iterations of quality assurance were required to ensure issues were sufficiently addressed. Throughout the data quality review process, the GLAAS database and analysis were updated accordingly.

External key informant validation

In addition to the data quality review, an external validation with key informants was undertaken. Key informants 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 2016/2017 process.

The key informant questionnaire was expanded in the 2016/2017 cycle to include 39 data elements from five questions. The questions concerned participation procedures,[1] joint sector reviews,[2] regulatory authorities,[3] the financing budget/plan,[4] and financial reporting.[5] A total of 58 key informant questionnaires were sent to external validators. Seventeen questionnaires were returned from all WHO regions[6] and responses were compared against country submissions.

There was a high level of agreement (80%) between country and external validation responses on whether or not the government conducts joint sector reviews. There was a moderate to high level of agreement for questions on the availability of expenditure reports (67%), regulatory authorities (64%), and participation procedures (60%). Agreement between the country and external validation responses was low on the question on the financing budget/plan at 30%; since the responses were measured on a five-point scale, few responses matched exactly.[7]

[1] Six data elements (urban sanitation, rural sanitation, urban drinking-water supply, rural drinking-water supply, hygiene promotion, and water resources planning and management).

[2] One data element (yes/no response).

[3] Twelve data elements (three sub-questions with disaggregation for urban/rural sanitation/drinking-water).

[4] Five data elements (urban sanitation, rural sanitation, urban drinking-water supply, rural drinking-water supply, and hygiene promotion).

[5] Fifteen data elements (ODA, non-ODA, and government expenditure reports for urban sanitation, rural sanitation, urban drinking-water supply, rural drinking-water supply, and hygiene promotion).

[6] African Region (5), Eastern Mediterranean Region (1), European Region (4), Region of the Americas (1), South-East Asia Region (3), and Western Pacific Region (4).

[7] When the level of agreement was recomputed by encoding responses numerically and summing the standardized differences between the country and external validation responses, the level of agreement increased to 74%.

Annex B. TrackFin: Tracking financing to WASH

About TrackFin

TrackFin is a globally accepted methodology to track financing to WASH at the national level, which helps to facilitate evidence-based decision-making. TrackFin was developed after previous GLAAS results had shown that the level of financial reporting currently available in the WASH sector is often insufficient to make sound, evidence-based planning and budgeting decisions. The methodology has been developed in collaboration with leading national WASH sector institutions, national statistics offices, and finance departments. High-profile international bodies such as the UN Statistics Division, the OECD and the World Bank were also involved, as they recognize that the information deficit identified across the sector must be addressed as a matter of urgency if significant further progress is to be made on core development and health issues in the context of the SDGs.

Using standard classifications, the method enables countries to comprehensively track financing into and through the sector, identifying how funds are allocated and used at national, district, and local levels on a regular basis. The output is a set of WASH-related accounts and indicators, referred to as WASH accounts, which clearly depict WASH financing in the country. The WASH accounts build on the experience of the development of health accounts.

The methodology addresses four basic questions:

1. What is the total expenditure throughout the sector?
2. How are funds distributed between the different WASH services and types of expenditure, such as capital expenditure, O&M costs, and the cost of capital?
3. Who pays for WASH services?
4. Which entities are the main channels of funding for WASH and what is their respective share of total spending?

After successfully piloting TrackFin in Brazil, Ghana and Morocco, the methodology has now expanded to other countries, including Burkina Faso, Madagascar, Mali, Senegal and Tunisia, and Ghana has completed a second round. Other countries around the world continue to express interest in implementing TrackFin.

Additionally, other development partners have shown interest in TrackFin and are supporting its implementation in other countries. For example, the World Bank is leading TrackFin in Tunisia and UNICEF has provided support in Mali. In addition to the Bill & Melinda Gates Foundation and AFD funding TrackFin through WHO, USAID also plans to fund TrackFin in a number of countries.

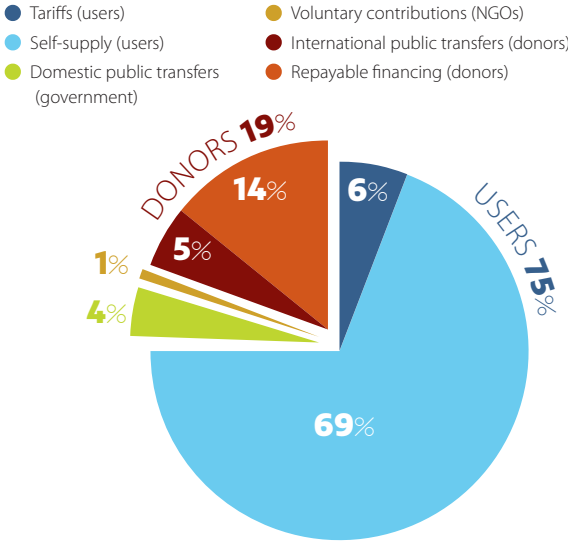
TrackFin Results

At the time of this report only Ghana, from its second round, and Mali had results available. Below are highlights of their findings.

Who pays for WASH services?

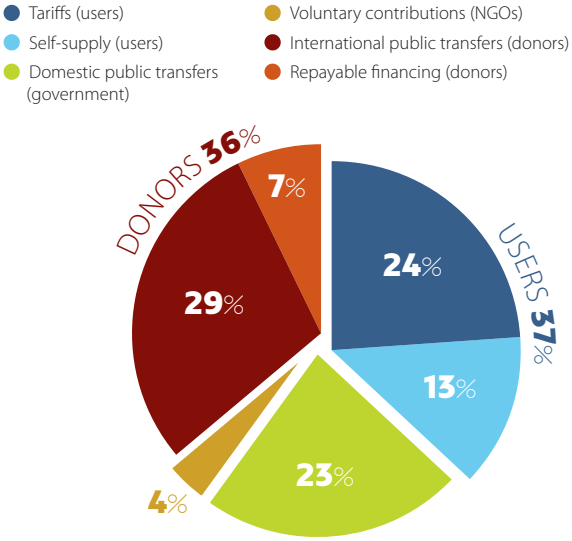
From the Ghana and Mali 2017 TrackFin study results users, through tariffs and self-supply, are a major source of WASH funding, accounting for 75% of funding in Ghana and 37% in Mali. It should be noted that voluntary contributions from NGOs in Mali and Ghana are under-represented because comprehensive data from NGOs were not available.

Figure B.1 **Funding by financing type and financing unit in Ghana, 2014**



Source: TrackFin Ghana study, 2017.

Figure B.2 **Funding by financing type and financing unit in Mali, 2014**



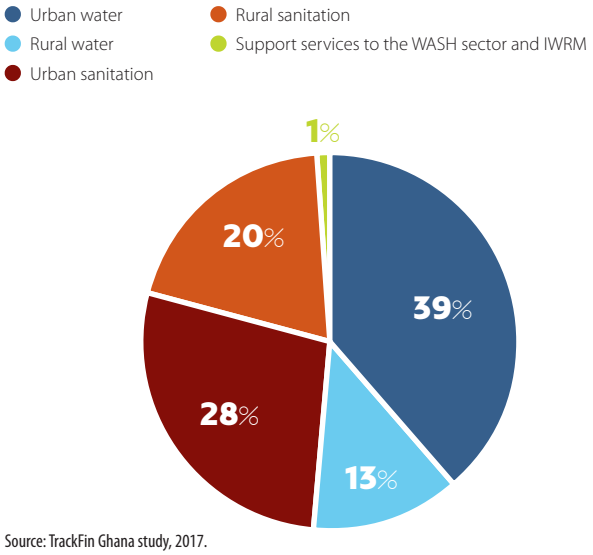
Source: TrackFin Mali study, 2017.

How are WASH funds distributed?

In Ghana, spending between water and sanitation is close to even, with sanitation accounting for 48% of spending and water for 51%. Urban areas receive about two thirds of the water and sanitation spending. In Mali, the disparity in spending between urban and rural areas does not exist—both urban and rural areas receive 45% of WASH expenditures. However, there is a large disparity between expenditures on water and sanitation, with 81% of spending going towards drinking-water.

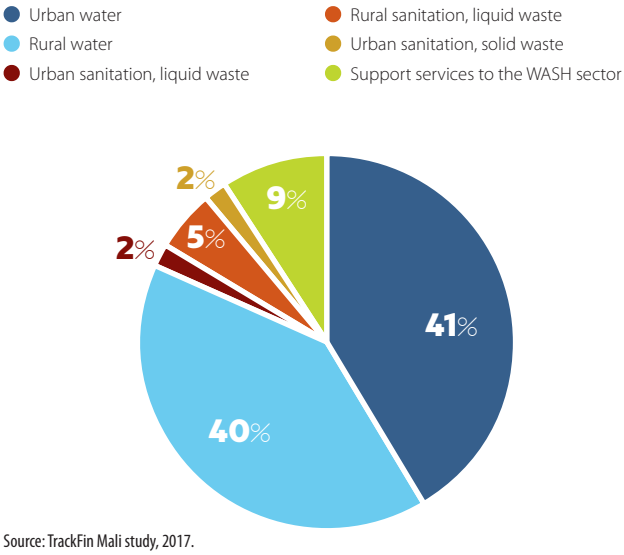
As TrackFin is a government-led process, it should be noted that the Governments of Mali and Ghana chose to include different categories in their analysis of WASH expenditures. Mali decided to include solid waste in the process, even though it was not in the initial methodology, but did not take into account integrated water resource management (IWRM). In Ghana, IWRM as it relates to drinking-water was included in the study, but is merged in the graph below with support services to the WASH sector.

Figure B.3 **WASH expenditures by subsector in Ghana, 2014**



Source: TrackFin Ghana study, 2017.

Figure B.4 **WASH expenditures by subsector in Mali, 2014**



Source: TrackFin Mali study, 2017.

Lessons learned

As TrackFin has now been successfully implemented and is being implemented in more countries, a number of lessons have emerged.

- **Institutional buy-in is key.** TrackFin is more successful when key government officials are supportive of the process. While TrackFin is in the initial stages in Madagascar, it is off to a promising start because of institutional buy-in. Early TrackFin workshops have been attended by several high level authorities, including the Prime Minister, Minister of Water, Sanitation and Hygiene, and Minister of Finance.

- **Household surveys can be a data source.** While data on household expenditures can be challenging to obtain, household surveys are proving to be a fruitful source. Ghana, Mali and Burkina Faso, where TrackFin is currently taking place, have been able to use household surveys to fill data gaps.

- **Health accounts experience is valuable.** Both WHO and in-country experience with health accounts have greatly contributed to TrackFin and WASH accounts. The TrackFin team at WHO is coordinating with the health accounts team to adapt the health accounts software to be used in developing WASH accounts. This approach has also already happened at country level—in Burkina Faso, the national health accounts were modified to be used for TrackFin data management and analysis.

Looking ahead

As the network of TrackFin countries and development partners supporting TrackFin continues to grow, the global community will have an increasingly better understanding of WASH financing at both the country and global level. This will lead to smarter resource allocation decisions and increased access to sustainable WASH services.

In the coming year, it is expected that up to ten additional countries will begin to implement TrackFin, with support from WHO and other partners. As more and more countries put TrackFin in place, the methodology will continue to be adapted to best suit the needs of countries, and a global TrackFin community will emerge and be strengthened.

Annex C. SDG 6: Monitoring the means of implementation

The 2030 Agenda for Sustainable Development includes a dedicated goal on water and sanitation that sets out to "ensure availability and sustainable management of water and sanitation for all." SDG 6 expands the MDG focus on drinking-water and sanitation to cover the entire water cycle, including the management of water, wastewater and ecosystem resources. It contains six targets on outcomes across the entire water cycle, and two targets on the means of implementing the outcome targets (Table C.1).

Table C.1 **Targets for SDG 6: Ensure availability and sustainable management of water and sanitation for all**

	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
MoI	**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

The Means of Implementation (MoI) refer to the interdependent mix of financial resources, technology development and transfer, capacity-building, inclusive and equitable globalization and trade, regional integration, as well as the creation of a national enabling environment required to implement the new sustainable development agenda.[1] The MDGs have been criticized as overly focused on outcomes, with insufficient attention paid to the MoI and resources required to achieve them. In part to address these concerns, the SDGs include MoI targets under each of the first 16 goals as well as a dedicated goal in Goal 17 (Partnerships for the Goals – Strengthen the MoI and revitalize the global partnership for sustainable development). Compared to the more established outcome measures for access to basic drinking-water and sanitation, defining meaningful and measurable indicators for MoI is a much greater challenge: data availability on the effectiveness of enabling environment and partnerships is limited, and systems for monitoring MoI have yet to be established in most countries. At the same time, the establishment of MoI targets and indicators within Goal 6 provides a unique opportunity to mobilize support and resources as well as shape policy priorities at the global and national levels to galvanize the implementation of Goal 6 as a whole. In addition, much as MDG monitoring has helped to establish monitoring systems at the national level and has supported building of capacity in national statistical offices to monitor outcome indicators, selection of appropriate targets and indicators can support development of monitoring systems for MoI at the national, regional and global levels.

WHO, through the GLAAS initiative, is a co-custodian of indicators 6.a.1 and 6.b.1, along with UNEP and OECD.

Indicator 6.a.1 The amount of water- and sanitation-related ODA for water- and sanitation-related activities and programmes that is part of a government coordinated spending plan.

Indicator 6.b.1 The percentage of local administrative units with established and operational policies and procedures for participation of local communities in water and sanitation management.

[1] UN (2017) United Nations Technical Support Team Issues Brief: Means of Implementation; Global Partnership for achieving sustainable development, New York, United States. Available at https://sustainabledevelopment.un.org/content/documents/2079Issues Brief Means of Implementation Final_TST_141013.pdf [Accessed 8 March 2017].

A detailed methodological note laying out definitions, interpretations, data sources, methods of computation, and limitations for the SDG 6 MoI indicators has been developed and is available online.[1] Data to measure indicators 6.a.1 and 6.b.1 as currently stated are not yet available, and the methodology is likely to evolve over the next few years through consultation with countries, development partners, and other stakeholders. The GLAAS country survey has been revised in the 2016/2017 cycle to better accommodate monitoring of targets 6.a and 6.b; in particular, the scope of some of the questions has been expanded beyond WASH to include integrated water resources management. Existing data have been pieced together to provide some information on the current status of targets 6.a and 6.b, as shown below. In addition, the United Nations Statistics Division has developed a global SDG indicator database[2] and metadata repository[3] to consolidate data on SDG indicators, and will highlight progress in annual SDG reports.[4]

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

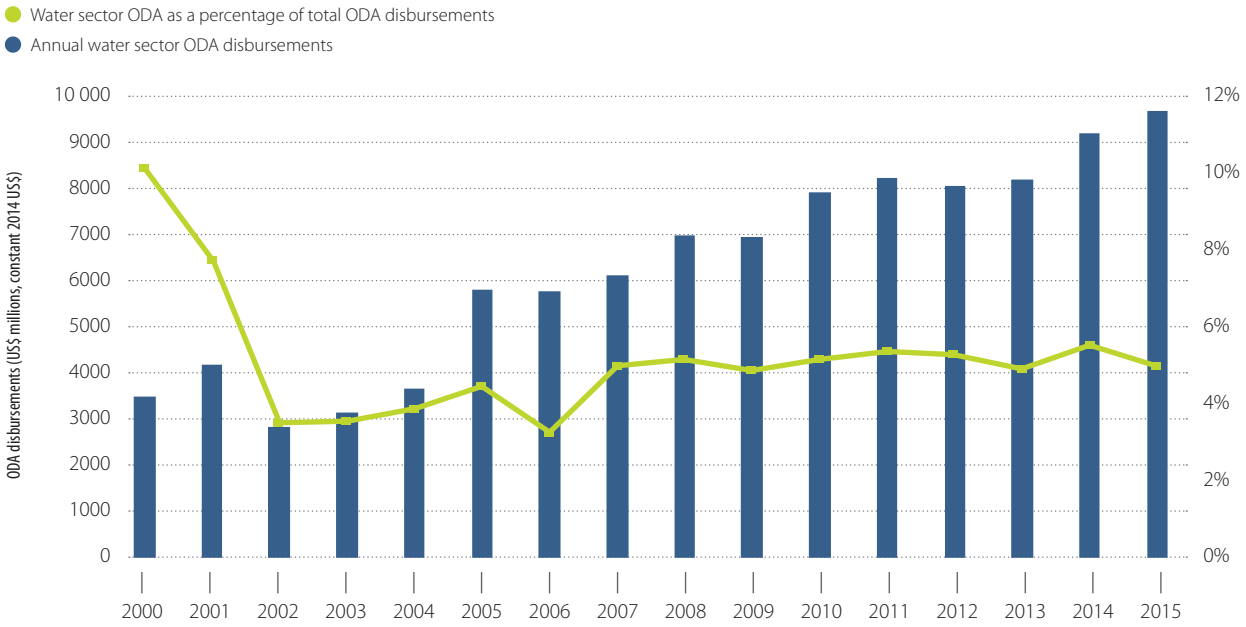
ODA for the water sector captured under Goal 6 includes WASH, wastewater treatment, water resources conservation, development and management, agricultural water resources, flood protection, and hydroelectric power. ODA disbursements in these areas were US$ 8.6 billion in 2015, representing an increase of 67% since 2005. Funding has increased across the sector since 2005 with agricultural water resources nearly tripling over this time period. However, water sector ODA has remained relatively constant as a proportion of total ODA disbursements at approximately 5% since 2005.

ODA disbursements for water supply and sanitation large systems comprised by far the largest proportion of water sector ODA in 2015 at approximately 40%. Basic drinking-water supply and basic sanitation accounted for approximately 20%, about half of that for large systems. Agricultural water resources and water sector policy and management each accounted for 12% to 13% of total water sector ODA. The disaggregation of ODA by OECD-CRS purpose code has not changed greatly since 2010.

The Sub-Saharan Africa SDG Region received the largest proportion of ODA to the water sector in 2015 at 28%, followed by Western Asia and Northern Africa at 22% and Central Asia and South Asia at 17%. In the Sub-Saharan Africa Region, basic systems accounted for a quarter of total ODA disbursements in 2015. ODA for large systems has decreased as a proportion of total ODA disbursements in the Sub-Saharan Africa Region from 41% in 2010 to 30% in 2015.

Additional information on ODA flows and targeting of aid can be found in the section External aid flows to water and sanitation.

Annual water sector ODA disbursements and as a percentage of total ODA



Source: OECD-CRS, 2016.

[1] http://www.unwater.org/fileadmin/user_upload/unwater_new/docs/Methodological%20note%206a%20and%206b_7%20March%202017.pdf

[2] https://unstats.un.org/sdgs/indicators/database/

[3] https://unstats.un.org/sdgs/metadata/

[4] 2016 report available here: https://unstats.un.org/sdgs/report/2016/

ODA disbursements for the water sector have been steadily rising but have remained relatively constant as a proportion of total ODA disbursements at approximately 5% since 2005.

Table C.2

ODA disbursements for ODA recipient countries (US$ millions, constant 2014 US$)

		Water and sanitation (OECD-DAC 140)											
SDG Region	Year	Water sector policy and administrative management (CRS 14010)	Water resources conservation (including data collection) (CRS 14015)	Water supply and sanitation - large systems (CRS 14020, 14021, 14022)	Basic drinking-water supply and basic sanitation (CRS 14030, 14031, 14032)	River basins' development (CRS 14040)	Waste management/ disposal (CRS 14050)	Education and training in water supply and sanitation (CRS 14081)	Total	Agricultural water resources (CRS 31140)	Flood prevention/ control (CRS 41050)	Hydro-electric power plants (CRS 23220)	Total water sector ODA
World*	2015	1 164	213	3 606	1 802	270	353	41	7 450	1 221	313	670	9 654
	2010	885	204	3 174	1 378	259	276	50	6 227	826	337	509	7 899
Central Asia and Southern Asia	2015	64	34	552	310	56	39	3	1 059	333	121	155	1 668
	2010	61	27	579	141	27	51	2	888	187	44	117	1 236
Eastern Asia and South-Eastern Asia	2015	74	32	425	248	90	114		984	179	81	203	1 446
	2010	54	77	411	224	109	45	3	923	232	190	88	1 432
Latin America and the Caribbean	2015	44	25	296	106	10	30	2	514	19	6	42	580
	2010	41	10	398	201	16	27	2	697	40	16	82	835
Northern America and Europe	2015	11	19	167	26	11	22		255	50	13	1	319
	2010	5	1	87	5	21	31		149	2	3	22	176
Oceania	2015	12		15	20	5	5	1	58		1	13	72
	2010	1		18	20		4		43				43
Sub-Saharan Africa	2015	457	52	794	663	76	50	15	2 107	277	79	219	2 682
	2010	222	32	889	571	29	24	29	1 796	173	63	137	2 169
Western Asia and Northern Africa	2015	251	16	1 134	217	7	79	5	1 709	347	11	34	2 100
	2010	253	25	687	93	36	32	5	1 131	179	17	45	1 372

*Includes regional donations that cannot be categorised by SDG region.

Source: OECD-CRS, 2016.

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

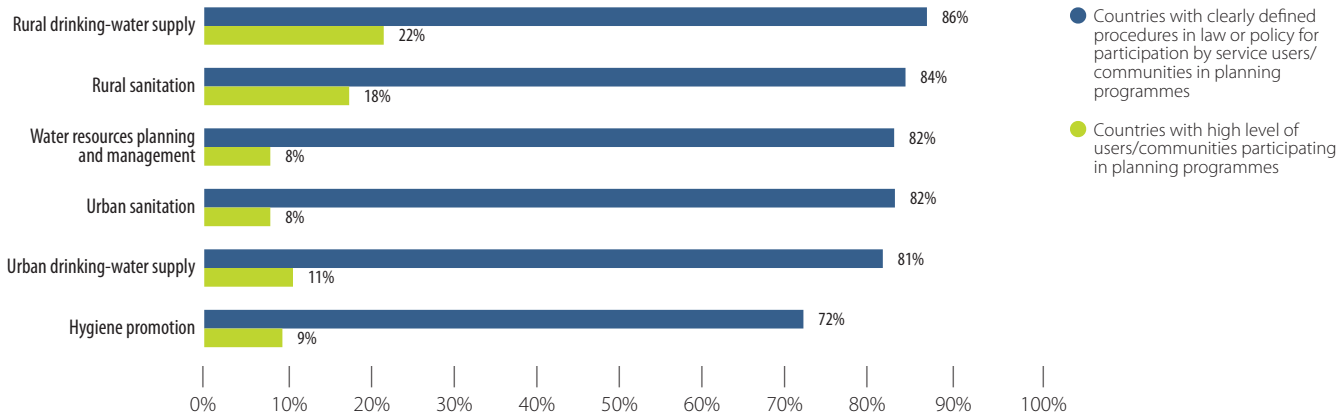
Effective water and sanitation management depends on the participation of a range of stakeholders, including local communities. The GLAAS survey has been collecting data on service user participation in the WASH sector since 2009. In the GLAAS 2016/2017 cycle, the question has been expanded beyond WASH to include water resources planning and management.

Over three quarters of countries report having clearly defined policies and procedures in place for the participation of service users and communities in planning programmes for drinking-water supply (urban: 81%, rural: 86%) and sanitation (urban: 81%, rural: 84%), as well as water resources planning and management (82%). Among the four subsectors, rural drinking-water supply tends to have the highest proportion of countries with defined procedures for participation, and urban sanitation the lowest, a result which has been seen consistently since the 2009/2010 cycle of GLAAS. Hygiene promotion had the lowest proportion of countries with defined procedures for participation within the WASH sector in 2016/2017 at 72%.

While most countries report having clearly defined procedures for local participation in place, levels of participation remain comparatively low. Less than one quarter of countries report a high level of participation in any subsector. Levels of participation tend to be higher for rural drinking-water supply (22%) and sanitation (18%) compared to urban (11% and 8% respectively). Levels of participation for hygiene promotion and water resources planning and management were also quite low at 9% and 8% respectively.

While the proportion of countries with clearly defined procedures for participation by service users/communities in WASH planning programmes and water resources planning and management is consistently high, countries that report high levels of user participation remains comparatively low.

Figure C.2 **Percentage of countries with defined procedures in law or policy for participation by service users/ communities, and extent of high user participation in planning programmes (n=74)**



Source: GLAAS 2016/2017 country survey.

Why does SDG 6 matter to local governments?

Ensuring access to clean water and sanitation is usually a responsibility of local governments, and relies on effective local governance, natural resource management, and urban planning.

The challenges involved can vary hugely at sub-national level, particularly between urban and rural areas.

In urban areas, the main challenge is often a lack of access to basic services in informal settlements, or high prices and a lack of quality control of water from private vendors. In rural areas, water may be free, but it may involve long journeys to and from the source, and may be contaminated.

Local governments have a role to play in improving water quality through environmental protection measures and sustainable solid waste management.

Integrated water resources management requires horizontal cooperation in planning and environmental policy between municipalities and regions across borders.

Local governments are ideally placed to support participatory management of water and sanitation by communities, including slum-dwellers.

Extract from: WHAT LOCAL GOVERNMENTS NEED TO KNOW, UCLG. 2015.

Table C.3

Countries with clearly defined procedures in laws or policies for participation by service users and communities in planning programmes, and level of participation

Procedures exist: ✔ Yes ✘ No

Level of participation: ✔ High ● Moderate ✘ Low

	Sanitation				Drinking-water supply				Hygiene promotion		Water resources planning and management	
	Urban		Rural		Urban		Rural		National		National	
COUNTRY	Procedures exist	Level of participation	Procedures exist	Level of participation	Procedures exist	Level of participation	Procedures exist	Level of participation	Procedures exist	Level of participation	Procedures exist	Level of participation
Afghanistan	✘		✔	●	✘		✔	●	✔	●	✔	✘
Albania	✔	✘	✔	✘	✔	✘	✔	✘	✔		✔	
Argentina	✔	●	✔	✘	✔	●	✔	✘	✘		✔	●
Azerbaijan	✔	●	✔	●	✔	✔	✔	✔	✔	✘	✔	✔
Bangladesh	✔	●	✔	●	✔	●	✔	●	✔	●	✔	✘
Barbados	✔	✘	✔	✘	✔							
Belarus	✔	●	✔	●	✔	●	✔	●	✘	●	✔	●
Bhutan	✔	●	✔	✔	✔	●	✔	✔	✔	✔	✔	✘
Bolivia (Plurinational State of)	✔	✘	✔	●	✔	✘	✔	●	✘	✘	✔	✘
Bosnia and Herzegovina	✔	✘	✔	✘	✔	●	✔	●	✔	✘	✔	✘
Botswana	✔	●	✔	✘	✔	●	✔	●	✔	●	✔	✘
Brazil	✔	●	✔	●	✔	●	✔	●	✔	●	✔	●
Burkina Faso												
Burundi	✔	●	✔	●	✔	●	✔	●	✔	●		
Cambodia	✔	✘	✔	●	✔	✘	✔	●	✔	●	✔	✘
Chile	✔	✘			✔	✘	✔	●			✔	✘
China	✔	✘	✔	✘	✔	✘	✔	✘	✔	✘	✔	●
Colombia	✔	●	✔	✘	✔	●	✔	✘	✔	✘	✔	✘
Costa Rica	✔	✘	✔	✘	✔	✘	✔	✘	✔	✔	✔	✘
Côte d'Ivoire	✔	●	✔	●	✘		✔	●			✔	●
Cuba	✔	●	✔	●	✔	●	✔	●			✔	✔
Dominican Republic	✘		✔	✘	✘		✔	✘	✔	●	✔	
Ecuador	✔	✔	✘	✘	✔	✔	✔	✔	✘		✔	✘
El Salvador	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘
Ethiopia	✔	●	✔	✔	✔	✔	✔	✔	✔	●	✔	●
Fiji	✔	✘	✔	✔	✔	✘	✔	✔	✔	✔	✔	✘
Georgia	✔	✘	✔	✘	✔		✔		✔		✔	
Ghana												
Guatemala												
Guinea	✔	✘	✔	✘	✔	●	✔	●	✔	✘	✔	✘
Haiti	✘	✘	✔	✘	✘	✘	✔	✘	✘	✘	✘	✘
Honduras	✔	✘	✔	✘	✔	✘	✔	✔	✔	✘	✔	✘
India	✔	●	✔	●	✔	●	✔	●	✔	●	✔	✘
Jamaica	✔	●	✔	●	✘	✘	✔	●	✔	●	✔	✔
Kenya	✔	✘	✔	●	✔	✘	✔	✔	✔	●	✔	✘
Kyrgyzstan	✘		✘		✘		✘		✘		✘	
Lao People's Democratic Republic	✔	✔	✔	●	✔	✔	✔	●	✔	●	✔	●
Lesotho	✔	●	✔	✔	✔		✔	✔	✔	✘	✔	✘
Liberia	✔	●	✔	✔	✔	●	✔	●	✔	●	✔	✘
Lithuania	✔	✘	✔	●	✔	✘	✔	●	✔	✘	✔	✘
Madagascar	✔	✘	✔	●	✔	✘	✔	●	✔	●	✔	✘
Malaysia	✔		✔	●	✔		✔	●			✔	✔
Maldives	✔	●	✔	●	✔	●	✔	●	✔	●	✔	●
Mali	✔	●	✔	●	✔	●	✔	●	✔	✘	✔	✘
Mexico	✔	✘	✔	●	✔	✘	✔	●	✔	●	✔	✘
Micronesia (Federated States of)	✘	●	✘	●	✘	●	✘	●	✘	●	✔	●
Mongolia	✔	●	✔	✘	✔	●	✔	✘	✔	●	✘	
Mozambique	✔	✘	✔	✘	✔	●	✔	●	✔	✘	✔	●
Nepal	✔	●	✔	✔	✔	✔	✔	✔	✔	●	✔	✘
Nigeria	✔	●	✔	●	✔	●	✔	●	✔	●	✔	●
Pakistan	✔	✘	✔	●	✔	✘	✔	●	✔	✘	✔	✘
Panama	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	●
Papua New Guinea	✘		✘		✘		✘		✘		✘	
Paraguay	✔	●	✔	✘	✔	●	✔	●	✔	●	✔	●

COUNTRY	Sanitation				Drinking-water supply				Hygiene promotion		Water resources planning and management	
	Urban		Rural		Urban		Rural		National		National	
	Procedures exist	Level of participation	Procedures exist	Level of participation	Procedures exist	Level of participation	Procedures exist	Level of participation	Procedures exist	Level of participation	Procedures exist	Level of participation
Peru	✔	●	✔	●	✔	●	✔	●	✔	●	✔	✔
Philippines	✔	●	✔	●	✔	●	✔	●	✔	●	✔	●
Rwanda	✔	●	✔	✔	✔	●	✔	✔	✔	●	✔	●
Senegal	✔	●	✔	●	✔	●	✔	●	✔	●	✔	✘
Serbia	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Solomon Islands	✔	✘	✔	✔	✔	✘	✔	✔	✔	●	✘	
South Africa	✔	✘	✔	●	✔	✘	✔	●	✔	●	✘	✘
Tajikistan	✔	✘	✔	✘	✔	✘	✔	●	✔	●	✔	●
Thailand	✔	●	✔	●	✔	●	✔	●	✔	✘	✔	●
Timor-Leste	✘	✘	✔	✘	✘	✘	✔	✔			✔	
Tonga	✔	●	✔	●	✔	●	✔	●	✔	●	✔	●
Ukraine	✔	✘	✘		✔	●	✔	✘	✘		✔	✘
United Republic of Tanzania	✔	✔	✔	✔	✔	●	✔	●	✔	●	✔	✘
Uruguay	✔	●	✔		✔	●	✔	✘	✔	✘	✔	●
Uzbekistan	✔	✘			✔	✘			✔	✘	✔	●
Vanuatu	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘
Venezuela (Bolivarian Republic of)	✔	✔	✔	✔	✔	✔	✔	✔	✔	●	✔	●
Viet Nam			✔	✘	✔	✘	✔	✘	✘		✔	✘
Zambia	✔	●	✔	✔	✔	●	✔	✔	✔	✔	✔	●
Zimbabwe	✔	●	✔	●	✔	✘	✔	●	✔	✔	✔	●

Note: Data not yet fully finalized. Final data sets will be made available on the GLAAS website.

Source: GLAAS 2016/2017 country survey.

Annex D. Summary of responses to the GLAAS 2016/2017 country survey

	DEMOGRAPHIC, HEALTH, AND COVERAGE ESTIMATES								
	Population (millions, 2017)[1]	Diarrhoea deaths due to inadequate WASH in children under 5 years (2012)[2]		Use of improved sanitation facilities (% of population, 2015)[3]			Use of improved drinking-water sources (% of population, 2015)[3]		
COUNTRY	National	per 100 000	Total	Urban	Rural	National	Urban	Rural	National
Afghanistan	34.17	175.5	8 697	45	27	32	78	47	55
Albania	2.91	1.6	3	95	90	93	95	95	95
Argentina	44.27	1.6	55	96	98	96	99	100	99
Azerbaijan	9.97	24.2	183	92	87	89	95	78	87
Bangladesh	164.83	30.1	4 582	58	62	61	87	87	87
Barbados	0.29			96	96	96	100	100	100
Belarus	9.46	0.2	1	94	95	94	100	99	100
Bhutan	0.79	37.7	27	78	33	50	100	100	100
Bolivia (Plurinational State of)	11.05	34.7	442	61	28	50	97	76	90
Bosnia and Herzegovina	3.79	0.3		99	92	95	100	100	100
Botswana	2.34	38.2	88	79	43	63	99	92	96
Brazil	211.24	2.1	316	88	52	83	100	87	98
Burkina Faso	19.17	150.2	4 385	50	7	20	97	76	82
Burundi	11.94	190.3	3 466	44	49	48	91	74	76
Cambodia	16.08	35.0	584	88	30	42	100	69	76
Chile	18.31	0.2	2	100	91	99	100	93	99
China	1 396.24	4.9	4 347	87	64	76	98	93	95
Colombia	49.07	2.6	119	85	68	81	97	74	91
Costa Rica	4.91	0.6	2	95	92	95	100	92	98
Côte d'Ivoire	23.82	148.9	4 623	33	10	22	93	69	82
Cuba	11.39	0.6	3	94	89	93	96	90	95
Dominican Republic	10.77	12.6	134	86	76	84	85	82	85
Ecuador	16.63	8.2	131	87	81	85	93	76	87
El Salvador	6.17	8.4	52	82	60	75	97	87	94
Ethiopia	104.34	89.6	12 639	27	28	28	93	49	57
Fiji	0.90	7.6	7	93	88	91	100	91	96
Georgia	3.97	1.5	4	95	76	86	100	100	100
Ghana	28.66	71.1	2 581	20	9	15	93	84	89
Guatemala	17.01	22.2	493	78	49	64	98	87	93
Guinea	13.29	109.6	2 028	34	12	20	93	67	77
Haiti	10.98	112.1	1 397	34	19	28	65	48	58
Honduras	8.30	13.8	136	87	78	83	97	84	91
India	1 342.51	71.7	87 125	63	28	40	97	93	94
Jamaica	2.81	3.2	8	80	84	82	97	89	94
Kenya	48.47	92.4	6 433	31	30	30	82	57	63
Kyrgyzstan	6.12	14.3	93	89	96	93	97	86	90
Lao People's Democratic Republic	7.04	83.9	722	94	56	71	86	69	76
Lesotho	2.19	99.1	255	37	28	30	95	77	82
Liberia	4.73	85.9	582	28	6	17	89	63	76
Lithuania	2.83	0.5	1	97	83	92	100	90	97
Madagascar	25.61	72.6	2 558	18	9	12	82	35	52
Malaysia	31.16	1.0	26	96	96	96	100	93	98
Maldives	0.38	1.6	1	97	98	98	100	98	99
Mali	18.69	214.1	6 109	38	16	25	97	64	77
Mexico	130.22	3.7	416	88	74	85	97	92	96
Micronesia (Federated States of)	0.11	31.2	4	85	49	57	95	87	89
Mongolia	3.05	21.9	65	66	43	60	66	59	64
Mozambique	29.54	109.1	4 758	42	10	21	81	37	51
Nepal	29.19	32.7	982	56	43	46	91	92	92
Nigeria	191.84	168.8	50 114	33	25	29	81	57	69
Pakistan	196.74	114.4	24 561	83	51	64	94	90	91
Panama	4.05	16.1	59	84	58	75	98	89	95
Papua New Guinea	7.93	66.0	645	56	13	19	88	33	40
Paraguay	6.81	10.7	81	95	78	89	100	95	98
Peru	32.17	4.8	142	82	53	76	91	69	87

	DEMOGRAPHIC, HEALTH, AND COVERAGE ESTIMATES								
	Population (millions, 2017)[1]	Diarrhoea deaths due to inadequate WASH in children under 5 years (2012)[2]		Use of improved sanitation facilities (% of population, 2015)[3]			Use of improved drinking-water sources (% of population, 2015)[3]		
COUNTRY	National	per 100 000	Total	Urban	Rural	National	Urban	Rural	National
Philippines	103.80	19.8	2 239	78	71	74	94	90	92
Rwanda	12.16	63.6	1 183	59	63	62	87	72	76
Senegal	16.05	50.8	1 177	65	34	48	93	67	79
Serbia	8.78	0.0		98	94	96	99	99	99
Solomon Islands	0.61	25.3	21	81	15	30	93	77	81
South Africa	55.44	31.8	1 742	70	61	66	100	81	93
Swaziland	1.32	92.1	155	63	56	57	94	69	74
Tajikistan	8.86	47.0	531	94	95	95	93	67	74
Thailand	68.30	2.9	107	90	96	93	98	98	98
Timor-Leste	1.24	50.3	93	69	27	41	95	61	72
Tonga	0.11	2.2		98	89	91	100	100	100
Ukraine	44.41	1.8	45	97	93	96	96	98	96
United Republic of Tanzania	56.88	55.4	4 688	31	8	16	77	46	56
Uruguay	3.46	0.6	1	97	93	96	100	94	100
Uzbekistan	30.69	20.9	613	100	100	100	98		
Vanuatu	0.28	12.1	4	65	55	58	99	93	94
Venezuela (Bolivarian Republic of)	31.93	6.0	177	97	70	94	95	78	93
Viet Nam	95.41	9.5	684	94	70	78	99	97	98
Zambia	17.24	104.0	2 678	56	36	44	86	51	65
Zimbabwe	16.34	98.4	1 979	49	31	37	97	67	77

[1] Total population, medium fertility variant. United Nations, Department of Economic and Social Affairs, Population Division (2015). World Population Prospects: The 2015 Revision.
[2] WHO (2014) Preventing diarrhoea through better water, sanitation and hygiene: exposures and impacts in low- and middle-income countries. World Health Organization, Geneva.
[3] UNICEF/WHO (2015) Joint Monitoring Programme. Progress on sanitation and drinking water – 2015 update and MDG assessment. World Health Organization, Geneva.

	EQUITY								
	Policies and plans have specific measures to reach vulnerable groups							Tracking progress among vulnerable groups	
	National							Sanitation	Drinking-water
COUNTRY	Poor populations	Populations living in remote or hard-to-reach areas	People living with disabilities	Women	Populations living in slums or informal settlements	Populations with high burden of disease	Indigenous populations	Poor populations	Poor populations
Afghanistan	✔	✔	✔	✔	✔	✔	✔	✘	✘
Albania	✔		✔		✔				
Argentina	✔	✔	✔	✘	✔	✔	✔	✔	✔
Azerbaijan	✔	✔	✔	✔			✔	✔	✔
Bangladesh	✔	✔	✔	✔	✔	✔	✔	✔	✔
Barbados	✘	✘		✘	✘	✘		✔	✔
Belarus			✔					✔	✔
Bhutan	✔	✔	✔	✔	✘	✔	✔	✔	✔
Bolivia (Plurinational State of)	✔	✔	✔	✔	✔	✔	✔	✔	✔
Bosnia and Herzegovina	✘	✘	✘	✘	✘	✘	✘	✘	✘
Botswana	✔	✔	✔		✔	✔		✘	✔
Brazil	✔	✔	✘	✘	✔	✘	✔	✔	✔
Burkina Faso									
Burundi	✔							✘	✘
Cambodia	✔	✔	✔	✔	✘	✔	✔	✔	✔
Chile	✔	✔							
China	✔	✔	✔	✔		✔	✔	✔	✔
Colombia	✔	✔	✔	✔	✔	✔	✔	✔	✔
Costa Rica	✔	✔	✔	✔	✔	✔	✔	✘	✔
Côte d'Ivoire	✔	✔	✔	✔	✔	✔	✔	✘	✘
Cuba									
Dominican Republic	✔	✔	✔	✔	✔	✔		✔	✔
Ecuador									
El Salvador	✘	✘	✘	✘	✘	✘	✘	✘	✘
Ethiopia	✔	✔	✔	✔	✔	✔	✔	✘	✘
Fiji	✔	✔	✔	✔	✔	✔	✔	✘	✔
Georgia	✔	✔	✔	✔	✔	✔	✔	✔	✔
Ghana									
Guatemala	✘	✘	✘	✘	✘	✘	✘	✘	✘
Guinea	✘	✘	✘	✘	✘	✘	✘	✘	✘
Haiti	✘	✘	✘	✘	✔	✘	✘	✘	✘
Honduras	✔	✔	✔	✔	✔	✔	✔	✔	✔
India	✔	✘	✘	✔	✔	✔	✔	✔	✔
Jamaica	✔	✔	✔	✔	✔	✘		✔	✔
Kenya	✔	✔	✘	✘	✔	✔	✘	✘	✘
Kyrgyzstan	✔	✔	✔	✔	✘	✔	✔	✘	✘
Lao People's Democratic Republic	✔	✔	✔	✔	✘	✔	✔	✔	✔
Lesotho	✔	✔	✔	✔	✘	✔	✘	✘	✘
Liberia	✘	✘	✔	✔	✘	✔	✘	✘	✔
Lithuania	✔	✘	✔	✘	✘	✘	✘	✘	✘
Madagascar	✔	✘	✔	✔	✘	✘	✘	✔	✔
Malaysia	✔	✔	✔	✘	✔	✔	✔	✔	✘
Maldives	✔	✔	✔	✔		✔		✔	✔
Mali	✔[1]	✔[1]	✔[1]	✔[1]	✔[1]		✔[1]	✘	✔
Mexico	✔	✔	✔	✔	✔	✔	✔	✔	✔
Micronesia (Federated States of)	✔	✔	✔	✔	✔	✔	✔	✔	✔
Mongolia	✘	✘	✔	✘	✘	✘	✘	✘	✘
Mozambique	✔	✔	✘	✔	✔	✔		✔	✔
Nepal	✔	✔	✔	✔	✔	✔	✔	✔	✔
Nigeria	✔	✔	✔	✔	✔	✔	✔	✔	✔
Pakistan	✔	✔	✔	✘	✔	✔	✔	✔	✔
Panama	✔	✔	✔	✔	✔	✔	✔	✘	✘
Papua New Guinea	✘	✘	✘	✘	✘	✘	✘	✘	✘
	✔ Yes ✘ No							✔ Yes ✘ No	

[1] For sanitation only.

EQUITY

Specific measures in the financing plan to target resources to vulnerable populations

Sanitation							Drinking-water						
Poor populations	Populations living in remote or hard-to-reach areas	People living with disabilities	Women	Populations living in slums or informal settlements	Populations with high burden of disease	Indigenous populations	Poor populations	Populations living in remote or hard-to-reach areas	People living with disabilities	Women	Populations living in slums or informal settlements	Populations with high burden of disease	Indigenous populations
✘	✘	✘	✘	✘	✔	✘	✘	✘	✘	✘	✘	✔	✘
✘	✘	✘	✘	✘	✘		✘	✘	✘	✘	✘	✘	
✘	●	●	✘	●	✘	●	✘	●	●	✘	●	✘	●
✔	✔	✔	✔	✔		✔	✔	✔	✔	✔	✔		✔
✔	●	●	●	●	✔	✔	✔	✔	●	✔	●	✔	✔
✔		✔					✔		✔				
●	●	●	✔	●	✘	●	●	●	●	✔	●	✘	●
✘	✘	✘	✘	✘	✘	✘							
✘	✔	●		●	✘		✔	✔	✘			✘	
●	●	✘	✘	●	●	●	●	●	✘	✘	●	●	●
●	●	●	●	●	●	✘	●	●	✘	●	●	✘	✘
✔	✔	✘	✘	✘	✘	✘	✔	✔	✘	✘	✘	✘	✘
✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
✔	✔	✘	✘	✘	✘	✘	✔	✔	✘	✘	✘	✘	✘
✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
✘	✔	✘	✘	✔	✘	✘	✔	●	✘	✘	✔	✘	✘
		✔		✔					✔		✔		
✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘
●	●	✘	✘	✘	✘	✘	●	●	✘	✘	✘	✘	✘
✘	✘	✘	✘	●	✘	✘	✘	✘	✘	✘	✘	●	✘
✘	●	✘	✘	●	✔		✔	✔	✔	✔	✔	✔	✔
✘	✘	✘	✘	✘	✔	✘	✘	✘	✘	✘	✘	✘	✘
✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘
●	●	✘	✘	●	✘	✘	●	●	✘	✘	●	✘	✘
✔	✔	✔	✔	●	✔	✔	●	✔	✔	✘	●	✔	✔
✘	✘	●	●	●	✘	✘	✘	✘	●	●	●	✘	✘
✘	✘	✘	✘	✘	✘	✘	●	✘	✘	✘	✔	✘	✘
●	●	✘	✘	✘	✘	✘	●	●	✘	✘	●	●	●
●	●	●	●	●	●	●	✔	✔	✔	✔	✔	✔	✔
●	●	✘	✘	●	●	●	●	●	●	●	●	●	●
✔	✘	✔	✘	✘	✘	✘	✔	✘	✔	✘	✘	✘	
●	✘	✘	✘	✘	✘	✘	✔	✘	✘	✘	●	✘	✘
✘	✘	✘	✘	✘	✘	✘	✘	●	✘	✘	●	✘	✘
✘	✘	✘	✘	●	✘	✘	●	●	✘	✘	●	✘	✘
✘	✔	✘	✔	✔	✔	✔	✘	✔	✘	✔	✔	✔	✔
●	●	●	●	●	●	●	●				●		
✘	✘	●	✘	✘	✘	✘	✘	✘	✘	✘	✘	✔	✘	✘
✘	✘	✘	✘	✘	✘		✘	✘	✘	✘	✘	✘	
✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘
✘	●	●	●	●	●	✘	✘	●	●	●	●	●	✘
●	●	✘	✘	●	✔	●	●	●	✘	✘	●	✔	●
✘	●	✘	✘	●	●	●	✘	●	✘	✘	●	●	●
✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘

✔ Yes and measures are applied
● Yes, but measures are not applied consistently
✘ No

	EQUITY								
	Policies and plans have specific measures to reach vulnerable groups							Tracking progress among vulnerable groups	
	National							Sanitation	Drinking-water
COUNTRY	Poor populations	Populations living in remote or hard-to-reach areas	People living with disabilities	Women	Populations living in slums or informal settlements	Populations with high burden of disease	Indigenous populations	Poor populations	Poor populations
Paraguay	✔	✔	✔	✔	✔	✔	✔	✘	✔
Peru	✔	✔	✔	✔	✔	✔	✔	✘	✔
Philippines	✔	✔	✔	✔	✔	✔	✔	✔	✔
Rwanda	✔	✔	✔	✔	✔	✔		✔	✔
Senegal	✔	✔	✔	✔	✔	✔	✘	✘	✘
Serbia	✔	✘	✘	✔	✔	✔	✘	✔	✔
Solomon Islands	✘	✘	✔	✔	✘	✘	✘	✘	✘
South Africa	✔	✔	✘	✔	✔	✘	✔	✔	✔
Swaziland	✔	✔	✔	✔	✔	✔		✔	✔
Tajikistan	✘	✘	✘	✘	✘	✘	✘	✘	✘
Thailand	✔	✔	✔	✔	✔	✔	✔	✔	✔
Timor-Leste	✔	✔	✔	✔	✘	✔		✘	✘
Tonga	✘	✔		✔	✘		✔	✔	✔
Ukraine	✘	✔	✔	✘	✘	✘		✘	✘
United Republic of Tanzania	✔	✔	✔	✔	✔	✔		✘	✔
Uruguay	✔		✘	✘	✔			✘	✘
Uzbekistan	✔	✔	✔	✔	✔		✔	✔	✔
Vanuatu	✘	✘	✘	✘	✘	✘	✘	✘	✘
Venezuela (Bolivarian Republic of)	✔	✔	✔	✔	✔	✔	✔		
Viet Nam	✔	✔	✘	✔	✔	✔	✔	✔	✔
Zambia	✔	✔	✘	✔	✔	✔	✔	✘	✘
Zimbabwe	✔	✔	✔	✔	✔	✔	✔	✔	✔
	✔ Yes ✘ No							✔ Yes ✘ No	

Note: Data not yet fully finalized. Final data sets will be made available on the GLAAS website.
Source: GLAAS 2016/2017 country survey.

EQUITY

Specific measures in the financing plan to target resources to vulnerable populations

Sanitation							Drinking-water						
Poor populations	Populations living in remote or hard-to-reach areas	People living with disabilities	Women	Populations living in slums or informal settlements	Populations with high burden of disease	Indigenous populations	Poor populations	Populations living in remote or hard-to-reach areas	People living with disabilities	Women	Populations living in slums or informal settlements	Populations with high burden of disease	Indigenous populations
●	●	●	●	●	●	●	●	●	●	●	●	●	●
✔	●	✘	✘	✔		●	✔	●	✘	✘	✔		●
●	●	●	✔	✔	●	●	●	●	●		✔	●	●
✔	✔	✔	✔	●	✔	✘	✔	✔	✔	✔	✔	✔	✘
●	●	●	✔	●	✘	✘	●	●	✘	✘	●	✘	✘
✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘
✘	●	●	✘	✘	✘	✘	✘	●	●	✘	✘	✘	✘
✔	✘	✘	✘	✔	✘	✔	✔	✘	✘	✘	✔	✘	✔
✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘
✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘
✘	✔	✔	✔	✘	✔	✘	✔	✔	✔	✔	✔	✔	✔
●	✔	✔	✔	✘	✔		●	✔	✔	✔	✘	✘	
✘	✘	●	●		✔	✘		✘	✘	✘		✔	✘
✘	✘	●	✘	✘	✘	✘	✘	●	●	✘	✘	✘	✘
●	✘	✔	●	●	✔		✔	✘	✔	✘	●	✔	
✔				✔			✔				✔		
	✔							✔					
✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘
●	●	✘	✘	●	✘	✔	●	●	✘	✘	●	✘	✔
✔	✘	✘	✘	✘	✘	✘	✔					✔	
●	●	●	●	●	●	✘	●	●	●	●	●	●	✘
●	●	●	●	●	●		●	●	●	●	●	●	

✔ Yes and measures are applied
● Yes, but measures are not applied consistently
✘ No

FINANCING

COUNTRY	Existence and level of implementation of a government-defined financing plan/ budget for the WASH sector which is published and agreed					Expenditure reports are publicly available and easily accessible, and allow comparison of committed funds to expenditures				Operating and basic maintenance costs are covered by tariffs				Absorption of external funds (% of official donor capital commitments utilized (three-year average))			
	Sanitation		Drinking-water		Hygiene	Sanitation		Drinking-water		Sanitation		Drinking-water		Sanitation		Drinking-water	
	Urban	Rural	Urban	Rural	National	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
Afghanistan	✗	✗	✗	✗	✗	●	●		●	✗	✗	✗	✗		✓	✓	✓
Albania	✓	✓	✓	✓	✓	●	●	●	●	✓	✓	✓	✓	✓	✓	✓	✓
Argentina	●	✗	●	✗	✗	●	✗	●	✗	✓	✓	✓	✓	✗	✗	✗	✗
Azerbaijan	✓	✓	✓	✓	●	●	●	●	●	✓	✓	✓	✓	✓	✓	✓	✓
Bangladesh	●	●	●	●	✗	●	●	●	●	✗		✓		✓	✓	✓	✓
Barbados	✗	✗	✗	✗	✗												
Belarus	✓	✓	✓	✓	✓	●	●	●	●	●	●	●	●	✓	✓	✓	✓
Bhutan	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✗	✗	✓	✓	✓	✓
Bolivia (Plurinational State of)	●	●	●	●	✗	✗	✗			●	✗	●	✗	✓	✓	✓	✓
Bosnia and Herzegovina	●	✗	●	✗	✗	●	●	●	●	✓		✓		✗		✗	
Botswana	✓	✗	✓	●	✓	✗	✗	✗	✗	✗	✗	●	✗				
Brazil	●	●	●	●	●	●	●	●	●	✓	●	✓	●				
Burkina Faso	✓	✓	✓	✓		✓	✓	✓	✓		✓						
Burundi	●	●	●	●	●					✓		✓	✗	●	●	●	●
Cambodia	✗	●	✗	●	●	✓	✓	✓	✓	✓	●	✓	●	✓	✓	✓	✓
Chile	✓	✓	✓	✓		●		●	●	✓		✓	✓				
China	●	●	●	●	●				✗				●	✗	✗	✗	✗
Colombia	●	✗	●	✗	●		✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓
Costa Rica	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✗	✗
Côte d'Ivoire	✓	●	✓	●	✓	✓	✓	✓	✓	●	✗	●	✗	✗	✓	✓	✗
Cuba	✓	✓	✓	✓	✓	●	●	●	●	●	●	●	●	●	●	●	●
Dominican Republic	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	●	●	●	●
Ecuador	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗		✗		✗
El Salvador	✗	✗	✗	✗	✗	✗	●	✗	●						✓		✓
Ethiopia	●	✓	✓	✓	✓	●	●	●	●	✓	✓	●	●	✓	✓	●	✓
Fiji	✓	✗	✓	✓	✓	✓	✓	✓	✓	✗		✗		✓	✓	✓	✓
Georgia	●	●	●	●	●									✓	✓	✓	✓
Ghana																	
Guatemala							✗	✗	✗								
Guinea	✓	✓	✓	✓	✓	●	●	●	●	●	●	✗	●	●	●	●	●
Haiti	✗	✗	✗	✗	✗	✗	✗	✗	✗			●	✗	✓	✓	✓	✓
Honduras	✗	✗	✗	✗	✗	●	●	●	●	●	✓	●	✗	✓	✓	✓	✓
India	✓	✓	✓	✓	✓	●	●	●	●	✗		●	✗	✗			●
Jamaica	✗	✗	✗	●	✗	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓
Kenya	●	●	●	●	✗	●	●	●	●	✗		✗	✗	✓	✓	✓	✓
Kyrgyzstan	●	✗	●	●	●	✗			●	✗		✗	✗	✗	✗	●	✗
Lao People's Democratic Republic	●	●	✓	●	●	✓	✓	✓	✓			✓		✓	✓	✓	✓
Lesotho	✓	✓	✓	✓	●	●	●	●	●	✓	✗	●	✗	✓	✓	●	✓
Liberia	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗				
Lithuania	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Madagascar	●	●	●	●	●	✓	✓	✓	✓	●	✗	✓	✗	✓	✓	✓	✓
Malaysia	●	✗	✓	●	✗	●	✗		✗	✗		●	✗				
Maldives	✓	✓	✓	✓	●	●	●	●	●	✗	✗	●	●				
Mali	✓	●	✓	✓	✓	●	●	●	●	✗	✓	✓	✓	✗	✗	✗	✗
Mexico	✓	✓	✓	✓	✓	✗	✗	✗	✗	✗	●	✗	●	✗	✗	✗	✗
Micronesia (Federated States of)	✗	✗	✗	✗	✗	✗	✗	✗	✗	●	✗	●	✗	✗	✗	✗	✗
Mongolia	●	●	●	●	●	●	●	●	●	✓	✓	✓	✓	✓	✓	✓	✓
Mozambique	●	●	●	●	●	✓	✗	✓	✓	✗		✗	✗			✗	✓
Nepal	✗	✗	✗	✗	✗	●	●	●	●	✗	✓	✓	✓	●	✓	●	✓
Nigeria	●	●	●	●	●	●	●	●	●	✗	✗	✗	✗	✗	✗	✗	✗
Pakistan	✓	✓	✓	✓	●	●	●	●	●	✗	✓	✗	✓	✓	✓	✓	✓
Panama	✓	●	✓	●	●	●	●	●	●	✗	✗	●	●	●	✗	✓	✗
Papua New Guinea	●	✗	●	✗	✗	✗	✗	✗	✗	✓		✓					

✓ Agreed and consistently followed
● Agreed but not sufficiently implemented
✗ No agreed financing plan/budget or in development

✓ Government, ODA, and non-ODA expenditure reports are available
● Some reports available
✗ Expenditure reports are not available

✓ Covers over 80% of costs
● Covers between 50% and 80% of costs
✗ Covers less than 50% of costs

✓ Over 75%
● Between 50% and 75%
✗ Less than 50%

FINANCING

Absorption of domestic funds (% of domestic commitments utilized (three-year average))				Sufficiency of financing to reach national targets				Government WASH budget (US$ millions, constant 2014 US$)		Annual WASH expenditure (US$ millions, constant 2014 US$)					
Sanitation		Drinking-water		Sanitation		Drinking-water		National		National		By source of funding			
Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Year	Budget	Year	Expenditure	Households	Government	External	Repayable
	✔		✔	●	●	●	●	2015	92	2015	170				
✔	✔	✔	✔	✘	✘	●	●	2016	60	2015	111	48	28	34	
✔	✔	✔	✔	●	✘	✔	✘	2015	1 707	2015	1 663		1 400	263	
✔	✔	✔	✔	✔	●	✔	●			2015	912	10	757	154	154
✔	✔	✔	✔	✘	✘	●	●	2015	548	2015	794	428	182	184	0
				✘	✘	✘	✘								
✔	✔	✔	✔	✘	✘	✘	✘								
✔	✔	✔	✔	●	✘	●	✔	2016	14	2016	13	1	9	2	0.2
✘	✘	✘	✘	●	●	●	●	2016	406	2014			249		
✘	✘	●	✘	●	✘	✔	●	2015	10	2014	192	127	2	61	3
✔		✔	✔	✘	✘	✔	●								
●	✔	●	✔	●	●	●	●	2014	9 240	2014	23 940	19 512	2 693		1 734
✔	✔	✔	✔					2017	45						
				✘	✘	✘	✘	2013	3	2013	27		5	22	
✔	✔	✔	✔	✘	●	●	●	2016	22	2016	180		4	176	
✔		✔	✔	✔	✘	✔	✔	2015							
✔	✔	✔	✔	●	✘	✔	✔	2016	53 794	2016			3 836		
✔	✔	✔	✔	✔	✘	✔	✘	2016	120	2016	2 225	1 459	711	55	
●	●	●	●	✘	✘	●	●	2015	309	2015	296	246	35		15
●	✘	●	✔	✘	✘	✘	✘	2016	181						
✘	✘	✘	✘	●	●	●	●				122				
✔	✔	✔	✔	✘	✘	●	●	2015	221	2015	235		158	11	66
	✘		✘		✘		✘	2016	11						
✔	✔	●	✔	✘	✘	✘	✘	2016	197						
✔	✔	✔	✔	✘	✘	✘	✘	2017	155	2017*	164	18	155	6	
✔	✔	✔	✔	✔	✔	✔	✔	2014	97	2014	97		46	51	
										2014	1 409	1 064	60	88	197
✘	✘	✘	✘	✘	✘	●	✘	2015	56	2015	93		50	43	
✔	✔	✔	✔	✘	✘	✔	●								
●	●	●	●	✘	●	✘	●	2015	132	2015	132		90		43
✔	✔	✔	✔	●	✔	✘	✘	2018	3 554	2016			5 514		
✔	✔	✔	✔	✘	✘	✘	✘	2015	260	2013	565		565		
✔		✔	✔	✘	✘	✘	✘	2016	370	2016	546	169	98	279	
		✘	✘	✘	✘	●	✘			2016	30	0.1	0.1	30	11
✘	●	✘	●	✔	✘	✔	✘	2015	26	2015	90	35	1	55	
✔	✔	●	✔	✘	✘	✘	✘	2017	36	2015	46	13	12	21	0.2
✔	●	✔	✔	✘	✘	✘	✘	2017	20						
✘	✘	✘	✘	●		●		2017	51						
✔	✔	✔	✔	✘	✘	✘	✘	2016	24	2015	90		26	64	
	✔		✔	✘	●		●	2016	291	2016					
				✘	✘	✘	✘	2016	12						
✔	✔	✔	✔	✘	✘	✘	✘	2014	254	2014	165	62	37	55	11
✘	✘	✘	✘	✘	✘	✘	✘	2015	2 394	2015	2 373		2 205	167	
✘	✘	✘	✘	●	✘	●	✘								
✔	✔	✔	✔	✘	✘	●	●	2015	237	2015	298	62	237		
		✔	✔	✘	✘	✘	●			2015	119		37	83	
✔	✔	✔	✔	✘	✔	●	●	2017	403	2015	174	22	90	6	56
✘	✘	✘	✘	✘	✘	✘	✘	2016	602	2015	717		717		
✔	✔	✔	✔	✘	✘	✘	✘	2016	636	2016	916	214	618	47	42
✔	✔	✔	✔	✔	✔	✔	✔	2015	561	2015	436		396	40	
●		●		✘	✘	✘	✘			2013	1		1		

✔ Over 75%
● Between 50% and 75%
✘ Less than 50%

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

*Data for financial year 2016–2017

	FINANCING																
	Existence and level of implementation of a government-defined financing plan/ budget for the WASH sector which is published and agreed					Expenditure reports are publicly available and easily accessible, and allow comparison of committed funds to expenditures				Operating and basic maintenance costs are covered by tariffs				Absorption of external funds (% of official donor capital commitments utilized (three-year average))			
	Sanitation		Drinking-water		Hygiene	Sanitation		Drinking-water		Sanitation		Drinking-water		Sanitation		Drinking-water	
COUNTRY	Urban	Rural	Urban	Rural	National	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
Paraguay	✔	✔	✔	✔	✘	●	●	●	●	✘	✘	✘	✘	✔	✔	✔	✔
Peru	●	●	●	●	●	✔	✔	✔	✔	●	✘	●	✘	✔	✔	✔	✔
Philippines	●	●	●	●	●	●	●	●	●	✔	✔	✔	✔	✔	✔	✔	✔
Rwanda	●	●	●	●	●	✔	✔	✔	✔	✔	✘	✔	✘	✔	✔	✔	✔
Senegal	✔	✔	✔	✔	✔	●	✔	●		●		✔		●	●	✔	✘
Serbia	●	●	●	●	●	●	●	●	●	✔	✔	✔	●	●	✘	●	✘
Solomon Islands	✘	●	●	●	●	✘	✘	✘	✘	●	✘	●	✘	✔	✘	✔	✘
South Africa	✔	●	✔	●	●	✔	✔	✔	✔	✔	✘	✔	●	✘	✘	✘	✘
Swaziland	●	●	●	●	●	✘	✘	●	●					✔	✔	✔	✔
Tajikistan	●	●	✔	●	●	✘	✘	✘	✘	✘	✘	✔	✘	✔	✔	✔	✔
Thailand	●	●	✔	●	●	●	✔	●	●			✔		✘	✘	✘	✘
Timor-Leste	●	✘	●	●		●	●	●	●	✘	✘	✘	✘	✔	✔	✔	✔
Tonga	●	●	●	●	●	●	●	●	●	✘	✘		✘	✔	✔	✔	✔
Ukraine	●	✘	●	●	✘	✘	✘	●	✘								
United Republic of Tanzania	●	●	●	●	●	●	●	●	●	●	●	●	●	✔	✔	✔	✔
Uruguay	✘	✘	✘	✘	✘					✔		✔					
Uzbekistan	✔	✔	✔	✔		✘		✘	✘	✔	✔	✔	✔	✘	✘	✘	✘
Vanuatu	✘	✔	✔	✔	✔	✘	✘	✘	✘	✔	✔	✔	✘	●	✘	●	✘
Venezuela (Bolivarian Republic of)	✔	●	✔	✔	●	●	●	●	●	✘	✘	✘	✘				
Viet Nam	●	●	●	✔	✘	●	✔	●	●	✘	✘	✘	✘	✘	✘	✘	✘
Zambia	●	●	●	●	●	✔	✔	✔	✔	✔	✘	✔	✘	✔	✔	✔	✔
Zimbabwe	●	●	●	●	●	✔	✔	✔	✔	✔	✘	●	✘	✘	✘	✘	✘
	✔ Agreed and consistently followed ● Agreed but not sufficiently implemented ✘ No agreed financing plan/budget or in development					✔ Government, ODA, and non-ODA expenditure reports are available ● Some reports available ✘ Expenditure reports are not available				✔ Covers over 80% of costs ● Covers between 50% and 80% of costs ✘ Covers less than 50% of costs				✔ Over 75% ● Between 50% and 75% ✘ Less than 50%			

Note: Data not yet fully finalized. Final data sets will be made available on the GLAAS website.

Source: GLAAS 2016/2017 country survey.

FINANCING

Absorption of domestic funds (% of domestic commitments utilized (three-year average))				Sufficiency of financing to reach national targets				Government WASH budget (US$ millions, constant 2014 US$)		Annual WASH expenditure (US$ millions, constant 2014 US$)					
Sanitation		Drinking-water		Sanitation		Drinking-water		National		National		By source of funding			
Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Year	Budget	Year	Expenditure	Households	Government	External	Repayable
●	●	●	●	✘	●	✔	●	2015	226	2016	254	24	61	18	152
●	●	●	●	✔	✘	✔	●	2015	1 745	2015	2 360	405	2 181	86	
✔	✔	✔	✔	✘	✘	●	✘	2016	210	2015			276		
✔	✔	✔	✔	✘	✔	●	●	2016	57	2015	74		57	17	
●	●	✘	✘	●	✘	✔	✔	2015	87	2015					
●	✘	●	✘	✘	✘	✘	✘	2015	13	2015	337	298	37	2	
	✘		✘	✘	✘	✘	✘	2017	19	2017*	20	12	1	7	
✔	✔	✔	✔	●	✘	●	✘	2016	3 550	2016	8 151	4 467	3 527		1 176
✔	✔	✔	✔	●	●	●	●	2017	48	2016	27		21	3	
✔	✔	✔	✔	●	✘	●	✘	2017	16	2015	37	6	3	28	
●	✔	●	✘	✔	✔	●	✘	2016	1 406						
✔	✔	✔	✔	✘	✘	✘	✘	2015	9						
✔	✔	✔	✔	✘	✘	✘	✘	2016	10						
				✘	✘	✘	✘			2016			48		
✔	✔	✔	✔	●	●	●	●	2017	61						
✔		✔		✘		✘		2015	547	2014	585	486	0.4	3	96
✔	✔	✔	✔	✔	✔	✔	✔	2016	68	2015			114	95	
●	✘	✔	●	✘	✘	✘	✘	2016	2	2016	2	0	0.1	2	
✘	✘	✘	✘	✘	✘	●	✘	2015	130						
✘	✘	✘	✘	✘	✘	✘	●			2015	1 690		209	303	1 040
✘	✘	✘	✘	✘	✘	✘	✘	2016	39	2016	154	62	31	61	
✘	✘	✘	✘	✘	✘	✘	✘								

✔ Over 75%
● Between 50% and 75%
✘ Less than 50%

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

*Data for financial year 2016–2017

	MONITORING							
	Most recent Joint Sector Review	Data availability for decision-making						
	National	Sanitation			Drinking-water			
COUNTRY	Year	Policy and strategy	Resource allocation	Status and quality of service delivery	Policy and strategy	National standards	Resource allocation	Status and quality of service delivery
Afghanistan	2015	✔	✔	✔	✔	✔	✔	✔
Albania	2016	✔	✔	✔	✔	✔	✔	✔
Argentina	2015	●	●	●	●	●	●	●
Azerbaijan	2016	✔	✔	✔	✔	✔	✔	✔
Bangladesh	2016	●	●	●	●	●	●	●
Barbados					✘			
Belarus	2016	✔	✔	✔	✔	✔	✔	✔
Bhutan	2016	●	●	●	●	●	✔	●
Bolivia (Plurinational State of)		✔	✔	●	✔	✔	✔	●
Bosnia and Herzegovina		✔	✔	✔	✔	✔	✔	✔
Botswana		●	●	●	✔	✔	●	✔
Brazil	2015	✔	✔	✔	✔	✔	✔	✔
Burkina Faso	2016							
Burundi	2013	●	✘		●	✘	✘	
Cambodia	2012	●	●	●	●	●	●	●
Chile		✔	✔	✔	✔	✔	✔	✔
China	2015	✘		✘	●	●	●	●
Colombia	2015	✔	✔	✔	✔	✔	✔	✔
Costa Rica	2016	●	●	✔	✘	✔	●	✔
Côte d'Ivoire	2016	✔	✔	✔	✔	✔	✔	✔
Cuba	2014	✔	✔	✔	✔	✔	✔	✔
Dominican Republic		✘	✘	✘	✘	✘	✘	✘
Ecuador	2015							
El Salvador	2015	●	●	●	●	●	●	●
Ethiopia	2016	✔	✔	✔	✔	✔	✔	✔
Fiji		●	●	●	✔	✔	✔	✔
Georgia		✘	✘	✘	✔	✔	●	●
Ghana								
Guatemala	1995							●
Guinea		●	✘	✘	●	✘	✘	✔
Haiti	2015	✘	✘	✘	✘	✘	✘	✘
Honduras	2013	●	✘	●	●	●	✘	●
India		✔	✔	✔	✔	✔	✔	●
Jamaica	2016	✔	✘	✘	✔	✔	✘	✘
Kenya	2014	✔	●	●	✔	✔	✔	✔
Kyrgyzstan	2015	✘	●		✔	✔	●	●
Lao People's Democratic Republic	2015	●	●	●	✔	✔	✔	✔
Lesotho	2015	●	●	✘	✔	●	●	●
Liberia	2015	✘	✘	✘	✘	✘	✘	✘
Lithuania		✔	✔	✔	✔	✔	✔	✔
Madagascar	2015	✔	✔	✘	✔	✔	✔	✘
Malaysia		●	✘	●	✔	✔	✔	✔
Maldives		✘	●		✘	✘	●	●
Mali	2016	✔	✔	✔	✔	✔	✔	✔
Mexico		✔	✔	✔	✔	✔	✔	✔
Micronesia (Federated States of)		●	●	●	●	●	●	●
Mongolia	2014	✔	●	●	✔	✔	✔	✔
Mozambique	2016	●	●	✔	✔	✔	●	✔
Nepal	2014	●	●	●	●	●	●	●
Nigeria	2016	●	●	●	●	●	●	●
Pakistan		●	●		●	●	●	●
Panama		●	✘	●	●	✔	✘	●
Papua New Guinea	2011				✔	●	●	✔
Paraguay		✘	✘	✘	●	●	●	●
Peru	2015	●	●	●	●	●	●	●
Philippines	2015	✔	✔		✔	✔	✔	●

✔ Data available, analysed, and used for a majority of decisions
● Data available but not sufficiently used for decision-making
✘ Only limited data collected and limited availability

	MONITORING							
	Most recent Joint Sector Review	Data availability for decision-making						
	National	Sanitation			Drinking-water			
COUNTRY	Year	Policy and strategy	Resource allocation	Status and quality of service delivery	Policy and strategy	National standards	Resource allocation	Status and quality of service delivery
Rwanda	2016	✔	✔	✔	✔	✔	✔	✔
Senegal	2016	✔	✔	✔	✔	✔	✔	✔
Serbia	2014	●	●	●	●	●	●	●
Solomon Islands		✔	✔	✔	●	●	✔	●
South Africa		✔	✔	●	✔	✔	✔	✔
Swaziland	2016							
Tajikistan	2015	●	●	●	✔	✔	✔	●
Thailand	2014	✔	●	✔	✔	✔	✔	✔
Timor-Leste		●		✘	●	✔		●
Tonga	2016	●	●	●	✔	✔	●	●
Ukraine	2016	●	●		●	●	●	●
United Republic of Tanzania		●	●	●	✔	✔	✔	✔
Uruguay		✔	✔	✔	✔	✔	✔	✔
Uzbekistan	2015	●	●	●	●	●	●	●
Vanuatu						●		●
Venezuela (Bolivarian Republic of)	2016	✔	✔	✔	✔	✔	✔	✔
Viet Nam	2015	●	●	●	●			●
Zambia	2016	✔	✔	✔	✔	✔	✔	✔
Zimbabwe	2015	✔	✔	✔	✔	✔	✔	✔

✔ Data available, analysed, and used for a majority of decisions
● Data available but not sufficiently used for decision-making
✘ Only limited data collected and limited availability

Note: Data not yet fully finalized. Final data sets will be made available on the GLAAS website.

Sources: GLAAS 2016/2017 ESA survey; OECD-CRS, 2016.

Annex E. Summary of responses to the GLAAS 2016/2017 ESA survey

	Strategies and reporting			Aid amounts			Flow types[1]		
EXTERNAL SUPPORT AGENCY	Existence of WASH or water sector strategy	Internal policies aligned with SDGs	Reports on WASH aid are publicly available	2013–2015 average ODA commitments[1] (US$ millions, constant 2014 US$)	2015 ODA disbursements[1] (US$ millions, constant 2014 US$)	2015 ODA disbursement allocation for sector strengthening (%)	Grants (US$ millions, constant 2014 US$)	Concessional loans (ODA) (US$ millions, constant 2014 US$)	Non-concessional loans (non-ODA) (US$ millions, constant 2014 US$)
African Development Bank	Developing	Developing	Yes	241	318		77	241	112
Asian Development Bank	Yes	Developing	Yes	421	372		50	322	578
Australia (DFAT)	No	Developing	Yes	131	112		112		
Bill & Melinda Gates Foundation	Yes	Developing	Yes	68	77		77		
BRAC[3]	Yes	Yes	Yes		6	10	6	0	
CARE International and CARE USA	No	Yes	No						
European Commission	No	Developing	No	545	734		608	126	
Finland (MOFA)	Yes	Yes		30	50		50		
France (AFD)	Yes	Developing	Yes	812	482	31	86	397	
Germany (BMZ)	Yes	Developing	Yes	1 041	962		323	591	10
Inter-American Development Bank	Yes	Developing	Yes	94	41		11	31	804
Japan (JICA)	Yes	Developing	Yes	1 411	1 303		286	1 017	
Netherlands (DGIS)	Yes	Yes	Yes	238	181		181		
Portugal (MOFA)				1	0		0		
Sweden (Sida)	Yes			99	115		115		
Switzerland (SDC and SECO)	Yes	Yes	Yes	239	217	10	217		
United Kingdom (DFID)	No	Yes	Yes	231	300		300		
United Nations Development Programme	Yes	Developing	Yes	2	2	85	2		
United Nations Children's Fund	Yes	Developing	Yes	46	62		62		
United States (USAID)[3]	Yes	Developing	Yes	224	259		259		
Water Supply and Sanitation Collaborative Council[3]	Yes	Yes	Yes		35		35		
Water.org[3]	Developing	Developing	Yes		44				
WaterAid[3]	Yes	Yes	Yes		100		100		
World Bank	No	Developing	Yes	1 337	955		98	857	1 933
World Vision	Yes	Yes	No		124		124		

Note: Data not yet fully finalized. Final data sets will be made available on the GLAAS website.

[1] Data from OECD-CRS.
[2] Percentages are shown as a proportion of total water and sanitation ODA, which includes regional aid that could not be disaggregated among SDG regions.
[3] All data including grant and loan breakdowns are based on the GLAAS 2016/2017 ESA survey. Data on aid amounts consist of grants and in-kind services.

Sources: GLAAS 2016/2017 ESA survey; OECD-CRS, 2016.

DISTRIBUTION OF WATER AND SANITATION ODA[1]

By SDG region[2]							By project type			By sector	
Central Asia and Southern Asia (%)	Eastern Asia and South-Eastern Asia (%)	Latin America and Caribbean (%)	Northern America and Europe (%)	Oceania (%)	Sub-Saharan Africa (%)	Western Asia and Northern Africa (%)	Basic systems (%)	Large systems (%)	Other (%)	Water	Sanitation
					92			3	97		100
64	25			1		9	59	15	26	59	41
5	51			10	12	2	45	29	26	84	16
35	9	0			23		91	1	8		100
100										17	83
3	0	10	18	2	28	35	32	28	40	52	48
27	7	0	0		18	14	39	19	42	62	38
8	4	5	0	0	37	41	12	64	24	70	30
2	15	9	6		11	43	18	65	17	84	16
		100					1	94	5	36	64
25	27	13	2	1	8	25	19	66	15	80	20
16	3	0			30	3	33	23	45	50	50
					100		52		48	100	
0	0	5	4		6	0	19	36	44	51	49
19	4	11	11		8	10	45	25	30	9	91
8	0	0			55	1	78	6	16	51	49
10	71	3			7	5		8	92		100
26	6	2		0	58	5	36	11	53	65	35
4	4	1	1	0	33	50	12	82	6	86	14
11	3				48						
7	3	1			5						
0	30	0	0	0	47	0				35	65
23	20	1	0	0	51	4	9	61	30	69	31
6	6	3	0	3	71	8					

Annex F. Glossary

Absorption rate: The absorption rate indicates the percentage of official domestic or donor commitments utilized over a given period. The GLAAS 2016/2017 country survey referred to a three-year average percentage of official domestic or donor commitments utilized.

Basic systems: Simple drinking-water and sanitation systems. For drinking-water, they include rural water supply schemes using handpumps, spring catchments, gravity-fed systems, rainwater collection, storage tanks, and small distribution systems. For sanitation, they include latrines, on-site disposal and alternative sanitation systems. (See also large drinking-water and sanitation systems).

Blended finance: 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, including the cost of installation/construction.

Collaborative Behaviours: A set of four behaviours, identified by Sanitation and Water for All, that if adopted, can improve the way governments and partners work together to improve the long-term sector performance needed to deliver sanitation, hygiene and water for all.

Commercial financing: Finance provided by private sector financiers at market rates.

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.

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

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

Enabling environment: The set of interrelated conditions such as legal, governance and monitoring frameworks, politics, financing and human capital that are able to promote the delivery of WASH services.

External support agencies: Defined as bilateral donors, multilateral organizations, foundations, financing institutions, NGOs and external agencies that support countries' work in the attainment of achieving sanitation and water for all.

Formal service providers: Entities recognized by authorities, complying with a minimum of service levels. Formal service providers include government and private sector utilities. For water supply, this includes large networked systems, but this can also include smaller scale set-ups such as water-kiosks managed by utilities. For sanitation, this includes piped sewer systems and septic tanks if maintained by a service provider regulated by authorities.

Hygiene: GLAAS 2016/17 survey questions consider hygiene as hygiene promotion which complements water and sanitation. 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.

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, large-scale sewerage including truck sewers and sewage pumping stations and domestic and industrial water treatment plants.

Microfinance: Microfinance is the provision of financial services to low income clients, including consumers and the self-employed, who traditionally lack access to banking and related services.

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

Nongovernmental organizations: Generally nonprofit organizations that operate independently of the government and sometimes provide services to people.

Non-revenue water: Non-revenue water represents water that has been produced and is "lost" before it reaches the customer (either through leaks, through theft, or through legal usage for which no payment is made).

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). 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): Includes activities necessary to keep services running. Operating costs are recurrent (regular, ongoing) spending to provide WASH goods and services: 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 does not include major repairs or renewals.

Policies/plans: Policies are considered to be the principle guide to action taken by the government or state. 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.

Procurement procedures: Procurement procedures are used for the purpose of purchasing or acquiring goods or services.

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.

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

Self-supply by individual households: Funding and infrastructure provided by households themselves for WASH services. 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 household members.

Sustainable Development Goals: 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 for using the service.

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, nongovernmental organizations or remittances.

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Technical review was gratefully provided by: Robert Bos; Clarissa Brocklehurst; François Guerquin; Michael Hammond.

The GLAAS report is greatly appreciative of the support and contributions of the Communication Teams in WHO and UN-Water: Daniella Bostrom Couffe, Anna Nylander (UN-Water); Kimberly Chriscaden, Christopher Dye, Nada Osseiran, Sarah Russell (WHO).

The facilitation and coordination of the GLAAS process by WHO colleagues at Headquarters, in regional and country offices are gratefully appreciated and acknowledged:

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WHO regional and country offices for the Western Pacific: Mohd Nasir Hassan, Rifat Hossain (WHO WPRO); Sophary Phan (WHO Cambodia); Xiaopeng Jiang, Martin Taylor (WHO China); Oyuntogos Lkhasuren (WHO Lao People's Democratic Republic); Vanya Delgermaa (WHO Mongolia); Rok Ho Kim, Maraia Meo (WHO Pacific Island countries); Nola Eluh Ndrewei, Boris Pavlin (WHO Papua New Guinea); Bonifacio B. Magtibay (WHO Philippines); Rex Thomas (WHO Vanuatu); Nghia Ton Tuan (WHO Viet Nam).

Technical contributions and inputs were made from a number of WASH experts around the world:
Yasmin Ahmad (OECD); Aziza Akhmouch (OECD); Luis Alberto Andres (World Bank); Rob Bain (UNICEF); Fiona Baker (SWA); Jamie Bartram (SAG); Kitch Bawa (AMCOW); Elisabeth Bernhardt (UNEP); Peter Koefoed Bjørnsen (UNEP); Sophie Bracken (Consultant); David Bradley (SAG); Leanne Burney (UN-Water); Sue Cavill (Consultant); Anne-Marie Cavillon (Consultant); Piers Cross (Consultant); Kerstin Danert (SKAT); Susan Davis (Improve International); Catarina De Albuquerque (SWA); Barbara Evans (SAG); Sean Furey (SKAT); Paul Glennie (UNEP); Balwant Godara (SWA); Nelson Gomonda (AMCOW); Joakim Harlin (UNEP); Leo Heller (SAG); Jose Hueb (Consultant); Frédéric Jacot-Guillarmod (Consultant); Alejandro Jimenez (SIWI); Princess Jimenez (SWA); Gareth Jones (SAG); Cindy Kushner (UNICEF); Quan Lau (Consultant); Pali Lehohla (SAG); Libbet Loughnan (Consultant); Jeanne Luh (UNC); Amanda Marlin (SWA); Patrick Moriarty (IRC); Helgard Muller (Consultant); Mike Muller (SAG); Jane Nabunnya Mulumba (IRC); Juste Nansi (IRC); Kelly Ann Naylor (UNICEF); Rachel Norman (Consultant); Zikora Oseloka (AMCOW); Thilo Panzerbieter (German Toilet Organization); Gérard Payen (SAG); Eduardo Perez (SWA); Ulrike Pokorski (GIZ); Alana Potter (IRC); Marie-Alix Prat (CEPA); Claire Préaud (Consultant); Federico Properzi (UN-Water); William Reidhead (UN-Water); Alexandra Reis (SWA); Virginia Roaf (SWA); Oriana Romano (OECD); Jan Willem Rosenboom (BMGF); Simon Scott (OECD); Darren Shako (Consultant); Jacqueline Sims (Consultant); Muyatwa Sitali (SWA); Stef Smits (IRC); Nick Tandi (SIWI); Paulo Fernando Piza Teixeira (Consultant); Terrence Thompson (Consultant); Kathleen Tiffay (Consultant); Robyn Tompkins (Consultant); Julie Truelove (WaterAid Canada); Andre Uandela (IRC); Erma Uijtewaal (IRC); Richard Ward (IRC).

The following partners in External Support Agencies (ESAs) made important contributions and are greatly acknowledged:
Kelly Alexander (Care International); Greg Allgood (World Vision); Brian Aborgast (BMGF); Radu Ban (BMGF); Clare Battle (WaterAid); Paula Beens (DGIS); Roel Blesgraaf (DGIS); Malinne Blomberg (AfDB); Tim Brewer (formerly WaterAid); Jessica Brinton (BMGF); Sérgio Carvalho (MOFA); Osward Chanda (AfDB); Gerard Cheong (DFAT); Isobel Davis (WSSCC); Dominick De Waal (WB); Paul Deverill (DFID); Digbijoy Dey (BRAC); Stéphanie Drozer (BMGF); Jorge Ducci (IDB); Mohamed El Azizi (AfDB); Barbara Frost (WaterAid); John Garrett (WaterAid); William Garrod (WaterAid); Johan Gély (SDC); Gabrielle GEZE (AFD); Céline Gilquin (AFD); Jeffrey Goldberg (USAID); Ana Gren (SIDA); Ridwanul Haque (BRAC); Dorota Herdzik (WaterAid); Haley Hill (BMGF); Marcus Howard (DFAT); Guy Howard (DFID); Guy Hutton (UNICEF); Md Akramul Islam (BRAC); Rhiannon James (WSSCC); Seema Johnson (USAID); Elizabeth Jordan (USAID); M. Moktadir Kabir (BRAC); Ville Kämppi (formerly FORMIN); Milan Kanti Barua (BRAC); Stuart Kempster (WaterAid); Sean Kerrigan (World Vision); Nameerah Khan (BRAC); Gil-Hong Kim (ADB); Marianne Kjellen (UNDP); Francis Konu (AfDB); Evariste Kouassi-Komlan (UNICEF); Daniella Krahl (BMZ); Gesa Kuhlmann (BMZ); Cindy Kushner (UNICEF); Amy S.P. Leung (ADB); Claire Lyons (Water.org); Kleber B. Machado (IDB); Franz-Birger Marré (BMZ); Shigeyuki Matsumoto (JICA); Maimuna Nalubega (AfDB); Henry Northover (WaterAid); Stephanie Ogden (Care International); Isabella Pagotto (SDC); Helen Parker (WaterAid); Lesley Pories (Water.org); Adolf Riehm (EuropAid); Nathalie Rizzotti (SDC); Karin Roelofs (DGIS); Sylvain Rouzeau (AFD); Jochen Rudolph (AfDB); Antoine Saintraint (EuropAid); Jyoti Shukla (WB); Tom Slaymaker (UNICEF); Kimberly Smith (USAID); Graham Snead (BMGF); Oliver Subasinghe (USAID); Johan Sundberg (SIDA); Jennifer Torres (USAID); Sophie Tremolet (WB); David Trouba (WSSCC); Anne-Laure Ullmann (AFD); Pim van der Male (DGIS); Carolien van der Voorden (WSSCC); Dick van Ginhoven (formerly DGIS); Heather Van Sice (Care International); Manuela Velasquez (IDB); Anke Verheij (DGIS); Laura Westcott (DFID); Sanjay Wijesekera (UNICEF); Chris Williams (WSSCC).

The external validation was provided by: Zakariyah (Bisi) Agberemi (UNICEF); Mustakim Akhmedov (UNDP); Justino da Silva (WaterAid Timor-Leste); Denis Desille (AFD); Mamadou Djerma (UNICEF JMP); Anita Gaju (Consultant); Alex Grumbley (WaterAid Timor-Leste); Xiaopeng Jiang (WHO China country office); Oliver Jones (World Bank); Tynarbek Musabaev (Central Asian Alliance for Water); Saheed Mustafa (WaterAid Nigeria); Kamram Naeem (UNICEF); Roman Rodyna (Ukraine MoH Public Health Centre).

The GLAAS report would not be possible without the dedication and input of numerous individuals in 75 countries – special thanks go to them all: Afghanistan (Sharifullah Alemi, Ahmad Joyan Aziz, Ahmad Basir, Qader Ghulam, Rolf Luyendijk, Mirzakwal Mirwais, Mohammad Mukhlis); **Albania** (Valion Cenalia, Sabina Cenameri, Aferdita Çullhaj, Denada Çunge, Ndue Çuni, Etleva Demiri, Margarita Lutaj, Eni Mazniku, Zhaneta Miska, Violeta Shqevi, Shkëlqime Tobli); **Argentina** (Ricardo Benítez, Enrique Calderón, Patricia Caso, Cecilia Daizo, Ernesto De Titto, Javier García Larumbe, Luis Higa, Oscar Juan Lascaray, Emilio Lentini, Oscar Pintos, José María Regueira, Humberto Stepanik); **Azerbaijan** (Eldar Abdullayev, Yunis Aslanov, Zahid Gasimov, Rovshan Guliyev, Anar Hasanli, Nubar Hasanova, Sahib Hasanzade, Akhmad

Mammadov, Fahrin Mammadov, Gulzar Mammadova, Rahim Pirimov, Aydin Rahimov, Aytan Rzayeva, Leylakhanim Taghizade); **Bangladesh** (Sudhir Kumar Ghosh); **Barbados** (Steve Daniel); **Belarus** (Roman Sergeevich Aleynikov, Vladimir Nikolaevich Anufriev, Alena Valiantsinauna Drazdova, Snezhana Anatolievna Dubenok, Veronica Vladimirovna Girina, Tatiana Feliksovna Minzhurova, Irina Gennadievna Salivonchik, Victoria Gennadievna Speranskaya, Olga Vladimirovna Vasneva, Irina Viktorovna Zhevniak); **Bhutan** (Tshering Dema, Chimmi Dorji, Karma Karma, Tshewang Lhamo, Sonam Pelzom, Dorji Phub, Gem Tshering, Deki Tshomo, Rinchen Wangdi, Narbir Yonzan); **Bolivia (Plurinational State Of)** (Evel Alvarez Alba, Luis Chumacero, Daniel Cruz, Victor Rico, Enrique Torrico); **Bosnia And Herzegovina** (Grabus Alisa, Gorana Bašević, Vučjak Branko, Snježana Brčkalo, Jelena Djaković Dević, Amer Husremović, Violeta Janković, Draženka Malićbegović, Alić Mirza, Vesna Rudić-Grujić, Sabina Šahman-Salihbegović, Roksanda Školjić, Mišić Snezana, Jelena Vićanović, Aida Vilić Svraka); **Botswana** (Thabo Baoleki, Kwashirai Chigodora, Kakanyo Fani Dintwa, Gilbert Gwati, Antony Masilo, Mmoloki Masole, Daniel Moatshe, David R. Molefha, Poelo A. Mosweu, Mpho Motsonkane, Vukile Mukombero, Lesego Raditsebe, Saniso Sakuringwa, Galeboe Senai, Thato Sengwaketse, Mpho Tebele, George S. Thabeng); **Brazil** (Joao Batista Peixoto, José Boaventura Teixeira, Rosane Cristina De Andrade, Alfredo Guerra Da Costa Machado, Marta Litwinczik, Lauseani Santoni, Camila Vicente Bonfim); **Burkina Faso** (Jean Edouard Odilon Doamba, Ousmane Ouedraogo, Harouna Ouibiga, Laurent David Tiemtore); **Burundi** (Aimable Irakoze, Prosper Niyokindi, Tite Niyonzima, Remegie Nzeyimana, Ahmedou Ould Sidi Ould Bahah, Emmanuel Sendanga); **Cambodia** (Vong H.E. Piseth, Kol Hero, Chhay Kimsotheavy, Yung Kunthearith, Heng Phoury, Chreay Pom, Ir Por, Mao Saray, Tang Sochettra, Sreng Sokvung, Choeu Somaly); **Chile** (Denisse Chapentier, Christian Maurer G., Jacqueline Torres G., Gabriel Vega R., Hilde Venero); **China** (Xuetao Bai, Kunlun Ding, Yanfen Fu, Wenchao Liu, Hongliang Liu, Xin'Ai Liu, Yong Tao, Wei Yao, Hansong Zhang, Qi Zhang); **Colombia** (Samuel Alfonso Forero, Adriana Estrada Estrada, Juan Manuel Flechas Hoyos, Jairo Hernández, Marcela Jiménez, Natalia Jiménez Contento, Diana Marcela Moreno Barco, Luz Hicela Mosquera Mosquera, Gerardo Nava, Fernando Vargas Mesas); **Costa Rica** (Jorge Aguilar Barboza, Álvaro Araya, Rodrigo Castro García, Gonzalo Chaves, Talía Coto Varela, Daniel Echeverría, Indira Galon González, Vivian González Jiménez, Elizabeth González Pérez, Manuel López, William Miranda, Sandra Molina Mena, James Phillips, Rodolfo Ramírez Villalba, Cecilia Rojas, Rolando Rojas, Sergio Romero Ramírez, Elías Rosales, Ignacio Sáenz Aguilar, Laura Torres Corral, Javier Valverde, Ronald Wachsman Azofeifa, Elizabeth Zamora, José Miguel Zeledón Calderón); **Côte D'Ivoire** (Adjossan Adjossan, Traore Aliou, Marie Josèphe Bitty, Eugène Bouafou, Seydou Coulibaly, Eugénie Gagne, Koffi Fernand Kouame, Kouamé André N'Guessan); **Cuba** (Yasmina Agüero Kassabb, Ivette Alfonso Cordero, Maileny Bacallao Horta, Rolando Calzada Cano, Ivette Cordero, Jesús Duran García, Manuel González Rodríguez, Ana Lidia Hernández, José Antonio Hernández Álvarez, Anabel Peraza Silverio, Dinardo Perez, Edilberto Pérez Blanco, Noel S. Pérez Duarte, Fernando Pérez Soria, Juan Carlos Ramírez Sotolongo, Manuel Romero Placeres, Susana Suarez Tamayo, Laritza Turro Soler, Inés Caridad Viacava Bizet); **Dominican Republic** (Jose Alarcon, Roberto Peguero Albuez); **Ecuador** (Patricia Aguilar, Diego Aliaga, Luis Enriquez, Patricia Nuñez, Jose Yanez); **El Salvador** (Arnoldo Rafael Cruz López, José Efraín Guzmán Valle, Vivian Lizeth Saade Saade); **Ethiopia** (Zufan Damtew, Muhammed Ebrahim, Abera Endeshaw, Nuredin Mohammed, Yared Tadesse); **Fiji** (Suliasi Batikawai, Sobha Devi, Simeli Drodro, Terence Elaisa, Carmelita Francois, Jeffery Ing, Bimlesh Krishna, Daiana Legalega, Virisila Naisele, Raksha Rani, Elenoa Waqanibaravi); **Georgia** (Natia Abzianidze, Marina Baidauri, Nana Gabriadze, Irine Javakhadze, Manana Juruli, Ketevan Lapherashvili, Grigol Mandaria, Alexsander Mindorashvili, Nino Shushtakashvili); **Ghana** (Suzzy Abaidoo, Benjamin Addo, Harold Esseku, Tony Kweku Tsekpetse, Sethina Okornoe, Kweku Quansah, Stephen Yaw Osei); **Guatemala** (Eldin Castellanos, Mario Roberto Hernández Morán, Noeil Antonio Pivaral Sáenz, Claudia Velásquez); **Guinea** (Lamine Barry, Pépé Bilivogui, Ibrahima Sory Camara, Salifou Camara, Ismaël Dia, Mamady Sangaré, Mory Fodé Saïdou Traore); **Honduras** (Marco Agüero, Ciria Cacho, Ramón Cuellar, Víctor Cuevas, Irma Escobar, Giovanni Espinal, Ariel Adonis Lopez, Marvin Martínez, Juan Antonio Menjivar Valladares, Ely Noé, Fernando Ochoa, Orlando Rivera, Martin Rivera, Luis Romero, Amelia Santos, José Antonio Silva, Jorge Urquía); **India** (Arun Baroka, Neeraj Mandloi, Praveen Prakash, Satyabrata Sahu); **Jamaica** (Everton Baker, Carey Brown, Patrine Cole, Melissa Colquhoun, Michael Dunn, Takese Foga, Ansord Hewitt, Anthony Mckenzie, Michelle Moses, Homero Silva, Herbert Thomas, Audley Thompson, Michael Williams); **Kenya** (Victoria Mulili, Benjamin Murkomen, Rose Ngure, George Ochieng, Kepha Ombacho, Andrew Trevett); **Kyrgyzstan** (Bubuzhan Arykbaeva, Anara Choitonbaeva, Elena Grekova, Meerim Kazizova, Shayirgul Orozbakieva, Asel Rayimkulova, Gulnara Sarieva, Sagyn Uezbaev, Sanzhar Mombekov); **Lao People's Democratic Republic** (Soutsakhone Chanthaphone, Phouvong Chanthavong, Tayphasavanh Fengthong, Xaypaxa Liengsone, Bounthanome Phimmasone, Keomanivone Phoutthakhanty, Noupheuak Virabouth, Khanthone Vorachith); **Lesotho** (Khahiso Kanetsi, Moipone Lehloara, Felix Malachamela, Mosepeli Ratikane); **Liberia** (Steve B. Sandoe); **Lithuania** (Ausra Bartuliene, Eduardas Daujotis, Vilija Galdikienė, Vytautas Kalpokas, Rita Kuštan, Birutė Liberienė, Indrė Musvičienė, Daina Radzevičienė, Romualdas Sabaliauskas, Mindaugas Šimanskis, Natalja Šliachtič, Eglė Valūnė, Eligija Židonienė); **Madagascar** (Vestalys Herimandimby, Fanantenana Rakotonirina, Ridjanirainy Randrianarisoa); **Malawi** (Emma Mbalame); **Malaysia** (Tauran Zaidi Ahamad Zahid, Tusreha Ani, Khairul Effendy, Mohamed Haniffa Haji Abdul Hamid, Majid Kapili, Hieng Ung Lau, Mohd Syukri Mad

Yasir, Norlen Mohamed, Shukri Muslim, Daniel Wong Park Ing, Engku Azman Tuan Mat, Kok How Voon, Wan Roslina Wan Abdullah, Wan Zubir Wan Kassim, Yuan Xiang Yeoh); **Maldives** (Afsal Hussain, Aishath Naseera, Sobah Rasheed); **Mali** (Daouda Bakayoko, Damassa Bouare, Yaya Boubacar, Boureïma Camara, Moussa Cisse, Mariama Maiga Diallo, Siriman Kanoute, Kassim Konate, Mahamar Idrissa Maiga, Oumarou Alou Maiga, Mahamane M'Barakou, Boubacar Sanogo, Issa Sissoko, Djénéba Tangara, Doussouba Doumbia Toure, Alou Badara Traore, Kolé Traore); **Mexico** (Mario Alanis Garza, Sean Carlos Cázares Aherne, Samuel Gregorio Moreno Santoyo, Matiana Ramírez Aguilar, Amanda Rodriguez); **Micronesia (Federal States Of)** (Moses Pretrick); **Mongolia** (J. Ariunaa, A. Batbayar, R. Batchimeg, Ts. Battseren, B. Bayasgalan, I. Bolormaa, B. Dulamkhand, D. Otgonbayar, B. Purevjav, Kh. Shurentsetseg, Sh. Urantsetseg); **Morocco** (Mokhtar Jaait, Khalid Nadifi); **Mozambique** (Filomena Aide, Chris Cormency, Odeisse Demira, Rui Fonseca, Raúl Júnior, Jacinto Mavila, Alcino Nhacume); **Nepal** (Kiran Darnal, Kapildev Gyawali, Kabindrabikram Karki, Premnidhi KC, Himalaya Panthi, Siddhi Shrestha, Arunkumar Simkhada); **Nigeria** (Gabriel Adayi, Isaiah Ademoroti, John O. Atanda, Emmanuel O. Awe, Mukaila Babarinde, Jide Dada, Emmanuel C. Eze, Jamilu Habu, Dickson A. Kadiri, Folashade Momoh, Olabamidele Olaiya, Stephen A. Otitologbon, Abah Theresah, Elizabeth C. Ugoh, Zainab M. Umara, Jumai Wakaso); **Pakistan** (Syed Abu Ahmad Akif, Imran Ali, Najeeb Aslam, Syed Ayub Qutab, Ghulam Dastagir Sheikh, Zulqarnain Fida, Abdul Haleem, Latif Khan, Munir Ahmed Mangrio, Kamran Naeem, Abu Rehan, Said Rehman, Muhammad Sadiq Khattak, Saima Shafique, Imran Y. Shami, Irfan Tariq); **Panama** (Otilia Arroyo, Tomasa Cañate, José Carias, Julio Cesar Castillo, Nivardo Cerceño, Ricardo Cerrud, Iván Estribí F., Carlos Gómez, Ana Hurtado, Atala Milord, María Solís); **Papua New Guinea** (Ray Kangu , Kencho Namgyal, Pekiwape Raymond, Raka Taviri, Takale Tuna); **Paraguay** (Roberto Acosta, Claudia Crosa, Lilyan Escobar, Monserrat Fretes, Alex Gaona, Edda Garcete, Harry Guth, Olga Marecos, María José Palacios, Antonio Rojas, Luis Sisul, Andres Wherle); **Peru** (Maria Del Carmen Calle Dávila, Gustavo Adolfo Canales Kriljenko, Paola Chinen Guima, Richard Montes Escalante, Euler Núñez Marín, Hilde Venero, Ana Vergara León); **Philippines** (Lisa Grace Bersales, Leonor Briones, Sevillo David Jr, Benjamin Diokno, Carlos Dominguez, Andres Ibarra, Ernesto Pernia, Paulyn Jean Rosell-Ubial, Nathaniel Santos, Ismael Sueno, Mark Villar); **Rwanda** (Tom Butera, Philibert Ciza, Augustin Gafasi, Caroline Ishimwe, Olivier Kanangire, Claudine Mukagahima, Alphonsine Mukamunana, Odilon Mukiza, Malik Murtaza, Philibert Niyonzima, Fidele Nteziyaremye, Ephrem Rutaboba, Amendine Umukesha, Joseph Usabimana, Fiona Uwera Mugabe, Bruce Uwonkunda); **Senegal** (Samba Ba, Fatou Bintou Niang Camara, Amadou Diallo, Sidy Ady Dieng, Omar Diom, Beydi Diop, Babacar Diouf, Ousseynou Ka, Oumar Kane, Ndèye Abibatou Lo, Babacar Ndiaye); **Serbia** (Neda Cukavac, Zora Desic, Tijana Djekic, Natasa Djurasinovic, Aleksandra Drobac, Miodrag Gluscevic, Dragana Jovanovic, Ljiljana Jovanovic, Biljana Miladinovic-Stojanovic, Sandra Nedeljkovic, Zvonko Platisa, Miljan Rancic, Aleksandra Savic, Aleksandar Sotic, Nebojša Veljkovic, Ana Vignjevic); **Solomon Islands** (Jack Filiomea, Ian Gooden, Peter Wopereis); **South Africa** (Livhuwani Mabuda, Cyprian Mazubane, Lerato Mokoena, Allestair Wensley); **Swaziland** (Bongani Bhembe, Dlamini Bianca, Caiphus Dlamini, Thobile Dlamini, Bernard Dube, Linda Hlophe, Madoda Khumalo, Stephen Khumalo, Musa Masilela, Larsh Mkhonta, Edward Mswane, Obed Ngwenya, Nompumelelo Ntshalintshali, Daniel Sithole); **Tajikistan** (Suhrob Akramov, Kholmurod Alijonov, Fayziddin Chiniyev, Saydali Hafizov, Tojiddin Ismoilov, Malika Karimova, Ahliddin Khojayev, Murod Melikov, Kholmahmad Nazarov, Zafar Rahmatzoda, Gul Sharifov, Pirnazar Shodmonov); **Thailand** (Prachote Karbkarn, Praweenuch Karnchanakajhorn Sak, Farida Mohsani, Wirote Wacharakiatisak); **Timor-Leste** (Nelson Da Silva, Gregório De Araújo, João Jerónimo, Martinus Nahak); **Tonga** (Elizabeth Baker, Timote Fakatava, Sela Fa'U, Pelenatita Kara, Mele Mafi, Reynold 'Ofanoa, Fakatava Paunga, Samuela Pohiva, Akata Saafi, Na'Aluse Taiala, 'Anitelu Toe'Api, Viliami Tongamana, Sinaki Tulia, Rennie Vaiomo'Unga); **Ukraine** (Raisa Madiudia, Iryna Rudenko, Anna Tsvetkova); **United Republic of Tanzania** (Linda Ayendera, Exaud Fataeli, Nadhifa Kemikimba, Theresia Kuiwite, Amani Mafuru, Wilhelmina Malima, Khalid Massa, Anyitike Mwakitalima, Agnela Nyoni, Justus Rwetabula, Hamza Sadiki, Amour Seleman); **Uruguay** (Alvaro Capandeguy, Emma Fierro, Andrea Gamarra, Pablo Guido, Sandra Rodriguez, Jorge Rodriguez Zunino, Raquel Rosa, Laura Sola); **Uzbekistan** (Nigora Marimovna Allaberganova, Takhir Abidjanovich Khaydarov, Olga Pavlovna Mirshina, Anvar Usmanovich Mukhamedaliev, Abdurashid Razykovich Sadykov, Nailya Sultanovna Salikhova); **Vanuatu** (Sammy Erickson, Ilaisa Glenden, Nelly Ham, Romney Marum, Pakoa Rarua); **Venezuela, Bolivarian Republic Of** (Heidi Bello, Tulia Hernandez, María Leny Matos, Luisana Melo, Pasquale Molinaro, Ernesto Paiva, Dorania Plaza, Cesar Sánchez, Siboney Tineo, Ana Uzcategui); **Viet Nam** (Anh Kiem Do, Huy Cuong Nguyen, Quoc Hung Pham, Bien Trung Tran); **Zambia** (Amos Malupenga, Brian Siakabeya, Rabson Zimba); **Zimbabwe** (Lovemore Dhoba, Goldberg T. Mangwadu, Tinayeshe Mutazu, M. Nyaruwanga).

Notes

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2017

ISBN 978 92 4 151219 0

http://www.who.int/water_sanitation_health/glaas/en/
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