


# GLAAS 2012 REPORT

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

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THE CHALLENGE OF EXTENDING AND  
SUSTAINING SERVICES



INCLUDES ANNEX  
ON TRACKING  
NATIONAL FINANCIAL  
FLOWS TO SANITATION,  
HYGIENE AND  
DRINKING-WATER

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# **GLAAS 2012 REPORT**

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UN-Water is the United Nations inter-agency coordination mechanism for all freshwater related issues. Established in 2003, UN-Water fosters greater cooperation and information sharing among UN entities and relevant stakeholders.

UN-Water monitors and reports on the state, utilization and management of the world's freshwater resources and on the situation of sanitation through a series of interconnected and complementary publications that, together, provide a comprehensive picture and, individually, provide a more in-depth analysis of specific issues or geographic areas.

#### PERIODIC REPORTS:

**World Water Development Report (WWDR)** is coordinated by the World Water Assessment Programme (WWAP) on behalf of UN-Water and published every three years. It provides a global strategic outlook on the state of freshwater resources, trends in use of the resource base in the various sectors (inter alia, agriculture, industry, energy) and management options in different settings and situations (inter alia, in the context of urbanization, natural disasters, and impacts of global climate change). It also includes regional assessments.

- ✓ Strategic outlook
- ✓ State, uses and management of water resources
- ✓ Global
- ✓ Regional assessments
- ✓ Triennial (4th edition)

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

- ✓ Strategic outlook
- ✓ Water supply and sanitation
- ✓ Global
- ✓ Regional assessments
- ✓ Biennial (since 2008)

**The progress report of the WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation (JMP)** is produced every two years. The JMP is affiliated with UN-Water and presents the results of the global monitoring of progress towards MDG 7 target C: to halve, by 2015, the proportion of the population without sustainable access to safe drinking-water and basic sanitation. Monitoring draws on the findings of household surveys and censuses usually supported by national statistics bureaux in accordance with international criteria.

- ✓ Status and trends
- ✓ Water supply and sanitation
- ✓ Global
- ✓ Regional and national assessments
- ✓ Biennial (since 1990)

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**2012**

**UN-Water Report on Integrated Approaches in the Development, Management and Use of Water Resources** is produced by UN-Water for the Rio+20 Summit. A similar status report was produced in 2008 for UNCSD. The report assesses the status and progress of the management of water resources in UN Member States and reports on the outcomes and impacts of improved water resources management.

**2013**

**UN-Water Country Briefs** pilot project. They provide a strategic outlook on the critical importance of investments in water for human and economic development at country level.

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# Foreword

With the 2015 target date for the Millennium Development Goals (MDG) clearly on the horizon, this 2012 edition of the UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS) contributes importantly to the implementation of the UN-Water strategy of delivering strong messages on water that help shape the post-2015 sustainable development landscape. Its publication is timely in the lead-up to the next key event in this process, the Rio+20 United Nations Conference on Sustainable Development.

UN-Water, the United Nations inter-agency coordination mechanism for all fresh water-related issues, has drinking-water and sanitation among its focus areas. While progress towards the Millennium Development Goal (MDG) target 7.C is regularly monitored by the WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation (JMP), the UN-Water GLAAS builds on these results and analyses the underlying reasons for success—or lack of it.

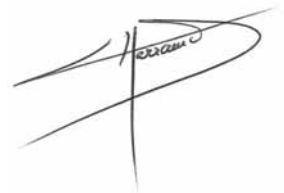
In its relatively short life, UN-Water GLAAS has earned its place in the water monitoring and reporting landscape and is increasingly used as the basis for more informed decision-making. This came from the recognition that the scarcity of information on national sanitation and drinking-water-related policies, financing and human resources was a major barrier to progress. It also results from the dearth of exact knowledge concerning the status of and trends in development assistance.

In early March 2012, the JMP announced that significant progress on improved access to drinking-water had been achieved. This encouraging news comes, however, with a message of caution: many are still unserved, disparities are great and the monitoring of key attributes, such as water quality, remains challenging. Moreover, the estimated 780

million people still unserved are increasingly hard to reach, and the MDG target for sanitation is not on track: there are currently 2.5 billion people with no access to improved sanitation.

This 2012 UN-Water GLAAS provides further reason for vigilance—resources are neither targeted nor apparently sufficient to sustain routine operation and maintenance requirements. Thus, there is a serious risk of slipping backwards on gains already made. The analysis emerging from UN-Water GLAAS also helps to identify the reasons behind the disparities in access to sanitation and drinking-water among different regions, communities and income groups that have been identified by the JMP.

Based on the evidence emerging from UN-Water GLAAS, there are a number of achievable immediate steps that countries, external support agencies and other stakeholders can undertake to continue extending sanitation and drinking-water provisioning, while sustaining services already in place. These immediate steps are highlighted in this report, together with a number of areas that warrant in-depth studies, a challenge that UN-Water GLAAS is ready to take up.



Michel Jarraud  
Chair  
UN-Water

# Acknowledgements

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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 this report—especially those individuals who submitted information from countries and external support agencies. A full listing of individuals who contributed to this report and their affiliations is given in Annex G.

## Acronyms and abbreviations

3Ts	tariffs, taxes and transfers
ADB	Asian Development Bank
ADF	Asian Development Fund, Asian Development Bank
AFD	Agence Française de Développement
AfDB	African Development Bank
AfDF	African Development Fund, African Development Bank
AFESD	Arab Fund for Economic and Social Development
AMCOW	African Ministers' Council on Water
CSO	Country Status Overview (World Bank Water and Sanitation Program)
EBRD	European Bank for Reconstruction and Development
ESA	external support agency
EU	European Union
GDP	gross domestic product
GLAAS	Global Analysis and Assessment of Sanitation and Drinking-water (formerly Global Annual Assessment of Sanitation and Drinking-water)
GoAL WaSH	Governance, Advocacy and Leadership for Water, Sanitation and Hygiene (United Nations Development Programme)
HIV/AIDS	human immunodeficiency virus/acquired immunodeficiency syndrome
HR	human resources
IDA	International Development Association, World Bank
IDB	Inter-American Development Bank
IFRC	International Federation of Red Cross and Red Crescent Societies
ISIC	International Standard Industrial Classification
JMP	WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation
LDC	least developed country
MDG	Millennium Development Goal
NDP	national development plan
NGO	nongovernmental organization
O&M	operation and maintenance
ODA	official development assistance
OECD	Organisation for Economic Co-operation and Development
OECD-CRS	OECD Creditor Reporting System
OFID	OPEC Fund for International Development
OPEC	Organization of Petroleum Exporting Countries
PRSP	poverty reduction strategy paper
SEEA-Water	System of Environmental Economic Accounting for Water
SWA	Sanitation and Water for All
TICAD IV	Fourth Tokyo International Conference on African Development
UN	United Nations
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
USA	United States of America
WASH	Water, sanitation and hygiene
WHO	World Health Organization
WSA	Water and Sanitation for Africa (formerly known as CREPA )
WSP-Africa	Water and Sanitation Program, World Bank
WSP	Water safety plan

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# Executive summary

**The objective of the UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS) is to monitor the inputs required to extend and sustain water, sanitation and hygiene (WASH) systems and services.** This includes the components of the

“enabling environment”: documenting government policy and institutional frameworks; the volume, sources and targeting of investment; the sufficiency of human resources; priorities and gaps with respect to external assistance; and the influence of these factors on performance. A more challenging secondary goal is to analyse the factors associated with progress, or lack thereof, in order to identify drivers and bottlenecks, to identify knowledge gaps, to assess strengths and weaknesses, to identify challenges, priorities and successes, and to facilitate benchmarking across countries.

This second<sup>1</sup> UN-Water GLAAS report presents data received from 74 developing countries, covering all the Millennium Development Goal (MDG) regions, and from 24 external support agencies (ESAs), representing approximately 90% of official development assistance (ODA) for sanitation and drinking-water.

There have been remarkable gains in WASH. The 2012 progress report of the World Health Organization (WHO)/United Nations Children’s Fund (UNICEF) Joint Monitoring Programme for Water Supply and Sanitation (JMP) announced that the MDG target for drinking-water was met in 2010: the proportion of people without access to improved drinking-water sources had been more than halved (from 24% to 11%) since 1990. However, the progress report also noted that the benefits are very unevenly distributed.

**Major gains have been made, with the MDG drinking-water target being met in 2010—but challenges remain to reduce disparities and to increase sanitation coverage.**

For example, only limited progress is evident in the increase of access to drinking-water among the poorest in sub-Saharan Africa or to sanitation among the poorest in South Asia. More than three quarters of those who lack access to safe drinking-water and basic sanitation live in rural areas.

The fact that, between 1990 and 2010, over 2 billion people gained access to improved water sources and 1.8 billion people gained access to improved sanitation facilities demonstrates what countries can achieve with sustained commitment, adequate resources and effective implementation approaches. These results also point to the achievements made by development partners that have provided external support. Ring-fencing of bilateral support for water and sanitation at current times of financial crisis stems directly from the high-level commitments made in

the Millennium Declaration. Political will and commitment to action, evidence-based planning and policy-making, and sufficient human and financial resources are, however, key to sustained success.

As this report shows, in many countries, policies and programmes have far too little emphasis on ensuring adequate financial and human resources to both sustain the existing infrastructure and expand access to sanitation, drinking-water and hygiene services. The danger of slippage against the MDG target is a real one.

**Focusing on effectively managing assets to sustain services can be as important as focusing on new infrastructure.**

The 2012 GLAAS report draws on the latest information, including data from the Organisation for Economic Co-operation and Development (OECD) Creditor Reporting System (CRS), and data gathered through two sets of questionnaires: one for low- and middle-income countries and one for ESAs. These questionnaires have allowed countries and donors to score their progress and WASH inputs according to objective criteria. While the responses are based on consensus from multiple stakeholders and are subject to validation, it is acknowledged that the accuracy of responses will show variability. Thus, to some extent, the responses should be interpreted as a self-assessment of country and donor priorities, and the data should be used with caution when making comparisons between countries and between donors. The GLAAS methodology is presented in Annex A.

**Lack of robust data, particularly on financial flows, is a major constraint to progress.**

The report:

- warns of a significant risk of slippage on the gains made in extending WASH services unless more attention is given to maintaining those services and assets;
- acknowledges that despite the severe financial crisis faced by many high-income countries, aid for sanitation and drinking-water continues to rise, while targeting to basic MDG-type services is improving;
- shows that some countries are reporting good progress towards national WASH targets, but highlights that for the majority of countries, human and financial resource constraints, especially for sanitation, are significantly impeding progress.

The focus on enhancing accountability is increasingly strong and is a key component of the Sanitation and Water for All (SWA) partnership, to which many GLAAS respondents belong. Accountability is being further enhanced by the increased attention paid to the Human Right to Water and Sanitation since the recognition of this right by the United Nations (UN).

<sup>1</sup> The first GLAAS report was published in 2010 after a “proof of concept” was piloted in 2008.

**Sections 1 and 2** of the report describe the growing political will for WASH implementation among reporting countries and the increasing efforts of countries to be accountable and to plan and coordinate effectively. Key findings include the following:

- Countries report recent and substantive political commitments to WASH, increasing funding allocations and increasing leadership and coordination among implementing agencies.
- The majority of countries have established transparent WASH service provision targets and have put in place supporting policies. Many countries are monitoring against these targets. Accountability can be improved, as most countries do not include consumers in planning, and only half have established regular review processes.
- Despite impressive global gains, most countries are falling short on meeting their own national WASH commitments, with 83% and 70% of countries reportedly falling significantly behind the trends required to meet their defined national access targets for sanitation and drinking-water, respectively.
- Although the important contribution that hygiene makes to health is clearly recognized, national targets have generally not been established for hygiene promotion programmes.

**Section 3** presents data on financial flows. While the limited data submitted preclude making definitive statements about global financial allocations, countries report insufficient financing for WASH overall, with particularly serious shortfalls for sanitation. Key findings include the following:

- Many of the governments reporting inadequate funding allocations for WASH also point to a poor absorption capacity—that is, difficulties in spending the limited funds that are received.
- Drinking-water continues to absorb the majority of WASH funding, even in countries with a relatively high drinking-water supply coverage and a relatively low sanitation coverage.
- Insufficient funding for operation and maintenance undermines the sustainability of services in a major way.

This report presents charts and descriptive tabular summaries for numerous drinking-water and sanitation indicators and benchmarks. Financial data presented in the tables or charts are, in a majority of cases, for 2010. For some key indicators, a dashboard of maps and figures is provided to present a geographical summary, global summary statistics and trends. Charts and tabular summaries also generally indicate the number of responses that were considered in the analysis or particular question. This number does not necessarily equal the total number of respondents to the survey, as not every country or ESA answered all parts of the questionnaires, and in many cases the data were collected from an already existing source (e.g. the OECD-CRS).

- Funds are disproportionately targeted for extending services in urban areas, even in countries where urban areas are relatively well served and rural areas are off-track.
- Although data on household funding contributions are limited, what information there is suggests that these are significant and can make a major contribution to sustaining services.
- To strengthen the collection of WASH financial information, a harmonized method of data monitoring is needed (one such method is proposed in Annex A).

**Section 4** examines the adequacy of the human resource base to implement WASH interventions and highlights the gaps in data. Key findings include the following:

- One half of countries did not report on how many WASH staff were in place, indicating a significant lack of information on human resources.
- There is insufficient staff in place to operate and maintain sanitation and drinking-water infrastructure.
- Half the countries surveyed reported that women make up less than a tenth of professional WASH staff.
- Lack of supply-side technicians and skilled labour stands out as a key barrier to the sustainability of services.

**Section 5** confirms that the right to water and sanitation is beginning to be accepted by governments and describes the successes and constraints to extending WASH coverage in an equitable way. Key findings include the following:

- Nearly 80% of countries recognize the right to water, and over 50% the right to sanitation.
- Most countries have not established equity criteria for the allocation of financing for water and sanitation.

**Section 6** describes priority-setting, targeting of development aid, and the coordination and alignment of ESA assistance with country programmes. Key findings include the following:

- Despite the economic crisis, aid for sanitation and drinking-water continues to rise. The total amount of development aid for sanitation and water increased by 3% from 2008 to 2010, to US\$ 7.8 billion. Non-concessional lending for sanitation and water increased from US\$ 2.5 billion in 2008 to US\$ 4.4 billion in 2010.
- Aid for basic systems comprised 26% of aid for sanitation and drinking-water in 2010, an increase from 16% in 2008.
- Only 7% of aid is directed at maintaining services.
- Development aid for sanitation and water to fragile and conflict-affected states increased by 50% between 2007 and 2010, from US\$ 560 million to US\$ 840 million.

- Only half of development aid for sanitation and drinking-water is targeted to the MDG regions sub-Saharan Africa, Southern Asia and South-eastern Asia where 70% of the global unserved live.
- Sector budget support from donors for WASH is 3% of total WASH aid. Opportunities exist for increasing alignment with country priorities and strengthening national WASH systems through increasing sector budget support wherever transparency and accountability mechanisms are in place.

**Section 7** focuses on sanitation, hygiene and drinking-water in schools and health-care facilities, reporting on access to WASH services in these public institutions. Key findings include the following:

- Half the countries did not report on access to adequate sanitation in schools or health-care facilities, suggesting a lack of monitoring systems and capacity.
- On average, 34% of primary schools and 25% of rural health-care centres lack improved sanitation facilities.

In response to the finding that there is a serious lack of robust data on in-country financial flows to sanitation and drinking-water, this report addresses the subject in greater depth in Annex B. The annex describes the work that has been done so far on developing a methodology for tracking national financial flows. Other annexes contain the survey methodology (Annex A), a glossary (Annex C), and country and ESA data (Annexes D and E, respectively), as well as supplementary information on donor/country coordination (Annex F).

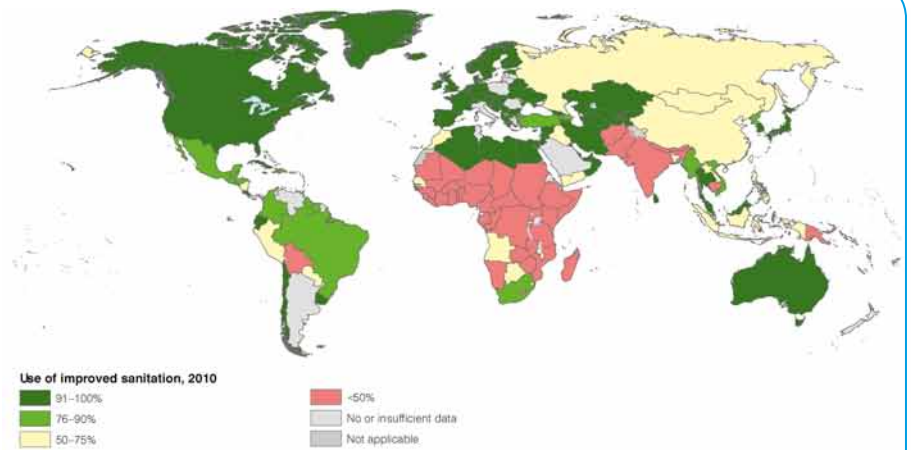
Based on the evidence emerging from this report, a number of issues stand out as requiring urgent attention and action by:

- National governments and country WASH stakeholders to:
  - ▶ continue to improve the strength and clarity of leadership for WASH;
  - ▶ strengthen the development of robust national plans for WASH service provision;
  - ▶ strengthen system-wide support of the delivery of WASH, and link WASH services to core government systems for planning and resource allocation;
  - ▶ focus on building institutional and human resource capacity for both increasing WASH services to the unserved and maintaining existing services by directing more resources to operations and maintenance;
  - ▶ consider adopting a human-rights based approach to focus attention on the vulnerable and to ensure that they are not excluded from the benefits of WASH services;
  - ▶ improve targeting of investments to the poor and vulnerable;
- ▶ develop and strengthen monitoring and establish national WASH Management Information Systems;
- ▶ create and track specific budgets for sanitation and water;
- ▶ encourage multistakeholder participation in decision-making around WASH, through consultation with users and through regular reviews.
- External support agencies to:
  - ▶ improve targeting of aid to the poor and vulnerable, including targeting off-track countries;
  - ▶ consider increasing sector budget support where this is expected to lead to stronger systems to deliver services and increase coverage;
  - ▶ consider directing more external funding to support operation and maintenance of existing WASH services.
- All stakeholders to:
  - ▶ intensify harmonization and collaboration among national line agencies, donors and NGOs.

# Context

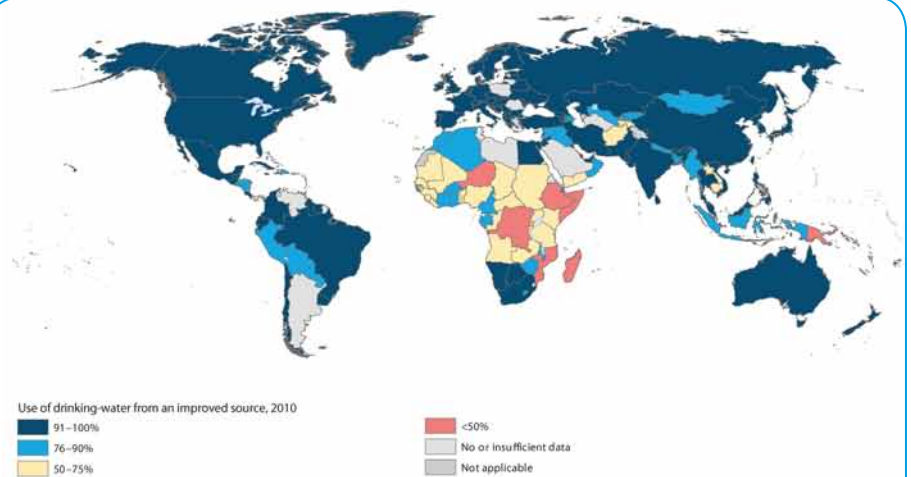
It is clear that there have been remarkable gains, particularly by some countries, in improving access to sanitation and drinking-water. The 2012 JMP progress report (UNICEF/WHO, 2012) estimates that 63% of the world's population has access to improved sanitation (Figure 1), and 89% of the global population now uses improved drinking-water sources (Figure 2).

Sanitation and drinking-water are universally accepted as being essential for human life, dignity and human development. However, sanitation and drinking-water issues have not in the past received the high-level political attention that they deserve. A number of donors, international nongovernmental organizations (NGOs) and UN agencies, in recognition of this, came together to raise the political profile of sanitation and drinking-water following the lead of the UN Human Development Report (UNDP, 2006) in highlighting some of the principal shortcomings within the international architecture. These include the lack of a single international body to speak on behalf of sanitation and drinking-water.



**FIGURE 1** Percentage of population using improved sanitation facilities (2010)

Source: UNICEF/WHO (2012)



**FIGURE 2** Percentage of population obtaining drinking-water from an improved source (2010)

Source: UNICEF/WHO (2012)

## Sanitation and Water for All

Using the evidence base established by UN-Water GLAAS, the SWA partnership aims to address critical barriers to achieving universal and sustainable sanitation and drinking-water. These barriers include insufficient political prioritization, weak sector capacity to develop and implement effective plans and strategies, and uncoordinated and inadequate investments in these plans and strategies. SWA aims to provide a common vision and a set of values and principles for a transparent, accountable and results-oriented framework for action to address the obstacles to global progress.

Eighty-one members make up the SWA partnership, which is based on mutual trust, support and commitment to principles of aid effectiveness, including national ownership of plans, donor harmonization and mutual accountability.

The SWA High Level Meeting, held every two years, brings together ministers of finance from developing countries, ministers of development cooperation from donor countries and high-level representatives from development banks and other donor institutions to address the lack of priority given to sanitation and water as a development intervention, the poor targeting of aid in the sector and the need for robust planning and institutions. The first SWA High Level Meeting, held in April 2010, influenced sector progress and catalysed action at the country level. In particular, participants reported that the 2010 High Level Meeting strengthened relations between WASH sector ministries and finance ministries, triggered stronger sector coordination in many countries, created a crucial context for advocacy on sanitation, encouraged political and financial decision-makers to use evidence for better decision-making and raised awareness about sanitation within sector and finance ministries.

The commitments made at the first High Level Meeting focused on SWA's three key priority areas—increased political prioritization, improved evidence-based decision-making and strengthened national planning processes. Participants tabled over 200 specific commitments and agreed to report on them regularly.

The GLAAS report is the primary mechanism for reporting on the progress of countries in achieving these commitments and on successes within the WASH sector in overcoming obstacles to progress.



The result is the SWA initiative, with its component of biennial High Level Meetings of top decision-makers, supported by GLAAS as the global monitoring report that highlights the evidence, drivers and blockages affecting progress in increasing sanitation and drinking-water coverage. The SWA initiative also endeavours to link with and strengthen existing national processes.

Answering the question “What works to effectively extend and sustain WASH service provision?” is becoming ever more difficult with the rapidly changing financial, political and physical environment. The regional and global financial crises have contributed to creating unpredictable and tighter government and donor budgets. Many countries have experienced overall development, but at the expense of growing inequity between the rich and the poor. The continued trend of population growth and rapid urbanization further strains a deteriorating water and sanitation infrastructure. The crisis of growing

water scarcity, coupled with the other short- and long-term risks posed by climate change, is a potential threat to health security and equitable service provision.

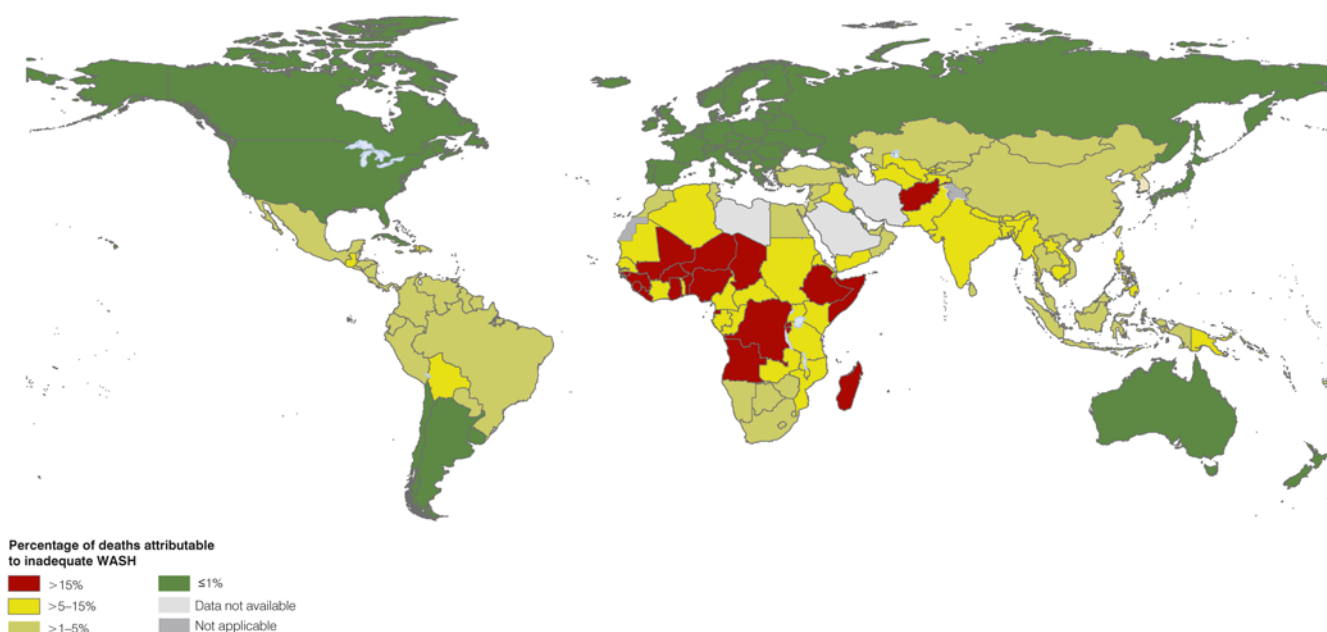
The case for even greater efforts is undeniable. Even if the rate of progress cited in the JMP report (UNICEF/WHO, 2012) were to continue until the end of the MDG period, universal water and sanitation coverage would still be far off—in 2015, 605 million people would remain without access to an improved drinking-water source, and 2.4 billion people would be without access to improved sanitation facilities. Given this scenario, billions will remain at risk of WASH-related diseases such as diarrhoea, which in 2011 killed 2 million people and caused 4 billion episodes of illness (Figure 3).

Without rapid progress in WASH, the growth of national economies will continue to be impeded. Evidence suggests that lack of access to safe drinking-water and adequate sanitation

costs countries between 1% and 7% of their annual gross domestic product (GDP) (WSP-Africa, 2012).

Crucial as disease prevention and economic growth are, the benefits of investing in WASH go beyond health and beyond economic development. They touch on a range of critical issues that cannot easily be measured. These include contributing to every individual's personal dignity and comfort, social acceptance, security for women, school attendance, especially for girls, and productivity at school and work.

With 2015 fast approaching, preparations are already in place to focus on universal access to water and sanitation in the post-MDG period. Considering the vast resources that this continuing effort will require, it is vital that we have an improved understanding of what is being done, by whom it is being done and the critical inputs associated with success, in order to better target and more efficiently use scarce resources.



**FIGURE 3** Percentage of deaths attributable to WASH-related disease or injury

Source: Prüss-Üstün et al. (2008)



## 1

# Political will and accountability



## KEY MESSAGES

- All countries have made some form of political or financial commitment to sanitation and drinking-water since 2010, with the vast majority having established transparent WASH service provision targets.
- Despite impressive global gains, most countries are falling short on meeting their own national WASH commitments, with 83% and 70% of countries reportedly falling significantly behind the trends required to meet their defined national access targets for sanitation and drinking-water, respectively.
- Investments in sanitation and drinking-water are increasingly being scrutinized; while transparency is improving, accountability for results achieved remains weak.



High-level political commitment underpins all efforts to accelerate and sustain improvements in access to adequate and safe drinking-water, sanitation and hygiene services. Successful implementation of this commitment requires a steady focus on the water and sanitation priorities, adequate allocation of resources and the establishment of a regular and transparent monitoring framework to ensure that all stakeholders can be held accountable against their agreed commitments, roles and responsibilities. Such responsibilities include enforcing relevant legal frameworks, ensuring effective regulatory mechanisms, maintaining and strengthening institutional arrangements and applying up-to-date technical knowledge through best practice. They all depend, ultimately, on political resolve to give balanced support to all essential elements.

All countries that responded to the GLAAS questionnaire reported that they had made some form of high-level political or financial commitment to sanitation and drinking-water, often

at the ministerial level, since 2010. Seventeen of them made commitments at the SWA High Level Meeting in 2010, and many others made commitments subsequently in response to national and international initiatives and events. Earlier, at AfricaSan II in 2008 in Durban, South Africa, for example, ministers belonging to the African Ministers' Council on Water committed to the measurable, time-bound sanitation targets enshrined in the eThekweni Declaration and made a pledge on budget lines for sanitation and hygiene.

#### eThekweni Declaration

The eThekweni Declaration was signed by over 30 African government ministers in Durban in February 2008. The declaration recognized the importance of sanitation and committed the signatory governments to establishing specific public sector budget allocations for sanitation, with the aim of spending 0.5% of GDP on sanitation.

Source: WSP-Africa (2008).



**In many cases, political will has not yet catalysed the enabling environment required to secure adequate progress against national sanitation and drinking-water targets (Table 1.1).**

**TABLE 1.1** Meeting political commitments: progress towards attaining sanitation and drinking-water objectives (% of countries reporting attainment of key urban/rural sanitation and drinking-water objectives)

Regional breakdown	Targets in place	Policies adopted	Adequate finance (perceived)	Adequate outputs <sup>1</sup>
Northern Africa, Eastern, Central and Western Asia, and the Caucasus	97%	88%	44%	49%
Latin America and Caribbean	100%	52%	30%	32%
Southern and South-eastern Asia and Oceania	86%	63%	32%	36%
Sub-Saharan Africa	94%	73%	9%	20%
<b>TOTAL</b>	<b>93%</b>	<b>70%</b>	<b>22%</b>	<b>30%</b>

The percentages shown are based on progress in each of the four "sub-sector" areas of WASH services (urban sanitation, rural sanitation, urban drinking-water, and rural drinking-water), expressed as an aggregate figure. For example, if a country reported adequate financing for urban water supply, but not for the other three "sub-sectors", the aggregate score would be expressed as 25%.

<sup>1</sup> Annual progress at 75% or more to meet target.

Source: 2011 GLAAS country survey (74 country respondents)



Nearly two thirds of countries responding to the 2011 GLAAS questionnaire indicated their commitment to tracking and publicly reporting on progress made at international events such as the ones mentioned above. These findings, taken together with the reported increases in expenditure for water and sanitation by several countries from 2009 to 2011, are evidence of concrete action resulting from national and international WASH commitments. The efforts of the SWA partnership run through this consistently and are aimed at coordinating, leveraging and enhancing commitments.

The 2012 JMP progress report (UNICEF/WHO, 2012) describes the success of many countries in reducing the proportion of people without access to improved drinking-water sources and to improved sanitation facilities. At the national level, progress frequently exceeds that required to meet the MDG targets. A number of countries from Latin America, Northern Africa and Western Asia report that they are on track in meeting national targets, such as universal access to a piped sewerage system, that surpass the JMP harmonized global criteria for access to improved drinking-water and sanitation.

When it comes to meeting self-imposed national water and sanitation targets (as opposed to the globally agreed MDG target), however, most countries report that they are falling short: 83% and 70% of countries report falling significantly

behind the trends required to meet national access targets for sanitation and drinking-water, respectively. Additionally, one half of responding countries report that they are not on track to achieve targets declared at the regional or international level (e.g. the eThekweni goal of allocating 0.5% of GDP to sanitation).

Accountability is strengthened by ensuring that national, regional and local planning and review processes are open and inclusive, involving a wide range of stakeholders, including local communities. GLAAS data show that approximately one half of the responding countries reported the existence of periodic review systems, and only 28% of countries have put in place and systematically apply procedures for listening to consumer input.

In addition to making some form of ministerial-level political or financial commitment to sanitation and drinking-water, all countries participating in GLAAS have taken steps to increase transparency by allowing their commitments and actions to be in the public domain. This is evidenced by their individual participation in the GLAAS survey and the increased number of countries responding to the survey (Table 1.2). It is also evidenced by their eagerness to attend the SWA High Level Meeting.

#### Progress towards High Level Meeting commitments relating to political will and internal advocacy

Many of the commitments made by ministers or their representatives at the 2010 SWA High Level Meeting reflected an increased political will and addressed raising the priority of sanitation and water at the national level. Several of their countries already have reported progress. The President of Liberia, for example, has been a high-profile and committed proponent of water and sanitation, providing leadership to the development of an SWA "WASH Compact", which she signed in early 2012. In 2010, the President of Burkina Faso personally launched the new sanitation and hygiene campaign. In Senegal, the government has taken steps to enhance the importance of drinking-water and sanitation within the new national economic and social policy. The government of Mongolia has promoted the importance of drinking-water and sanitation among ministry officials and decision-makers. Several countries have also committed to meeting their commitments made under other initiatives; for instance, Ethiopia has developed a plan to meet its sanitation commitments in line with the eThekweni Declaration.

**TABLE 1.2** Developing countries participating in the 2012 GLAAS report<sup>1</sup>: evidence of increased accountability (74 respondents)

MDG region	Countries participating in 2011 GLAAS survey <sup>2</sup>	Proportion (%) of population represented in the region
Eastern Asia	Mongolia	<1
Central Asia and Caucasus	Azerbaijan, Kyrgyzstan, Tajikistan, Uzbekistan	18
Latin America and Caribbean	Bolivia (Plurinational State of), Brazil, Colombia, Dominican Republic, El Salvador, Haiti, Honduras, Panama, Paraguay	50
Northern Africa	Egypt, Morocco	68
Oceania	Fiji, Samoa	10
Southern Asia	Afghanistan, Bangladesh, Bhutan, India, Iran (Islamic Republic of), Maldives, Nepal, Pakistan, Sri Lanka	100
South-eastern Asia	Cambodia, Indonesia, Lao People's Democratic Republic, Myanmar, Philippines, Thailand, Timor-Leste, Viet Nam	94
Sub-Saharan Africa	Angola, Benin, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Equatorial Guinea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, South Africa, South Sudan, Togo, Uganda, Zimbabwe	85
Western Asia	Jordan, Lebanon, Oman, Yemen	17

<sup>1</sup> A description of the methodology employed by GLAAS is found in Annex A. Country responses were coordinated by governments.

<sup>2</sup> There are thirty four new respondent countries to the GLASS survey, these are highlighted in blue.

Overall, data indicates that decision-makers have demonstrated their good intentions to improve WASH services. Because of an increased commitment to accountability, countries' WASH-related efforts and outputs are better understood and documented. From this evidence, however, it is clear that a variety of barriers, discussed later in the report, are continuing to impede the delivery of tangible results. If more substantive progress is to be made, WASH decision-makers need to become more serious and engaged in the follow-up to their commitments to deliver results.





# 2

## Policies, planning and coordination



### KEY MESSAGES

- Globally, progress has been made in the adoption of national policies, with 63% and 77% of responding countries having adopted and published policies for sanitation and drinking-water, respectively. Many countries have agreed and published policies since the last GLAAS report.
- Most countries have established national sector planning and coordination processes, but many also report having inadequate information and data for effective investment planning. Only one half of responding countries report that their planning processes are based on annual or biennial reviews, and even fewer countries are in a position to perform their planning based on reliable data from national information systems.
- Over 90% of countries have decentralized responsibility for water and sanitation, but operational decentralization has been accompanied by fiscal decentralization in only 40% of countries surveyed, potentially weakening the capacity of local government to plan and deliver services.
- Countries are progressively adopting a preventive “water safety planning” approach to drinking-water quality management.
- Despite a clear recognition of the important contribution that hygiene makes to health, national targets have generally not been established for hygiene promotion programmes.

## 2.1 POLICY ADOPTION

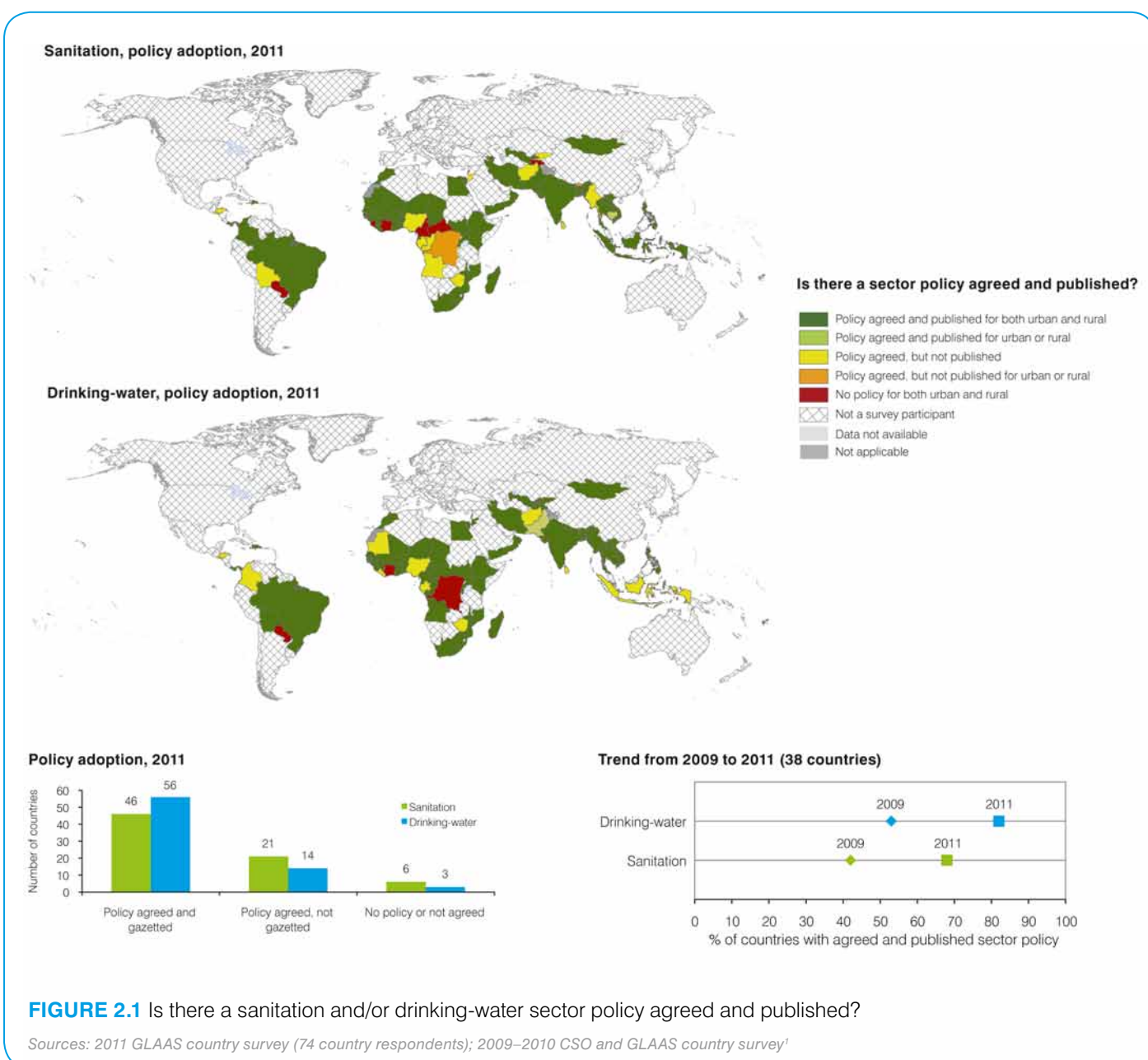
Countries recognize the importance of developing national sanitation and drinking-water policies that establish objectives, define roles, responsibilities and expectations, and set boundaries for governments and partners. Effective and efficient service delivery can be particularly difficult to achieve in countries where government

departments or agencies are not guided by specific sanitation and drinking-water policies.

Globally, 63% and 77% of countries reported policies that have been agreed and gazetted for sanitation and drinking-water, respectively. The 2009–2011 trend shows improvement: countries that responded to both the 2009 and 2011 GLAAS surveys show strong progress, with an additional

14 countries (out of 38 common respondents) having agreed and published policies since 2009, primarily in Africa. Some countries noted that the policy implementation was hindered by unpredictable financing and inadequate dissemination of the policy message.

**Urban and rural sanitation policies have been adopted and published in 63% of respondent countries, up from 40% in 2009, demonstrating that countries are progressively tackling the urgent need to address sanitation issues. Drinking-water policy adoption rates are higher and show a similar pattern of progress (Figure 2.1).**



<sup>1</sup> For the 2010 GLAAS report (WHO, 2010), UN-Water GLAAS and the World Bank's Water and Sanitation Program collaborated to develop a three-part survey questionnaire and data consultation process for countries in the Africa region. These Country Status Overviews (CSOs) report on the extent to which countries have put in place the institutions and policies needed to meet their water and sanitation targets, their financing requirements and sector sustainability and include recommendations on how each country could improve performance. Results from the 2009–2010 CSO and GLAAS country survey are used for comparative purposes in some of the figures in this report.



## SANITATION

Sustained progress in urban sanitation requires infrastructure to keep up with growth and the existence of sufficient technical capacity and financial resources to meet demand for the creation of sanitation facilities and excreta removal, treatment and disposal. A majority of respondent countries reported establishing plans for the expansion of urban sanitation services together with specific policy provisions to address the issue in slums and informal settlements. Despite this, most countries submitting data to GLAAS indicated that annual outputs are significantly less than what is needed to meet national urban sanitation targets.

In rural sanitation, only 20% of countries report that the supply of skilled labour and technicians is adequate to ensure progress; however, most countries indicate that government policies exist or are being formulated to develop the

private sector and to further develop sanitation products and services.

## WATER SAFETY

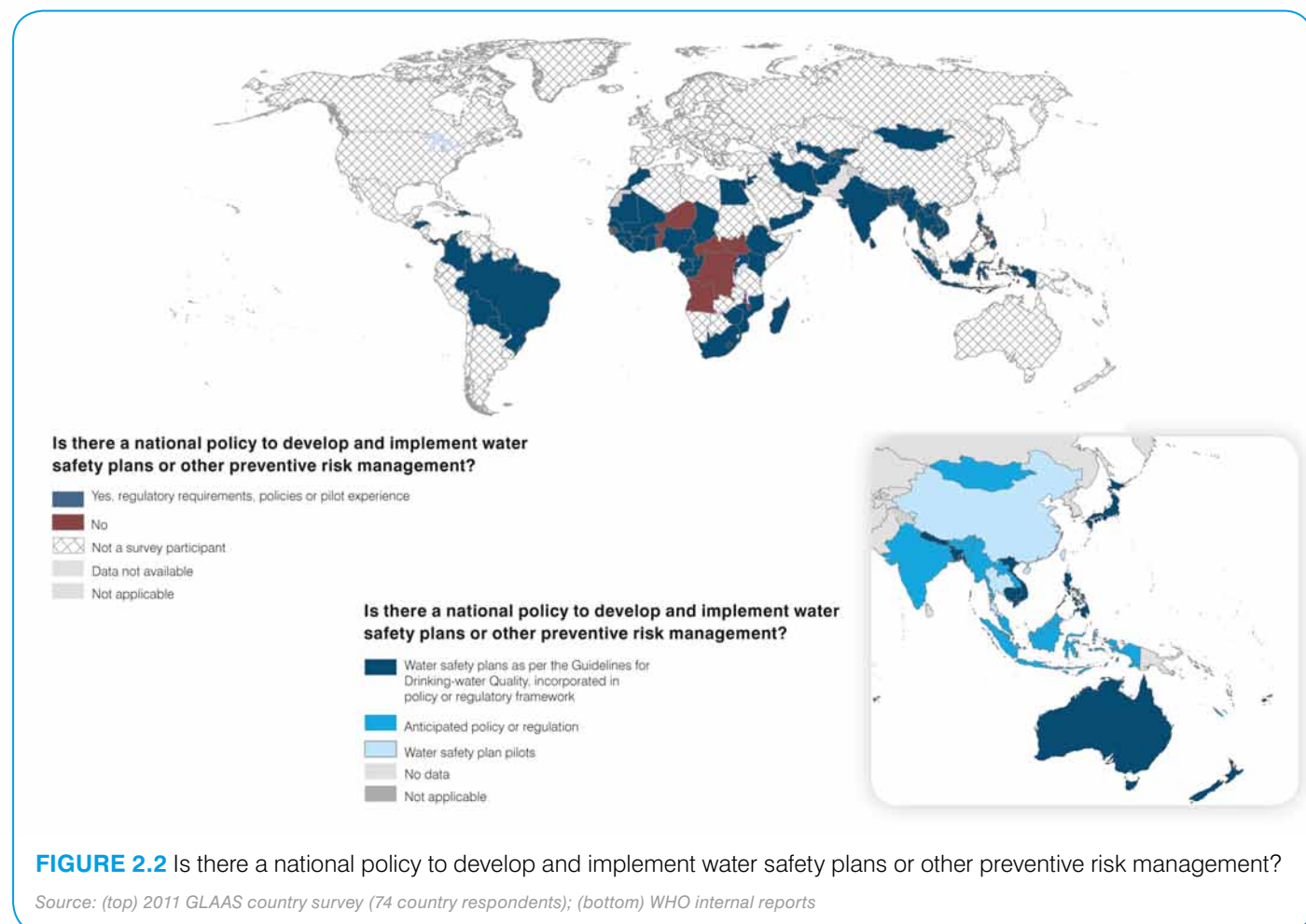
Policies promoting continuous vigilance in the form of preventive risk management will contribute to improving water quality and reducing disease. This vigilance is often lacking, however, in part because water supply operators are frequently overwhelmed by their operational and financial challenges, such that they are unable to address their important public health protection role. The WHO Guidelines for Drinking-water Quality (WHO, 2011) recommend water safety plans, a proactive management approach encompassing the whole water supply chain, from catchment to consumer.

The global momentum towards water safety planning is supported by the findings from the GLAAS report (Figure 2.2).

The level of progress with water safety plans is illustrated in more detail in Figure 2.2, showing the WHO regions of South-East Asia and the Western Pacific, where certain countries have made notable progress. Of the countries encouraging water safety planning, 13 out of 24 in South-East Asia and the Western Pacific currently have a policy or regulatory requirement on water safety plans, whereas an additional 8 countries are planning to update their policies and regulations to incorporate this approach.

To be effective, water safety plans need to be continually reviewed and updated, including in response to external audits specified in regulations. In this regard, countries need to take substantive additional actions before the benefits of the water safety planning approach can be realized.

**Water safety planning is gaining global momentum, with 81% of the respondent countries either encouraging or requiring water safety plans in policies and regulations or reporting pilot experiences (Figure 2.2).**



## HYGIENE

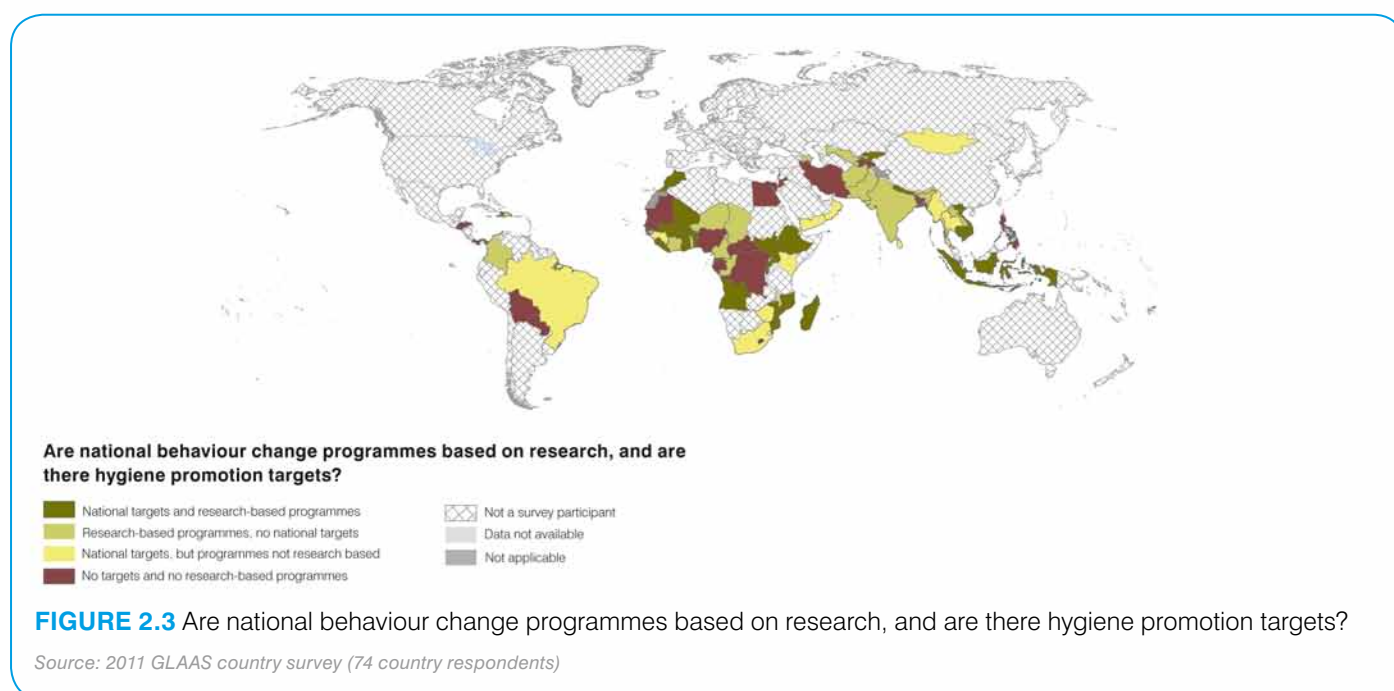
Despite widespread recognition of the important contribution of hygiene to health, hygiene promotion programmes are not driven by the establishment of national targets. Only 19 out of 74 countries (26%) have defined targets for national hygiene promotion, indicating an important potential for improvement by systematizing planning and establishing an accountability

framework. In stark contrast to this operational gap, 90% of countries include hygiene in their health strategies.

Despite low overall rates of implementation of programmes based on research on local knowledge, attitudes and perceptions on hygiene, GLAAS country reports suggest that hygiene programmes informed by this

type of research are growing in number. Experience indicates that it is difficult to predict whether and for how long hygiene behaviour change will last. Moreover, there are few studies whose findings confirm the persistence of hygiene behaviour long after cessation of programme implementation.

**Few countries have established targets for hygiene promotion. National behaviour change programmes are not sufficiently informed by assessments of local attitudes and are frequently limited to small-scale implementation (Figure 2.3).**



## 2.2 PLANNING AND COORDINATION

An enabling framework for progress in sanitation and drinking-water must support the translation of policies into action. Important factors include leadership, coordination, local capacity, effective monitoring and encouragement of broad participation to ensure accountability. Coordination can be challenging in the common scenario where responsibilities for different aspects of WASH are fragmented over a number of government agencies that devote only a small share of their overall resources to this area. Where overall responsibility is unclear, accountability for performance is typically weak. Agencies may not necessarily be held accountable, and issues that are perceived to be of lesser priority or even marginal in a specific institutional context will have difficulty in securing adequate financial and human resources, even though they may be essential components of the overall sanitation and drinking-water framework.

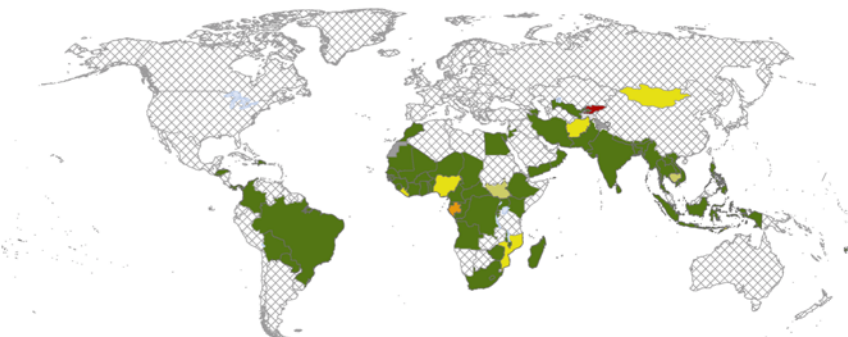
The 2011 survey indicates some progress in overcoming the major obstacles identified by GLAAS respondent countries in 2009, which included the following:

- Approaches used for developing policies are not coherent and holistic within each ministry.
- Agencies are working independently on specific policy aspects rather than being guided by an overall framework.
- Lead institutions are not defined, especially for sanitation.
- There is no strategic plan on how targets for drinking-water and sanitation will be met or for the promotion of hygiene.
- There is low capacity at local levels in terms of oversight and service delivery.

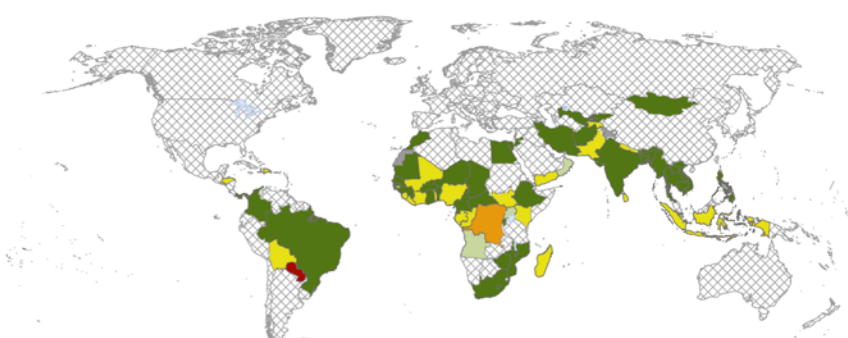
Eighty-five per cent of countries identified a lead government agency for sanitation, indicating a clear improvement over the situation in 2009. One may speculate that this progress may have been linked to

**Lead institutions for sanitation are defined in over 85% of responding countries. Additionally, more than half of responding countries report that coordination mechanisms among drinking-water institutions are both defined and operational (Figure 2.4).**

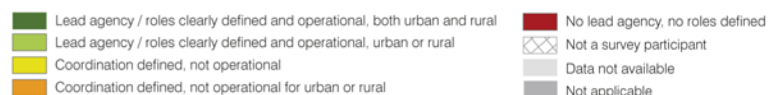
**Sanitation, lead government agency in place, 2011**



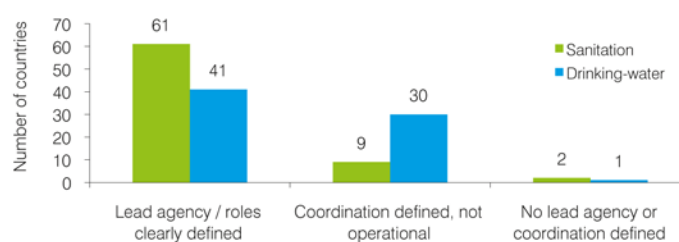
**Drinking-water, institutional roles clearly defined, 2011**



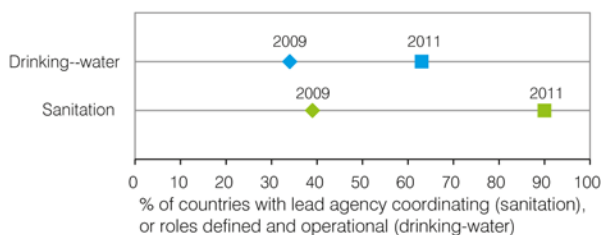
**Is there a government lead agency / are institutional roles clearly defined?**



**Institutional lead and roles defined, 2011**



**Trend from 2009 to 2011 (38 countries)**



**FIGURE 2.4** Is there a government agency with a clear mandate to lead and coordinate policy development (sanitation)? Are institutional roles of rural and urban players clearly defined and operational (drinking-water)?

Sources: 2011 GLAAS country survey (74 country respondents); 2009–2010 CSO and GLAAS country survey

rising international attention given to sanitation, such as through the International Year of Sanitation (2008). While lead agencies have been identified, countries comment that poor coordination still exists among implementing agencies, particularly for sanitation. In many countries, government coordination structures have been established at the national level, but this process of firming up coordination still needs to trickle down to provincial and local levels, although, admittedly, the barriers to coordination may be lower at those levels.

The GLAAS survey did not ask countries to report on the existence of a defined lead government institution for drinking-water simply because this is considered established practice. However, one half of the countries surveyed reported that they had accomplished the more difficult task of both defining and operationalizing the roles of the multiple institutions responsible for drinking-water systems and services.

### Commitments to better coordination

The need to strengthen linkages between sectors and improve coordination was recognized at the SWA High Level Meeting in 2010, and countries made commitments specifically relating to this issue. Angola has since held a National Inter-ministerial Meeting (ministries of water, environment, health, education, territorial administration and finance). Angola also committed to strengthening accountable institutions where they are lacking and is making progress on exerting strong national leadership to bring coherence to the sector's plans and strategies. Ethiopia reports making progress on its commitment to improving the WASH planning and coordination process by strengthening national plans and partnerships. Burkina Faso has already established the Water and Sanitation Partnership Framework that it committed to create. This framework will improve partner and donor coordination and is expected to lead to increased financing of sanitation and drinking-water within the national budget.

### Ghana translates strong policies into outputs for water supply

Successful translation into outputs needs strong policies to be accompanied by effective implementation arrangements and adequate financing. For example, Ghana has exceeded its MDG target of 77% water supply coverage by enabling over 10 million people to gain access to drinking-water from an improved source between 1995 and 2010 (WHO/UNICEF, 2012). Its success can be attributed in part to effective implementation arrangements that are in place for rural and urban water supply through the Community Water and Sanitation Agency and the Ghana Water Company Limited, clarity on budgets through separate line items and an existing regulatory framework.

For sanitation, Ghana published a National Environmental Sanitation Action Plan and Investment Plan in 2010 and has adopted Community-Led Total Sanitation as a strategy. While households are expected to invest in sanitation, there is, however, no clarity on financing for sanitation software (i.e. demand generation and behaviour change activities).

## Most countries have established planning and coordination processes, but they are not necessarily supported by adequate information and data (Table 2.1).

**TABLE 2.1** Planning, coordination and monitoring processes: progress on selected indicators  
(% of countries that reported establishment of key urban/rural sanitation and drinking-water processes)

Regional breakdown	Lead government agency for sanitation in place <sup>1</sup>	Institutional roles clearly defined and operational for drinking-water	Annual review used for planning (water and sanitation)	Investment programme agreed and published (water and sanitation)	Use national information system (water and sanitation)
Northern Africa, Eastern, Central and Western Asia, and the Caucasus	78%	68%	63%	93%	51%
Latin America and Caribbean	100%	40%	33%	32%	22%
Southern and South-eastern Asia and Oceania	89%	62%	43%	49%	56%
Sub-Saharan Africa	84%	59%	63%	45%	36%
TOTAL	86%	60%	55%	51%	42%

<sup>1</sup> Due to the different levels of rigor for the questions on government coordination, sanitation appears to be doing better than drinking-water; however, the question on sanitation merely indicates the existence of a lead agency, whereas the drinking-water question assesses the level of coordination among key actors. Specifically, for sanitation, the question asked whether there was a "government agency with a clear mandate to lead and coordinate the policy development and planning of institutions". For drinking-water, the question asked whether the "institutional roles of rural and urban players [national and local government, utilities, water boards, regulators, etc.] are clearly defined and operational".

Source: 2011 GLAAS country survey (74 country respondents)



## 2.3 REVIEWS, MONITORING AND REPORTING

The systematic performance of periodic (i.e. annual or biennial) reviews to monitor and evaluate the performance of sanitation and drinking-water uptake and services is increasingly used by countries as a basis for planning. The adoption of this approach serves two purposes: first, to provide greater stakeholder participation and joint ownership, and second, to provide a means to hold government and donors accountable for achieving expected results. This process is particularly important where there are a large number of actors in sanitation and drinking-water, since it articulates and reiterates common goals, reduces duplication and promotes mutual accountability. Sector-wide reviews that are led and owned by national government and involve all major stakeholders are key to improving WASH coordination and planning.

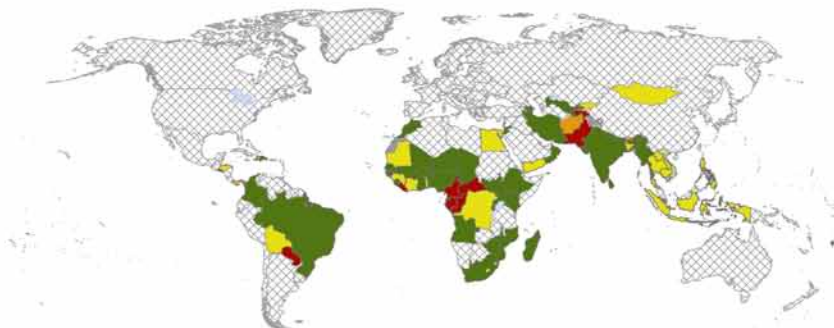
Countries that responded to the GLAAS questionnaires in both 2009 and 2011 have made strong progress, with an additional 14 and 9 countries (out of 38 common respondents) having established periodic review processes that are used for planning in sanitation and drinking-water, respectively, since 2009.

### Ethiopian ministries define coordination, but implementation remains weak at lower levels of government

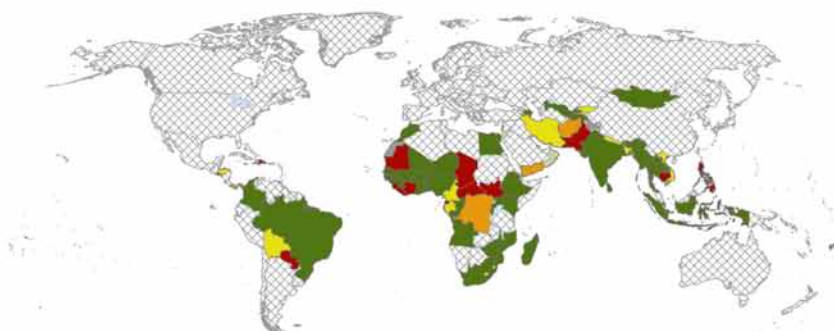
In order to facilitate the integrated implementation of WASH in Ethiopia, the three concerned line ministries, the former Ministry of Water Resources, the Ministry of Health and the Ministry of Education, signed a Memorandum of Understanding for joint cooperation in 2006. The Memorandum of Understanding has fostered robust coordination at the regional level; however, “the WASH MoU [Memorandum of Understanding] has only very partially been transferred to lower administrative levels with the result that the implementation of the MoU is not strong in local (Woreda) governments” (Government of Ethiopia, 2011).

Periodic sector reviews are increasingly being used in sanitation, with 85% of countries reporting organizing such reviews and one half of countries reporting that their outcomes are used for sanitation planning (Figure 2.5).

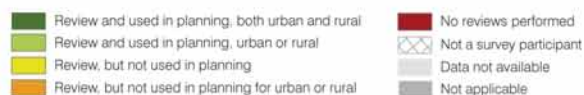
Sanitation, annual/biennial review processes, 2011



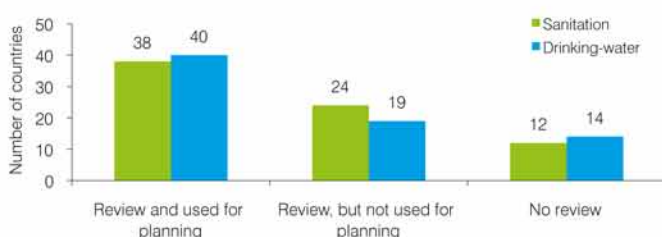
Drinking-water, annual/biennial review processes, 2011



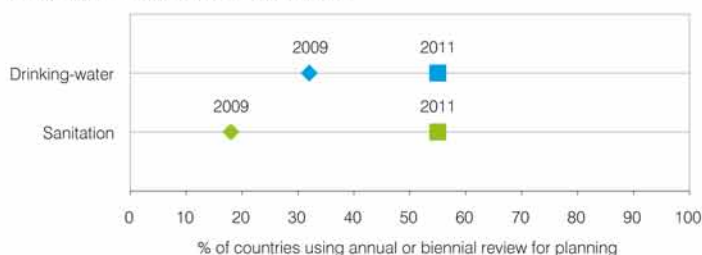
Is there an annual or biennial review of the sector?



Annual or biennial review, 2011



Trend from 2009 to 2011 (38 countries)

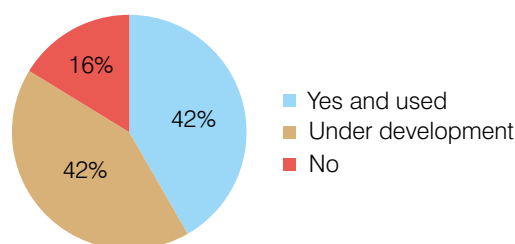


**FIGURE 2.5** Is there an annual or biennial review of the sector?

Sources: 2011 GLAAS country survey (74 respondents); 2009–2010 CSO and GLAAS country survey

Four countries responded that there was no process of review in either sanitation or drinking-water. Review and decision-making processes need to be informed by reliable sector information. Comprehensive monitoring on a routine basis is a practice that most surveyed countries are in the process of developing. Country respondents indicate that coordinating the monitoring process, often carried out by several entities at both local and regional levels, is complex and challenging. In addition, country respondents confirm that while there might be effective project or programme monitoring systems, reliable sector-wide information systems remain to be developed.

### Countries report that only 42% of urban/rural sanitation and drinking-water sectors are informed by reliable information monitoring systems (Figure 2.6).



**FIGURE 2.6** Is there a national information system used to inform decision-making?

Source: 2011 GLAAS country survey (74 country respondents)

#### High Level Meeting commitments for better monitoring

Robust sector monitoring, including the monitoring of previous commitments, was the subject of many commitments at the SWA High Level Meeting in 2010. Mauritania committed to increasing follow-up and transparency in the technical and financial implementation of water and sanitation programmes through steering committees, monitoring and evaluation, and audits; the country reports that this is progressing well. Ethiopia is working to achieve its commitment to improve national monitoring and information management systems by creating a WASH inventory and strengthening the national monitoring and information systems for health and water resources. Liberia committed to the development of a monitoring and evaluation system for the WASH sector and reports good progress.

#### Joint Sector Review in Nepal

Nepal, where there are a number of state and non-state actors working in WASH, held its first Joint Sector Review in May 2011. The Joint Sector Review discussed a specially commissioned report on the status of WASH in the country, identified and prioritized three to four key actions that are to be taken by all the relevant stakeholders in the year ahead and agreed to hold another Joint Sector Review in 2012.

Source: Government of Nepal (2011)

#### Civil society organizations produce joint performance report in Ethiopia

In keeping with the principle of mutual accountability, the civil society organizations operating in Ethiopia produced an Annual Joint Report on WASH in 2010. This emanated from a commitment made at a multistakeholder forum in 2009 that WASH sector civil society organizations would produce an annual performance report that could be incorporated into the National WASH Report, produced by the National WASH Coordination Office.

Source: Government of Ethiopia (2011)

#### Burkina Faso information system details process and outcome indicators

Some countries have made good progress in establishing sector-wide information systems that inform decision-making. The Programme national d'Approvisionnement en Eau potable et d'Assainissement of Burkina Faso publishes an annual report on detailed process and outcome indicators for drinking-water and sanitation, both urban and rural. These include access to water and sanitation, proportion of water sources that are functioning, coverage of schools, health centres and public spaces, and good governance indicators, such as the proportion of drinking-water provisions and the proportion of public toilets managed by delegation.

Source: Government of Burkina Faso (2011)

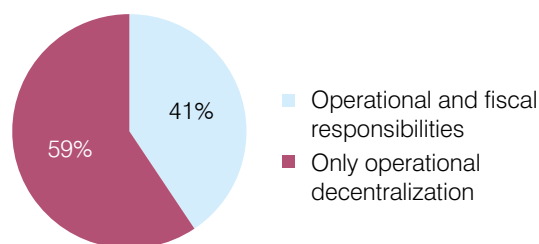
## 2.4 DECENTRALIZATION

In most developing countries, responsibilities for drinking-water and sanitation services are devolved to the local level. When decentralization is effective, it ensures that services are appropriate for local needs, that operation and maintenance requirements are met and that facilities created are sustained over time. This does not imply that these services can operate without any support from higher levels. Effective decentralization requires adequate technical, financial and human resources support to local authorities. The principle of subsidiarity applies: the initiative to seek support should come from the local level whenever the challenges faced cannot be solved with the technical, financial and human resources locally available. Independent regulation and quality control are functions performed at a higher level.

Over 90% of countries indicated that service delivery has been decentralized for sanitation and drinking-water supply; however, as shown in Figure 2.7, less than half have undertaken full fiscal decentralization.

As reported recently by the African Ministers' Council on Water, (AMCOW) "the major challenge still to be overcome is that of decentralization and the local management of water supply and sanitation (WSS) services. All local management stakeholders, including the contracting authority, the commune (local authorities), the regional technical departments that should support them, as well as the water users' associations and the local private sector, suffer from a severe lack of human, technical, and financial resources that prevents them from successfully undertaking their new responsibilities and ensuring that investment is sustainable" (AMCOW, 2011).

**Only 40% of countries that have decentralized service delivery have decentralized fiscal responsibilities (Figure 2.7).**



**FIGURE 2.7** To what degree has decentralization of service been carried out in sanitation?

Note: A similar proportion was found for drinking-water.

Source: 2011 GLAAS country survey (64 country respondents indicating operational decentralization of service delivery)

### Decentralization of rural water service delivery in India

In 2010, the Indian Planning Commission performed an evaluation study of the Rajiv Gandhi Drinking Water Mission, the flagship rural water programme in India, and found that only 8% of the surveyed households were willing to pay for operation and maintenance. They considered operation and maintenance the responsibility of the Gram Panchayat (the village committee). However, over one half of the Gram Panchayats have expressed their inability to take the responsibility of operation and maintenance. "In a large majority of the Gram Panchayats (50 out of 63), formal hand-over of operation and maintenance of the assets created under the Mission has not been done" (Government of India, 2010).





## 2.5 LOCAL STAKEHOLDER PARTICIPATION

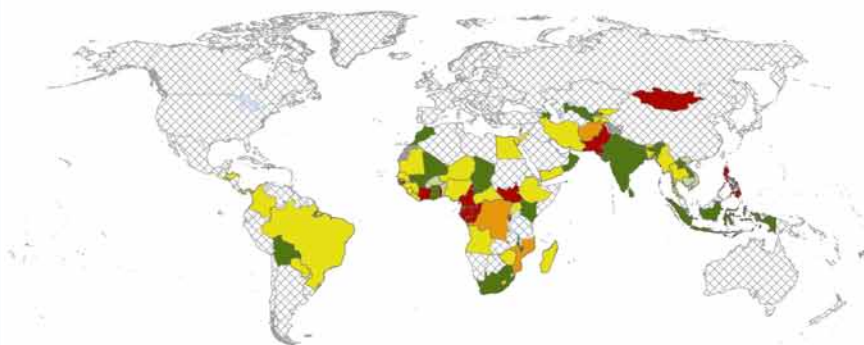
Consultation with, involvement of and participation by local stakeholders are crucial to ensure that policies, legal frameworks, monitoring reports, reforms, budgets, expenditure priorities and resource plans are reviewed and fully owned by stakeholders and that users receive the services that they want and are willing to pay for. Consultation can be promoted through various institutional frameworks or processes at local, national and regional levels. Countries have attempted to institutionalize participation through local water and sanitation committees, registered user groups and regulatory systems that facilitate consumer feedback and “consumer voices” to be heard.

Respondents suggest that some countries have laws, policies or plans for informing, consulting with and supporting participation by citizens, but these frequently are not specific to sanitation and drinking-water.

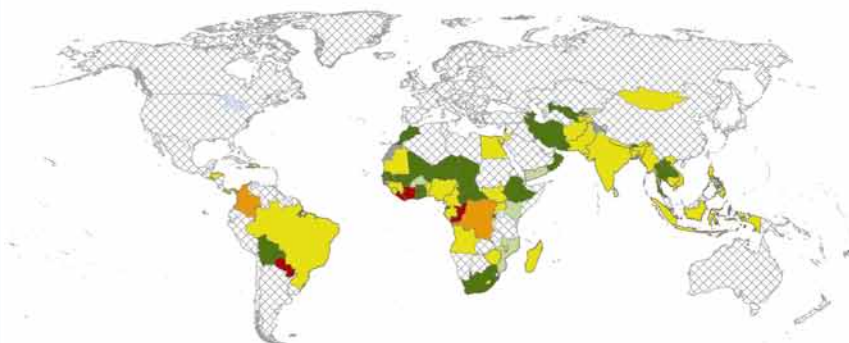
As Figure 2.8 suggests, procedures to support local stakeholder participation in planning, budgeting and implementing programmes have not been systematically applied in a majority of responding countries. Over 70% of countries indicated that either there are no procedures for local stakeholder participation or procedures are not systematically implemented. Respondents suggest that the mechanisms that do promote public engagement on sanitation and drinking-water specifically are not uniformly implemented, although the trend is improving. Strengthening participatory processes will ensure that planned investments are appropriate for the community, lead to greater local support of decision-making processes, outputs and recurrent investment needs, and improve sustainability of sanitation and water services. Comparing the trends for drinking-water and sanitation, it seems that pursuing community engagement in the planning and implementation processes for drinking-water may be either easier or more attractive than doing the same for sanitation.

**Local stakeholder participation in planning, budgeting and implementing programmes has improved since 2009, with more countries having established systematic processes to facilitate stakeholder participation, but systematic application is still low overall (Figure 2.8).**

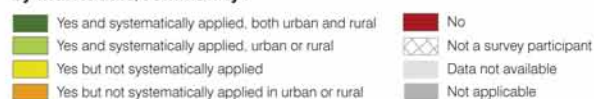
**Sanitation, procedures for stakeholder participation, 2011**



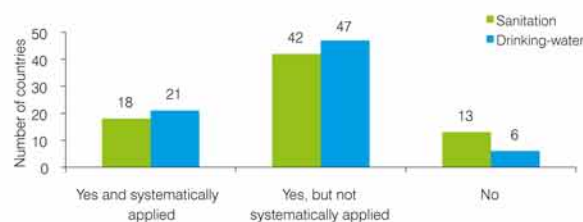
**Drinking-water, procedures for stakeholder participation, 2011**



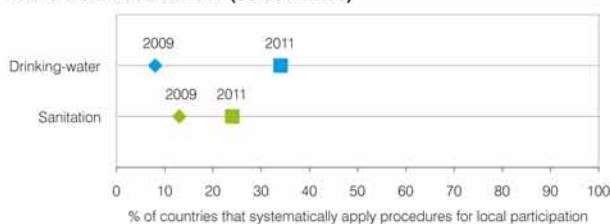
**Are there procedures for informing, consulting & supporting participation by individuals/community?**



**Stakeholder participation, 2011**



**Trend from 2009 to 2011 (38 countries)**



**FIGURE 2.8** Are there procedures for informing, consulting and supporting participation by individuals/community?

Sources: 2011 GLAAS country survey (74 respondents); 2009–2010 CSO and GLAAS country survey

## 2.6 IMPLICATIONS FOR THE FUTURE

This section shows that the WASH sector is becoming more coherent, with greater focus on sanitation, and that progress is being made on many of the “easier” improvements, such as those related to demonstrating commitment through the setting of targets, progressively adopting WASH policies and improving coordination, including by engaging more stakeholders in planning. However, this section also shows limited progress on many of the more “difficult” issues, such as successfully implementing policies, developing effective and coherent planning and monitoring systems, and effectively supporting the local level in the delivery of services.

Tackling the difficult issues will require continued strength and clarity of leadership, with defined roles and responsibilities. Planning processes could be dramatically improved if they could respond to data made available through management information systems. In this regard, WASH service delivery could undoubtedly benefit from a strengthened “whole systems” approach, which would entail inclusion of WASH in core government systems for planning and resource allocation.





## KEY MESSAGES

- Central government continues to be a major source of funding for water and sanitation, although many low- and middle-income countries remain dependent on external aid. External funding for WASH amounted to more than 1% of GDP in seven developing countries.
- Existing levels of household and private investment are poorly understood, but available data suggest that they are significant sources of financing and can make major contributions to supporting operation and maintenance of services.
- The majority of countries report that sector information systems for financial planning and reporting are inadequate.
- Data suggest that funds spent on operation and maintenance are insufficient. A majority of countries indicate that rural water supply programmes are not effective due to lack of funding, whereas one third of countries report that urban utilities lack revenue to fund operation and maintenance.
- Funding levels for WASH are reported to remain insufficient, especially for sanitation. Drinking-water continues to absorb the majority of WASH funding, even in countries with a relatively high drinking-water supply coverage and relatively low sanitation coverage.
- Most countries could not report how much they spend on hygiene, and for those that did, it was only about 2% of WASH expenditure.
- The breakdown of expenditure for WASH in rural and urban areas appears only weakly correlated with needs.
- Long procurement processes and heavy administrative burdens mean that many countries struggle to efficiently disburse the limited funds that are committed. Absorption of domestic capital commitments is higher than that of donor commitments, but appears to be declining.
- To strengthen the collection of WASH financial information, a harmonized method of data monitoring is needed (one such method is proposed in Annex B).



Extending and sustaining water and sanitation programmes and infrastructure require, among other things, adequate funding and sound financial management. These include investment planning, securing funds for proposed budgets, making efficient and timely disbursements and monitoring outcomes. Previous analyses have shown that global spending is far less than what is required to meet the MDGs (Hutton & Bartram, 2008), and analysis of regional spending in Africa, for example, shows that expenditure is one quarter of what is required for drinking-water services alone (Foster & Briceño-Garmendia, 2010). Inadequate funding for sanitation and drinking-water infrastructure and for its long-term operation and maintenance was the most frequently cited obstacle by GLAAS survey respondents.

### 3.1 SOURCES OF FUNDING AND HOW MUCH IS BEING SPENT

Funding for water and sanitation is required for new capital investment and for recurrent expenses of operations (operational expenditure), capital maintenance (long-term renewals and rehabilitation, usually recovered as an annual “depreciation” charge) and any costs of capital (interest payments on loans and any required dividend returns to equity providers). Funding for these water and sanitation costs can come from three main sources, commonly referred to as the “3Ts” of WASH: “tariffs”, which are funds contributed by users of WASH services (and also including the value of labour and material investments of households managing their own water supply); “taxes”, which refer to funds originating from domestic taxes that are channelled to the sector by the central, regional and local governments; and “transfers”, which refer to funds from international donors and charitable foundations. Transfers include grants and concessional loans, such as those given by the World Bank, which include a grant element in the form of a subsidized interest rate or a grace period. The “3Ts” are discussed in Annex B, a special GLAAS thematic section that reviews the state of the evidence on WASH financial flows and proposes a methodology to encourage and harmonize country monitoring.

Of the 74 countries participating in GLAAS, only 17 submitted data on sources of funding, and just 4 were able to provide figures on the contributions made by household through the payment of tariffs. Table 3.1 shows these household contributions, ranging from 30% to 61% of total reported sanitation and drinking-water funding from all sources, combining capital investment and recurrent costs. These limited data confirm findings in previous reports (World Bank, 2008; OECD, 2009a) indicating that household contributions comprise a significant portion of finance for sanitation and drinking-water.

Two analyses were performed to determine relative contributions of financing from various sources to sanitation and drinking-water. The first analysis was confined to assessing the financial data on taxes and transfers from the 17 respondent countries. This analysis shows that central government remains the major source of investment in sanitation and drinking-water in most of the countries surveyed,

providing half of the reported US\$ 19.8 billion in financial flows (Figure 3.1).

The second analysis covered all of the “3T” sources of funding—tariffs from households, taxes and transfers—but was necessarily limited to only the four countries that were able to submit this full data set. This analysis indicates that household contributions account for a significant share of investment in these four countries, accounting for 44% of funding, as compared with national government, which contributed only 18% of the reported US\$ 10.1 billion with in water and sanitation finance (Table 3.1).

These data confirm the importance of financial contributions from household tariffs and self-supply, particularly for recurrent expenditure and capital expenditure for non-networked services, and the need to monitor these in the future.

**Household funding for WASH, through tariffs and self-supply, is generally not monitored. Limited data suggest that household funding contributes a significant share of the overall WASH financing (Table 3.1).**

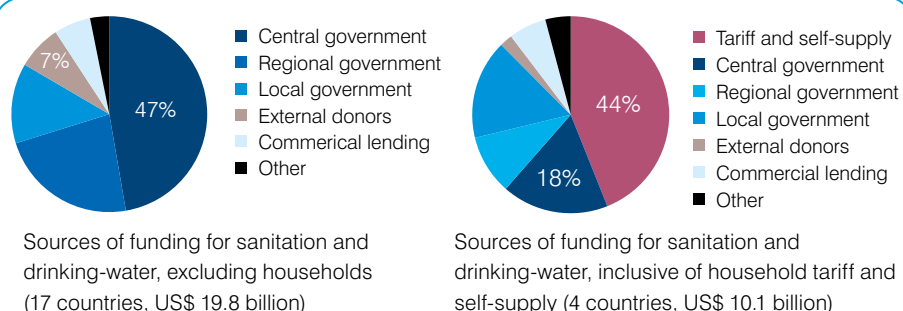
**TABLE 3.1** Contribution of household tariffs (and costs associated with self-supply)

Country	Contribution of household tariffs to total WASH funding	Contribution of household tariffs to total operational expenditure <sup>1</sup>
Iran (Islamic Republic of)	61%	100%
Bangladesh	36%	87%
Thailand	32%	Data not available
Lesotho	30%	82%

<sup>1</sup> Progressively increasing the proportion of operational expenditure funded through household tariffs to 100% allows for sustainable recovery of costs associated with operation and minor maintenance. Over time, the combination of tariffs and taxation needs to fund operational expenditure plus long-term capital maintenance and any interest costs of loans.

Source: 2011 GLAAS country survey

**Central government budget allocation and disbursement are the major source of financing for respondent countries. Household contributions are poorly understood, but could be equally, if not more significant (Figure 3.1).**



**FIGURE 3.1** Sources of financing for sanitation and drinking-water

Source: 2011 GLAAS country survey



## EXTERNAL SUPPORT

In many respondent countries, external development aid remains a major source of financing for sanitation and drinking-water (Table 3.2), most likely for capital investment. In these cases, strong coordination among donors and alignment with WASH investment priorities are essential. GLAAS data indicate that coordination mechanisms are more likely to be in place for countries with multiple donors.

As discussed further in section 6, over US\$ 8.9 billion in development aid was directed to sanitation and drinking-water

in 2009. Major recipient countries in terms of aid amounts include China, India, Indonesia, Peru, Turkey, the United Republic of Tanzania and Viet Nam comprising over US\$ 1.5 billion in annual sanitation and water aid (2008–2009 average). ODA to middle-income countries such as China<sup>1</sup>, India and Turkey is primarily composed of loans that have a grant element of at least 25%. Sanitation and drinking-water aid comprised over 1% of GDP for seven countries, as shown in Table 3.3b.

Section 6 provides further details on external financial support for WASH.

**External support can be a major source of financing for some countries, highlighting the need for strong donor coordination and alignment with sector investment priorities (Table 3.2).**

**TABLE 3.2** Respondent countries reporting greater than 25% donor finance

Country	Donor finance (as % of government finance)	Major donors <sup>2</sup>	Number of donors	Sector-wide approach or other sectoral framework implemented for water and sanitation	Investment plan implemented
Madagascar	26	World Bank, African Development Bank, EU	12	Yes	Yes
Honduras	39	Spain, Japan, World Bank	14	Being defined	Under preparation
Kenya	41	Germany, World Bank, France	24	Yes	Under preparation
Afghanistan	46	World Bank, USA, Germany	13	Being defined	Rural water supply
Yemen	46	World Bank, Germany, Netherlands	12	Yes	Yes
Bangladesh	63	Asian Development Bank, Japan, World Bank	19	Drinking-water only	Yes
Lesotho	67	Ireland, World Bank, USA	9	Drinking-water only	Urban rural supply

EU, European Union; USA, United States of America

Sources: 2011 GLAAS country survey; OECD (2012)

**Many developing countries remain dependent on external aid for WASH. It accounts for more than 1% of GDP in seven developing countries. Only one African country is a top WASH aid recipient (Table 3.3).**

**TABLE 3.3** Top aid recipients for sanitation and water aid in 2008–2009

a) Top WASH aid recipients by dollar amount (ODA)

Country	Average donor disbursement for sanitation and drinking-water, 2008–2009 (US\$ million)	Donor financing for WASH (as % of GDP)
China	296	0.01
Viet Nam	274	0.29
India	252	0.02
Turkey	167	0.03
United Republic of Tanzania	161	0.77
Indonesia	157	0.03
Peru	139	0.11

b) Top WASH aid recipients by % of GDP (ODA)

Country	Average donor disbursement for sanitation and drinking-water, 2008–2009 (US\$ million)	Donor financing for WASH (as % of GDP)
Timor-Leste	11	1.94
Samoa	9	1.80
Burundi	17	1.31
Nicaragua	74	1.20
Lesotho	21	1.18
Liberia	10	1.15
Haiti	69	1.05

Sources: World Bank (2011); OECD (2012)

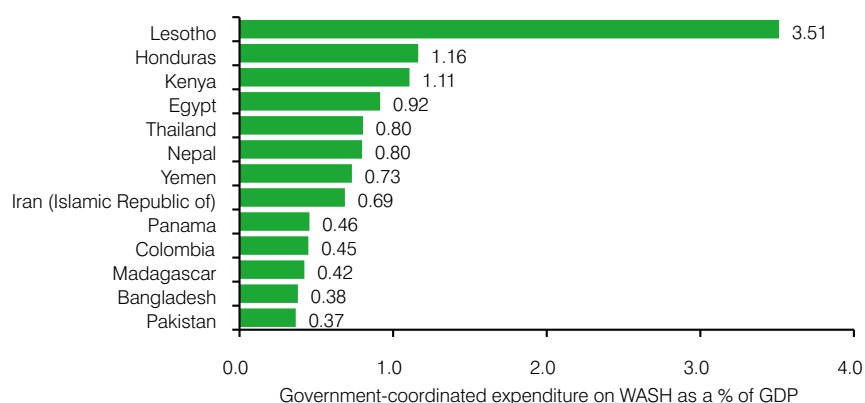
<sup>1</sup> In addition to an average annual aid of US\$ 296 million, China received an average annual amount of US\$ 332 million in non-concessional lending for water and sanitation in 2008–2009.

<sup>2</sup> Data derived from OECD with the exception of Bangladesh

### 3.2 ALLOCATION OF FUNDING: WHAT IS MONEY BEING SPENT ON?

One measure used to gauge political commitment and priority is the amount of public funds expended in sanitation and drinking-water, assessed as a trend or compared with spending in other sectors. For example, the 2008 eThekweni Declaration signatories set a target of spending 0.5% of GDP on sanitation. In the 2011 GLAAS country survey, a limited number (13 out of 74) of respondent countries reported total sanitation and drinking-water expenditures only from government and external funding sources (multilateral and bilateral donors and commercial lenders). For responding countries with sufficient data, these expenditures were compared with GDP. A median annual expenditure for sanitation and drinking-water, covering taxes (domestic government) and transfers (donors), but excluding household expenditures, was 0.73% of GDP.

**Government expenditure (from taxes and transfers) on sanitation and drinking-water ranged from 0.37% to 3.5% of GDP (Figure 3.2).**



**FIGURE 3.2** Public spending (from funds obtained through domestic taxes and external transfers) on sanitation and drinking-water as a percentage of GDP (2010 data)

Note: Not all countries reported contributions from regional and local governments (i.e. Egypt, Kenya and Yemen).

Sources: 2011 GLAAS country survey; World Bank (2012)

#### Increasing budget allocations to sanitation and drinking-water

A large proportion of the commitments made at the 2010 SWA High Level Meeting related to increasing the allocations to water and sanitation from developing countries' own budgets. More than 20 specific commitments were made by 12 countries in this respect. A few stand out because they were significantly influenced by the High Level Meeting process and because the countries report either having fulfilled the commitment or that they are making good progress. Ghana made progress on increasing its allocations for water and sanitation in its 2011 budget, creating a budget line in which specific allocations were made for activities related to the country's 2010 High Level Meeting commitments. Timor-Leste reports progress on increasing government investment in the WASH, going from US\$ 2 million in 2009 to US\$ 11.2 million in 2010 and then to US\$ 35 million in 2011.

**Summary data from respondent countries indicate that median government expenditure on sanitation and drinking-water is one third of that for health and one sixth of that for education (Table 3.4).**

**TABLE 3.4** Government expenditure on health, education and WASH

Country	Government expenditure on health (% of GDP) <sup>1</sup>	Government expenditure on education (% of GDP)	Government expenditure on sanitation and drinking-water (% of GDP)
Bangladesh	1.1	2.4 <sup>2</sup>	0.4
Colombia	5.4	4.7	0.5
Egypt <sup>3</sup>	1.9	3.8 <sup>2</sup>	0.9
Honduras	4.6	—	1.2
India	1.3	—	0.2
Iran (Islamic Republic of)	2.3	4.7	0.7
Kenya <sup>3</sup>	2.1	6.9 <sup>1</sup>	1.1
Lesotho	8.4	—	3.5
Madagascar	2.7	3.2	0.4
Nepal	1.7	4.7	0.8
Panama	6.1	3.8 <sup>2</sup>	0.5
Thailand	3.7	4.1	0.8
Yemen <sup>3</sup>	1.4	—	0.7
<b>Minimum</b>	1.1	3.2	0.2
<b>Maximum</b>	8.4	14.0	3.5
<b>Median</b>	2.3	5.5	0.7

<sup>1</sup> 2010 data.

<sup>2</sup> 2008 data.

<sup>3</sup> Not all countries reported contributions from regional and local governments.

Sources: 2011 GLAAS country survey; UNESCO (2012); WHO (2012); World Bank (2012)

### CAPITAL EXPENDITURE COMPARED WITH RECURRENT OPERATION AND MAINTENANCE EXPENDITURE

As noted previously, respondent countries indicate that there are insufficient resources to attain MDG and country targets. As such, it is important that limited financial resources be carefully balanced between new investment to provide service to the unserved and recurrent expenditure to sustain existing investments. As coverage levels increase, capital assets increase, as does the need for revenue to cover recurrent costs for human resources and for parts and supplies to operate and ensure the long-term maintenance of existing systems. However, as shown in Figure 3.3a, 31% of WASH funds expended in 11 respondent countries were directed towards operation and maintenance. Given that most countries report that operation and maintenance programmes for rural water supply are inadequate and that urban utilities frequently lack sufficient revenue to cover operation and maintenance costs (see section 3.7), this raises questions as to whether existing funding for operation and maintenance is sufficient to sustain WASH systems. Moreover, as cited in

the previous GLAAS report, 75% of the estimated financing needs for sanitation and drinking-water consist of recurrent operational and maintenance costs for existing services (Hutton & Bartram, 2008).

### SANITATION COMPARED WITH DRINKING-WATER EXPENDITURE

A review of expenditure breakdowns can indicate potential issues of how financial resources are targeted. The 2010 GLAAS report indicated that sanitation comprises approximately one fifth of the financing devoted to sanitation and drinking-water combined. The 13 countries that were able to provide data for this report indicated that 27% of total WASH funds were spent on sanitation (Figure 3.3b). According to global estimates, these same 13 countries have approximately 990 million people who do not have access to improved sanitation, compared with 190 million people who do not have access to an improved source of drinking-water. In other words, unimproved sanitation, which represents 84% of the total WASH unserved in these countries, receives only 27% of the total WASH funding.

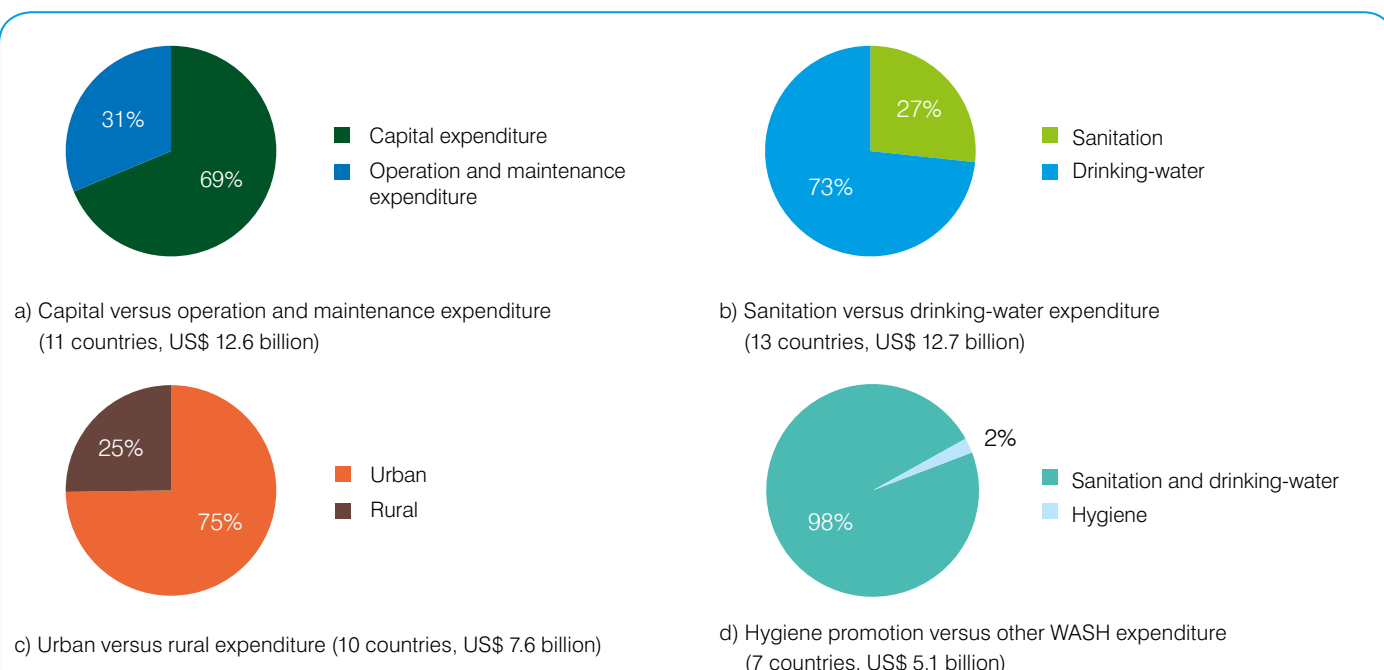
### URBAN COMPARED WITH RURAL EXPENDITURE

Similarly, the urban versus rural pie chart in Figure 3.3c indicates that for 10 respondent countries, 75% of expenditure is targeted at urban settings. However, these same 10 countries have approximately 44 million and 129 million in urban and rural populations, respectively, who do not have access to improved sanitation or drinking-water from an improved source. People without access to improved sanitation or drinking-water from an improved source in rural areas comprise 75% of the unserved, but benefit from only 25% of the expenditures for sanitation and drinking-water.

### HYGIENE PROMOTION

Expenditure for hygiene education and promotion was provided by seven respondent countries. The amount spent on hygiene education and promotion programmes across these respondents ranged from 0.3% to 8.2% of total reported public expenditure in WASH. Afghanistan, Bangladesh and Kenya each reported over 4% of total WASH expenditure for hygiene education and promotion.

**Limited sanitation and drinking-water expenditure data preclude making global statements concerning financial allocations derived from taxes and transfers, but hint at how expenditures are targeted (Figure 3.3).**



**FIGURE 3.3** Breakdowns of expenditures across different categories

Source: 2011 GLAAS country survey

### Funding operation and maintenance in rural water supply

Funding and technical support for operation and maintenance of rural water supply are clearly not adequate: 47 out of 70 countries report that maintenance programmes do not exist or are limited in effectiveness or scope. GLAAS findings indicate a variety of contributing factors, including an inadequate supply chain of spare parts and out-of-date or non-existent inventories of rural water points. The adequacy of funding to sustain urban water supply operations is discussed at the end of this section.

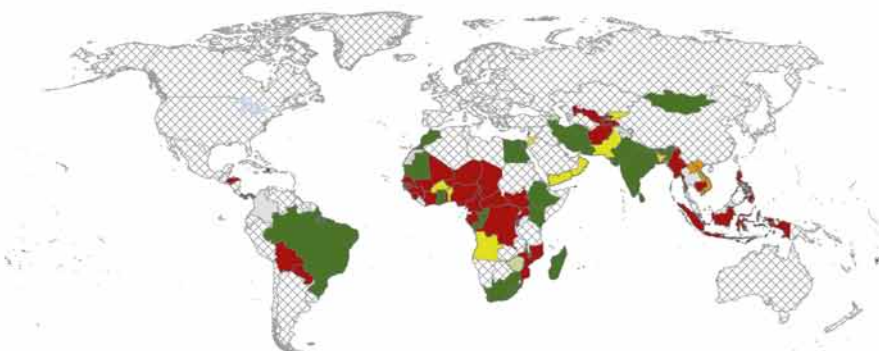
## 3.3 USE OF COMMITTED FUNDS

Efficient and timely release of committed funds is another key aspect of an effective financing system. Low annual disbursement rates of allocated budgets due to long procurement processes and heavy administrative burdens were cited by many country respondents as constraints to reaching sanitation and drinking-water planning targets (Figure 3.4).

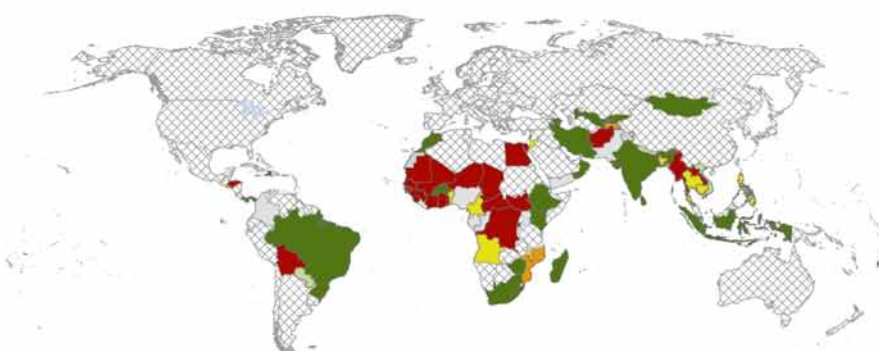
Use of aid can be improved by better coordination among donors and aligning with country processes. As an example, sector harmonization has been improved in Ethiopia by the three largest official development partners—the World Bank, the United Kingdom Department for International Development and the African Development Bank—which have all harmonized under a single financing modality channelled through the Ministry of Finance and Economic Development. Meanwhile, most other water sector official development partners—although still operating in project mode—have adopted the emerging sector-wide approach, replacing separate individual project missions and project-based field visits with biannual Joint Technical Reviews and an annual WASH Multistakeholder Forum.

Average absorption rates of central government capital commitments are low and show a declining trend (Figure 3.4).

Sanitation, absorption of committed domestic funds, 2011



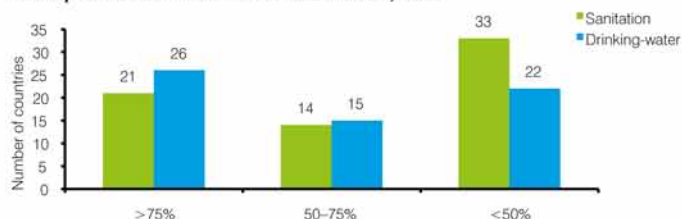
Drinking-water, absorption of committed domestic funds, 2011



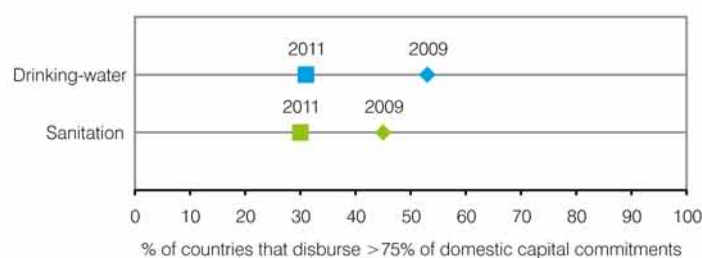
What is the percentage of domestic capital commitments utilized?



Absorption rates – domestic commitments, 2011



Trend from 2009 to 2011 (38 countries)



**FIGURE 3.4** What is the percentage of official domestic capital commitments utilized?

Source: 2011 GLAAS country survey (74 respondents); 2009–2010 CSO and GLAAS country survey



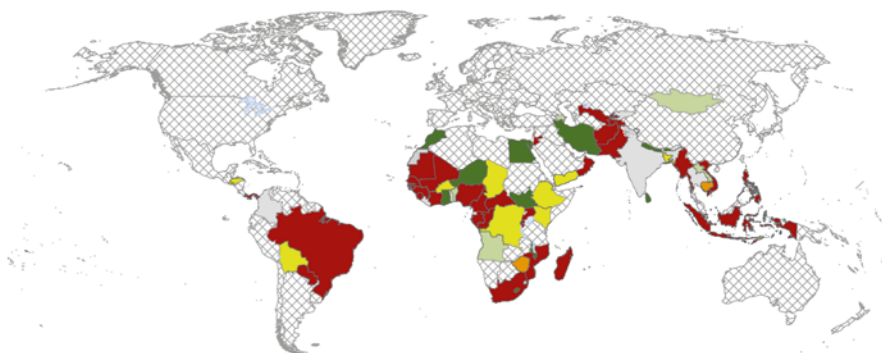
An analysis was undertaken to identify countries having high or low capacity to use or absorb funds against their WASH funding needs. To do this, a financial “absorption capacity” index was created, which amalgamated country responses on investment programmes, domestic and donor absorption capacity, and whether funding levels for local governments and operating entities were in line with decentralization policies. This index was compared with country responses on the sufficiency of funding. The results confirm previous evidence (WaterAid, 2011b) suggesting that those countries in greatest need, and that also lack the capacity to absorb and spend funds effectively, are hindered by funders that are reluctant to invest—thus creating a vicious cycle. This suggests that improvements in investment planning and financial procurement could make a positive difference towards improving funding sufficiency and creating a virtuous cycle. Results for urban drinking-water are shown in Figure 3.6.

#### The United Republic of Tanzania identifies factors for poor utilization of aid

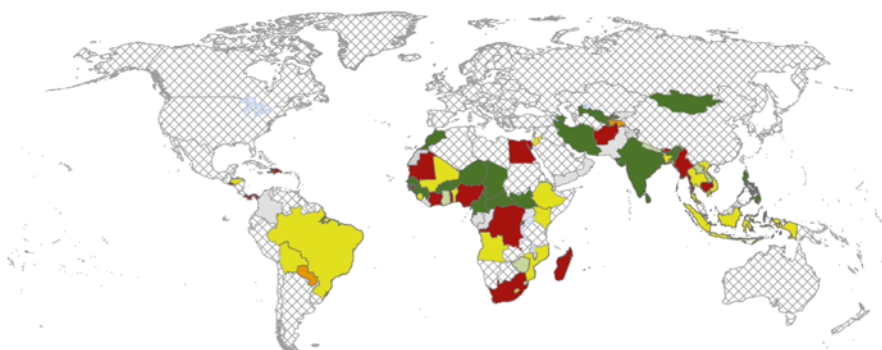
A public expenditure review of the water and sanitation sector in the United Republic of Tanzania in 2009 (Van den Berg et al., 2009) identified the lack of predictability of donor disbursements as a major reason for poor utilization of aid. “Unpredictability is linked to the following factors: (i) the planning and implementation of donor funding is not aligned with the government’s budget calendar, especially if the government and donor countries work with different financial years; (ii) the use of parallel systems that make it hard to obtain full information on the expected assistance flows; and (iii) the seasonality in project implementation.” These inefficiencies are further exacerbated by the fragmentation of donor funding, which results in high transaction costs for donors and government alike.

### Average absorption rates of donor capital commitments are even lower than domestic capital absorption rates (Figure 3.5).

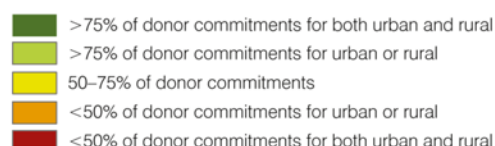
Sanitation, absorption of committed donor funds, 2011



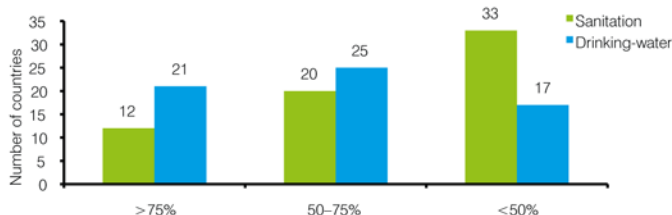
Drinking-water, absorption of committed donor funds, 2011



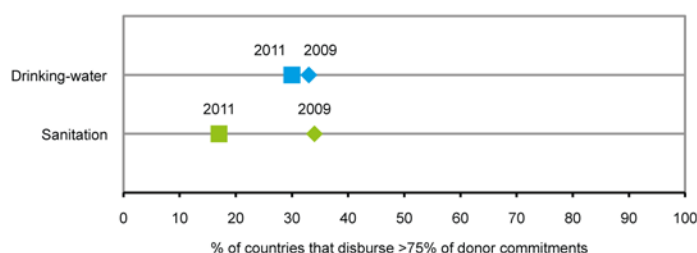
#### What is the percentage of donor capital commitments utilized?



#### Absorption rates – donor commitments, 2011



#### Trend from 2009 to 2011 (38 countries)



**FIGURE 3.5** What is the percentage of donor capital commitments utilized?

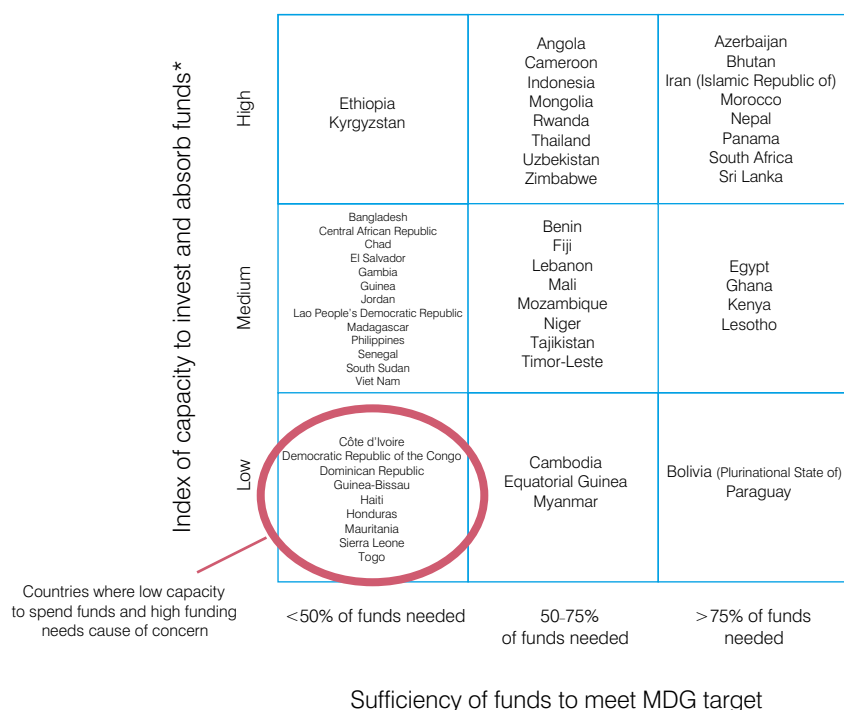
Sources: 2011 GLAAS country survey (74 respondents); 2009–2010 CSA and GLAAS country survey

### Key observations associated with financial absorption

A recent WaterAid report (WaterAid, 2011a) highlights key observations associated with financial absorption common to infrastructure sectors:

- High absorption rates appear to be a good indicator of the overall health and efficiency of the sector.
- Comparison of WASH with other sectors suggests that generic issues, such as the quality of public financial management or progress on decentralization, have an impact across all basic service sectors.
- Capital budgets are more likely than recurrent budgets to be underspent, so the relatively capital-intensive nature of WASH places it at greater risk to absorption constraints; procurement processes may also have contributed to WASH-specific absorption problems.
- Donor funds are much more susceptible than national funds to delay and underspending. With the majority of donor funds allocated to capital budgets, this overlaps with the previous bullet, but the evidence shows that donor procurement and reporting requirements are too burdensome on already-strained government capacity.
- The challenges for effective absorption are greater across all sectors in fragile states.

**Many of the same respondent countries that indicate a lack of financing as a constraint may not have an investment programme in place or have low usage rates for domestic and external donor commitments (Figure 3.6).**



**FIGURE 3.6** Sufficiency of funds versus investment and absorption capacity (urban drinking-water).

\* Note: Index based on a total score for four questions, including ; 1) Is an investment programme implemented?, 2) Percentage of donor capital commitment used?, 3) Percentage of domestic capital commitment used?, 4) Is funding in line with decentralization policies? This analysis, similar to others in this report, is based on self-reported country data.

Source: 2011 GLAAS country survey (57 respondents)

### 3.4 FINANCIAL MONITORING AND TRANSPARENCY: HOW CAN WE TRACK WHAT IS BEING SPENT?

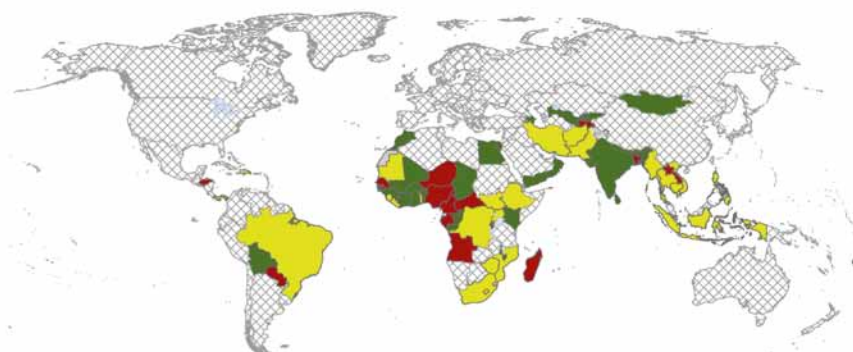
Comprehensive monitoring of budgets and expenditure at different levels of government and from all sources of revenue can inform resource targeting. It provides a better understanding of relative absorption rates and the effectiveness of policies and programmes and can provide insight into the cost-effectiveness of approaches used to reach WASH targets. Several respondent countries indicated that lack of a monitoring framework and post-project financial assessments constrained financial planning.

Transparent budgets and publication of financial statements enable stakeholders to identify priorities, funding sources and potential funding gaps. Figure 3.8 highlights how respondent countries are progressing in terms of budget transparency and comprehensiveness.

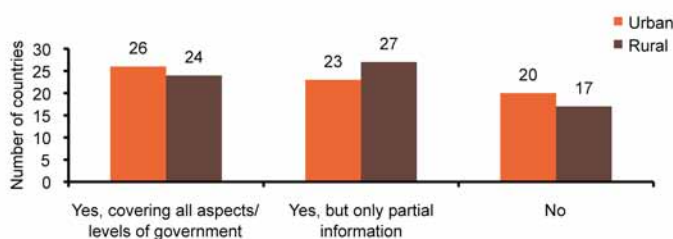
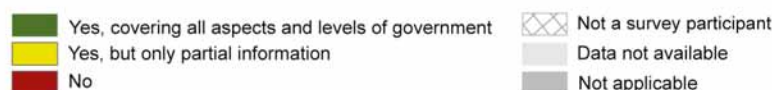
Further discussion of financing in this report (i.e. Annex B) will focus on the development of a standard methodology for tracking financial flows to sanitation and drinking-water at national levels. The ability to track financial flows can help governments in decision-making and make the business case for increasing investments in WASH as a whole.

**Over 60% of countries either have no financial information management systems in place or use one that provides only partial information (Figure 3.7).**

Use of financial systems in rural areas



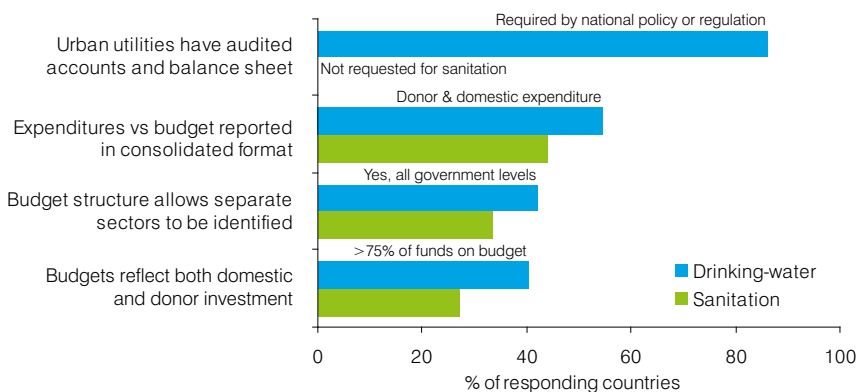
Is there a financial information management system to track investments and expenditures in drinking-water, sanitation and hygiene promotion at a national level?



**FIGURE 3.7** Is there a financial information management system to track investments and expenditures in drinking-water, sanitation and hygiene promotion at a national level?

Source: 2011 GLAAS country survey (74 respondents)

**Consolidated budget and expenditure information on sanitation is reportedly available for only 40% of country respondents (Figure 3.8).**



**FIGURE 3.8** Comprehensiveness of financial statements and transparency

Source: 2011 GLAAS country survey (74 respondents)

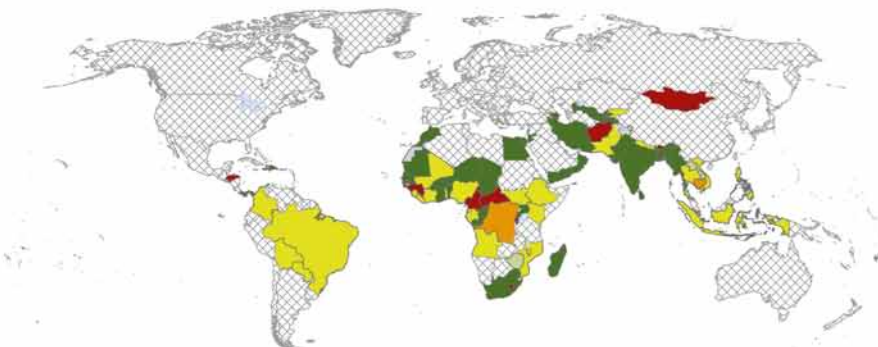
### 3.5 WASH INVESTMENT PROGRAMMES: DO COUNTRIES KNOW HOW MUCH THEY WILL NEED TO SPEND IN FUTURE?

Investment programmes help to define and prioritize capital needs, match expected resources with costs of infrastructure and programmes and improve intergovernmental coordination, predictability and transparency of budgeting and expenditure. Many respondent countries cite the development or implementation of investment programmes as significant achievements in recent years. These programmes can also be linked to a strategic financial planning process that answers questions such as who (e.g. users, taxpayers, donors) should pay for what (i.e. operating/capital expenses, water/sanitation, rural/urban/periurban areas) and what should be the future service level. The strategic financial planning process determines how much money is needed and where it would come from (OECD, 2009b).

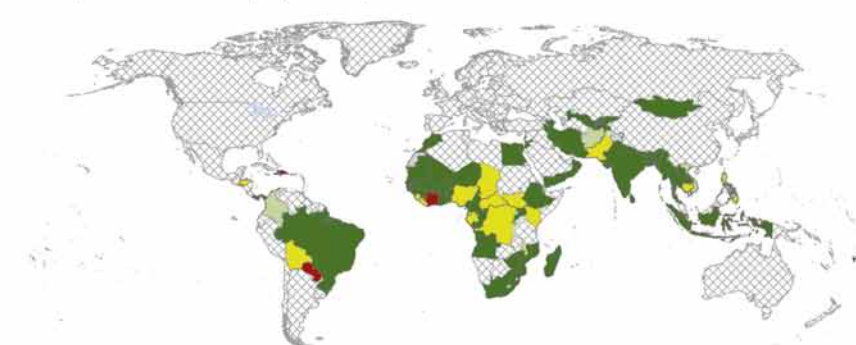
“The planned mid-term expenditure for sanitation development of 2010–2014 increases around four times compared to sanitation budget in the period of 2005–2009.”—*Indonesia 2011 GLAAS country survey response*

**WASH investment programming may be improving globally—62% of respondent countries have established drinking-water investment programmes, and 40% have established sanitation investment programmes (Figure 3.9).**

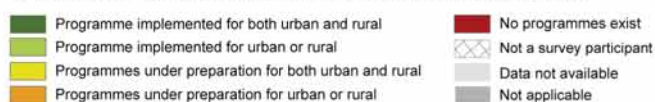
Sanitation investment programmes, 2011



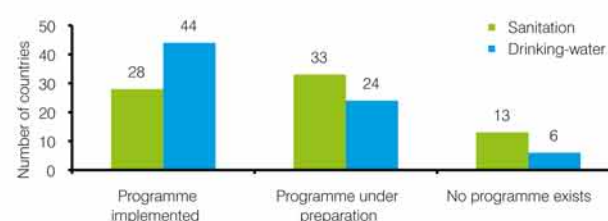
Drinking-water investment programmes, 2011



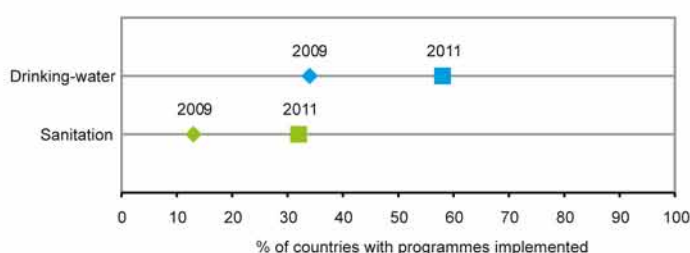
Is there an investment programme that is agreed and published?



Status of investment programmes, 2011



Trend from 2009 to 2011 (38 countries)



**FIGURE 3.9** Is there an investment programme that is agreed and published?

Sources: 2011 GLAAS country survey (74 respondents); 2009–2010 CSO and GLAAS country survey



### 3.6 ADEQUACY OF FINANCE

The 2010 GLAAS report (WHO, 2010) indicated that few countries had sufficient financial resources to achieve their reported targets. In fact, only 10 countries were reported to have more than 75% of the funds needed for sanitation. More recent data collected in the 2011 GLAAS country survey suggest that domestic budget allocations for sanitation and drinking-water have been increasing for some countries due to the development of investment plans and stronger political commitment. However, most respondent countries still report a shortage of adequate financial flows to meet targets and that budgets

frequently fall short of spending agreed in investment plans.

As evidence that expenditures are increasing for sanitation and drinking-water, five countries that reported in both the 2009 and 2011 GLAAS country surveys were compared, as shown in Table 3.5. Four out of the five countries indicated increases in expenditures to the sector.

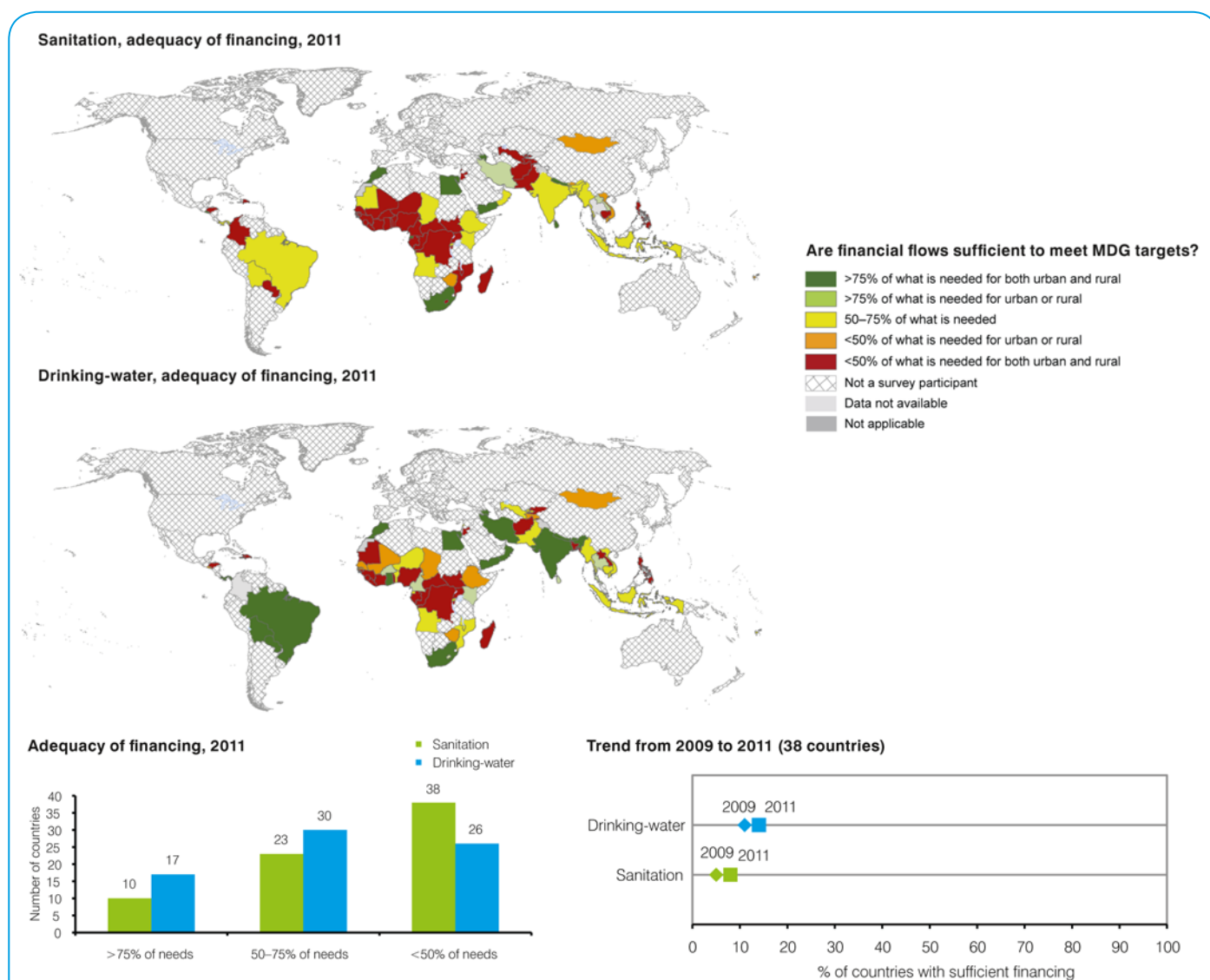
"A Strategic Environmental Sanitation Investment Plan is currently before cabinet, pending approval. This will contribute significantly to improved sanitation financing—increased and predictable funding as well as better targeting of the funds."— *Ghana 2011 GLAAS country survey response*

**TABLE 3.5** Comparison of expenditures for sanitation and drinking-water (2008–2010)

Country	Sanitation and drinking-water expenditure (US\$ million)	
	2008	2010
Burkina Faso	258	159
Kenya	286	355
Lesotho	33	118
Madagascar	13	107
Nepal	77	128

Sources: 2011 GLAAS country survey; 2009–2010 CSO and GLAAS country survey

**While financial resources for sanitation and drinking-water have increased in some countries, total funding is reported to remain inadequate, especially for sanitation (Figure 3.10).**



**FIGURE 3.10** Are financial flows sufficient to meet MDG targets?

Sources: 2011 GLAAS country survey (74 respondents); 2009–2010 CSO and GLAAS country survey

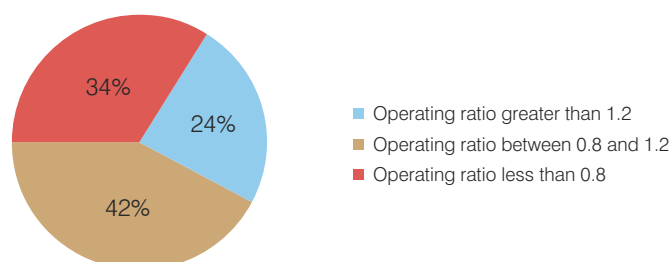
### 3.7 ADEQUACY OF REVENUE TO SUSTAIN URBAN WATER SUPPLY OPERATIONS

GLAAS country respondents reported that utilities were not even able to recover operation and minor maintenance costs through user fees, let alone the critical costs of long-term capital maintenance. Many respondent countries commented on existing infrastructure being in a poor state of repair, often as a result of a lack of funds for preventive and corrective maintenance. For drinking-water, this can result in a poor level of service, poor water quality or high non-revenue water. With time, degradation of the infrastructure will progress and can rapidly result in a need for more costly major asset replacement.

Three policy or implementation aspects of urban water management that may positively influence revenue generation include:

- Conducting tariff reviews and performing adjustments accordingly—Over half of countries indicate that urban tariffs are not reviewed or not adjusted upon review.
- Decision-making authority—Over half of countries indicate that urban utilities do not have decision-making authority with respect to investment planning.
- Achieving reductions in non-revenue water—Over three quarters of countries indicate that non-revenue water is more than 20% of water produced.

**One third of countries indicate that revenues cover less than 80% of operating costs for urban utilities (Figure 3.11).**



**FIGURE 3.11** Are operation and minor maintenance costs for utilities covered by user fees?

Source: GLAAS 2011 country survey (66 country respondents)

#### Non-revenue water reduction for efficient management of urban networks

Unbilled water produced by a utility—non-revenue water—together with other indicators, such as losses per connection or losses per kilometre, can be an indicator of the “health” of a water utility. The non-revenue water indicated by respondents to the 2011 GLAAS country survey corresponds to the average figure of 31% for utilities worldwide quoted by the International Benchmarking Network for Water and Sanitation Utilities (Van den Berg & Danilenko, 2011). A reduction of non-revenue water can also help to generate finance for capital maintenance and further investment, as well as reduce the strain on scarce water resources.

### 3.8 IMPLICATIONS FOR THE FUTURE

This section describes the sources, volume and targeting of funding for WASH. The limited data submitted suggest that households, central government and external donors all contribute significantly to WASH funding. The data indicate that funding is not necessarily targeted to those in need, that the WASH sector frequently has difficulty absorbing funding and that allocations may not be sufficient to support sustainable

operation and maintenance. The section overwhelmingly highlights a lack of robust information on WASH financing. It confirms that financial data are generally not effectively tracked and thus not available to inform decision-making. Strengthening the monitoring of financial flows through a methodology that ensures harmonization, comparability and consistency is urgently required. A proposed methodology is presented in Annex B.

#### Liberia Compact

In late 2010, following successful participation at the first SWA High Level Meeting, the Government of Liberia actively engaged SWA partners to mobilize resources in support of Liberia's WASH sector. In April 2011, the SWA partnership undertook to support national-level water and sanitation planning in Liberia with a joint Partner Mission. The Mission took place under the leadership of the Government of Liberia, including participation by President Ellen Johnson Sirleaf and several ministers. It set in motion a process to strengthen planning and both multiministerial and multidonor coordination. The Mission engaged Liberia-based and external SWA partners, including the Government of Ghana (as Ghana had recently created a Compact of its own), the Dutch development agency (Directorate-General for International Cooperation), the United States Agency for International Development, the African Development Bank, civil society partners, WaterAid, the World Bank's Water and Sanitation Program, UNICEF and the United Nations Development Programme (UNDP). The Mission resulted in a two-year Compact formalizing an agreement among the ministries, development partners and civil society organizations, setting out actions in the key areas of institutional reform, service provision, sector monitoring and financing. The Mission demonstrated how international support can be translated into national-level action—increasing local ownership, improving coordination and, importantly, making the WASH sector more “investment ready” to both finance ministries and development partners. In a country where water coverage and sanitation coverage are estimated to be only 73% and 18%, respectively, the Mission and the resulting WASH Compact are seen as critical steps in delivering sustainable and equitable access.



# 4

## Human resources



### KEY MESSAGES

- One half of countries did not report on how many WASH staff were in place, indicating a significant lack of information on human resources.
- Only 40% of responding countries reported sufficient human resources to operate and maintain urban drinking-water systems, and less than 20% for drinking-water systems in rural areas.
- There was a perceived acute shortage of extension staff for sanitation and hygiene promotion.
- Women make up less than 10% of the professional or managerial water and sanitation staff in half of the countries that responded to the survey.
- Lack of adequate funding and lack of technicians and skilled labour are commonly reported barriers to achieving sustainability.

Operating and maintaining sanitation and drinking-water systems and delivering sanitation and drinking-water services require a diverse range of people with a variety of training, experience and skills, including managers, planners, engineers, laboratory technicians, microbiologists, masons, plumbers and hygiene promoters. What makes sanitation and drinking-water perhaps more complex still is the involvement of a broad range of government bodies (frequently two or three ministries at the national level, further multiplied at lower levels of administration). This institutional infrastructure is complemented by parastatal authorities and nongovernmental entities, including the private sector and civil society organizations, that are directly involved in planning, design and implementation. The human resources available to ensure that adequate sanitation and drinking-water services are delivered and sustained are therefore an aggregate of the human resource capacity of all these different institutions. Coordination among the different organizations is essential when it comes to overall human resource planning for sanitation and drinking-water.

The health sector plays a vital role in promoting sanitation and hygiene in many countries, as well as in monitoring the safety of drinking-water supplied to users. In addition, the education and health sectors need to ensure that drinking-water and sanitation facilities are provided and maintained in their schools, clinics and hospitals.

In this complex and diverse institutional landscape, it is a daunting task to determine the role of each organization and to map the human resource capacity and requirements to deliver the services needed. Therefore, it should come as no surprise that some countries had problems reporting to GLAAS on human resource issues. That said, many countries suggested that their capacity to meet the MDG targets was critically hampered by a lack of human resources.

## 4.1 ADEQUACY OF HUMAN RESOURCE DATA

Nearly one half of the countries surveyed were unable to answer the question on how many staff they had in place for either drinking-water or sanitation in 2011. Of those that were able to respond, the answers varied widely. For example, certain countries reported having fewer than 10 staff

working on drinking-water at the central level, whereas other countries reported staff numbers in the thousands or higher. While this highlights some apparent serious human resource shortages in water and sanitation, the variation may also cast doubts on the reliability of available country data. Only one third of responding countries were able to indicate anticipated staffing levels or projected staffing needs for 2016.

### Assessing human resource capacity

“Mind the Gap”, a study funded by the United Kingdom Department for International Development and led by the International Water Association, commenced in 2008 and piloted the first method of its kind for sanitation and drinking-water to collect data on human resource gaps (skills) and shortages (number of workers) at the national level. Initial conclusions indicate that:

- Decentralization is often not accompanied by the necessary transfer of human and financial resources.
- Graduates lack practical experience, in part due to inadequate coordination between educational institutes and employers.
- Private companies, NGOs and donor agencies tend to attract the most skilled labour with the highest qualifications, but there is also strong competition from cutting-edge industries, such as the telecom industry and marketing companies.
- Low salaries, lack of benefits and poor working conditions in the public sector, especially for those working in remote areas, make it difficult to attract and retain good staff.

Following this initial study in five countries, the International Water Association, with the assistance of the Australian Agency for International Development and the United States Agency for International Development, is carrying out similar assessments of human resource capacity in a further 10 countries, with certain adjustments of the method to obtain even more robust and reliable data (IWA, 2011).

### Ethiopia's Health Extension Programme

The Health Extension Programme in Ethiopia was launched in 2003 in response to a lack of trained health workers. Women are selected who have more than 10 years of formal education and who want to work in their communities. Health extension workers are given training on family health, prevention and control of communicable diseases, hygiene and environmental sanitation, and health education and communication. By 2009, there were 30 000 health workers. The success of this programme is a result of investment in training by donors, widespread acceptance within communities and investment in information systems on family health, demographic data and use of services.



## 4.2 SUFFICIENCY OF STAFFING

Some countries that reported on water and sanitation staffing levels provided a staffing figure of fewer than 1000 for the entire country (e.g. covering central and local staff). While acknowledging that these estimates may be inaccurate, they nevertheless point to a massive gap in available drinking-water, sanitation and hygiene staff, often in the very countries that are most seriously off-track to meet the MDG targets. For example, few countries reported having sufficient staff in place to meet their needs for hygiene promotion.

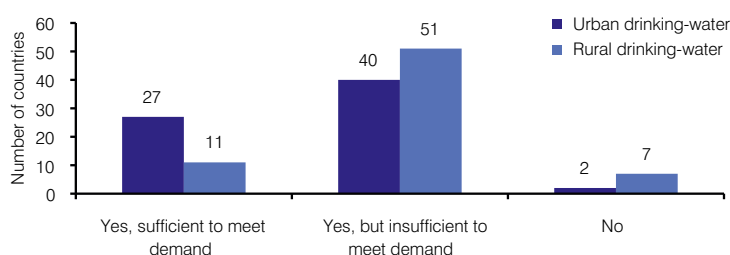
Further, only 40% of countries reported having sufficient staff to meet the operation and maintenance needs of their urban drinking-water systems. For rural drinking-water systems, the situation was worse, with less than 20% of countries reporting sufficient staff to operate and maintain their systems (Figure 4.1). Even where rural schemes are designed to be handed over to communities, some degree of oversight and support by technically qualified people is required. Without them, systems are bound to malfunction, and communities have no choice but to return to accessing unimproved water sources.

Staffing is also a concern in rural sanitation, where less than 20% of respondent countries consider the supply of skilled labour and technicians adequately developed to meet their needs (Figure 4.2).

### Human resource commitments

As part of the SWA initiative, a number of firm commitments relating to identifying and addressing human resource capacity gaps were made by several countries at the 2010 High Level Meeting; some were reaffirmations of existing initiatives. For example, in Timor-Leste, the government is implementing extensive training programmes to build human resource capacity. Angola has also reconfirmed its intention to address human resource capacity gaps at all levels as well as establishing a professional training centre for the water and sanitation sector. Some countries were significantly influenced by the messages conveyed at the High Level Meeting. Mauritania, for example, committed to hire and train sufficient staff in decentralized hydraulics and sanitation services and reports good progress in this regard.

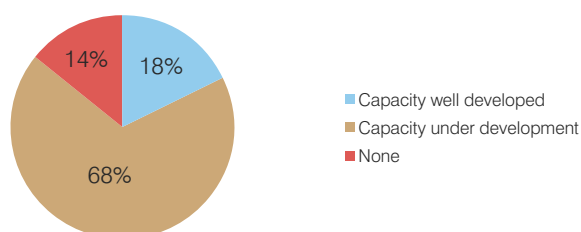
### Countries report insufficient staff to operate and maintain urban and rural drinking-water systems (Figure 4.1).



**FIGURE 4.1** Is there sufficient staff to operate and maintain urban and rural drinking-water systems?

Source: 2011 GLAAS country survey (67 country responses)

### Less than 20% of respondent countries consider the supply of skilled labour and technicians adequately developed to meet needs in rural sanitation (Figure 4.2).



**FIGURE 4.2** Are there sufficient supply-side artisans/technicians to meet needs in rural sanitation?

Source: 2011 GLAAS country survey (73 country respondents)

### 4.3 STAFF INCENTIVES AND CONTINUING EDUCATION

Countries report having insufficient incentives for drinking-water, sanitation and hygiene staff. Strengthening motivation can be fostered by a number of factors, including creating opportunities to develop skills and increase experience. Although many countries report that suitable in-country education and training institutions do exist, they also report that there are insufficient courses available to meet the needs of the existing staff. Mapping of training institutions that offer appropriate courses would be an important first step in strengthening human resource capacity across the regions. The possible role of national institutions for public administration and management needs to be explored, as these usually provide training for civil servants irrespective of the sector in which they work; they can therefore contribute to overcoming the fragmentation of the human resource base and of the institutional environment in which people operate.

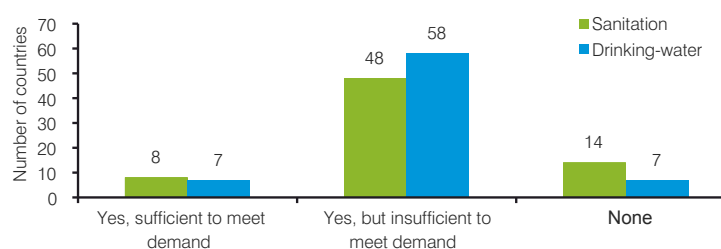
### 4.4 GENDER

Given the central role that women play in contributing to improving access to WASH, countries were asked to report on the proportion of female staff for sanitation (including both professional and skilled workers, such as hygiene promoters) and for drinking-water (professional workers only). In the staffing for both sanitation and drinking-water, women are a clear minority. Half of the GLAAS respondent countries reported that women make up less than 10% of the professional/managerial staff.

### 4.5 BARRIERS IMPEDING DEVELOPMENT OF HUMAN RESOURCES

Country survey respondents were asked to identify the most critical factor affecting the adequacy of human resource levels in drinking-water and sanitation at several levels of government and for both professionals and technical/skilled workers. Across the board, insufficient budget to hire and retain staff was viewed as the most limiting factor affecting human resources (Figure 4.4). The responses also indicate that the lack of qualified applicants plays a larger role in staffing at the local and regional levels than at the national or utility level.

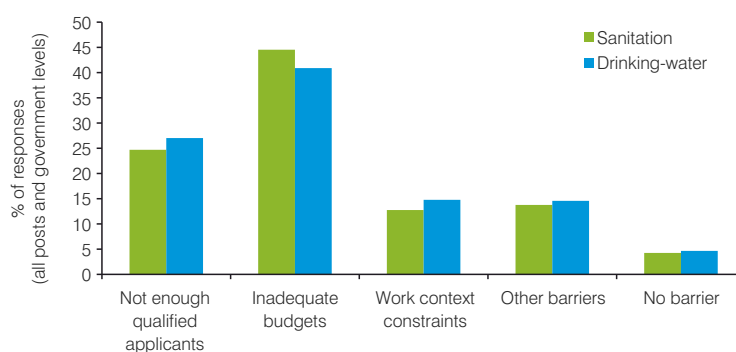
**In most countries, there are opportunities for continuing education and training, but the opportunities are insufficient to meet the needs of the staff (Figure 4.3).**



**FIGURE 4.3** Is there continuing education provided for staff?

Source: 2011 GLAAS country survey (72 country responses)

**Inadequate budget is the reason most frequently cited for a lack of staff (Figure 4.4).**



**FIGURE 4.4** Most prevalent reasons for staff shortages cited by countries

Source: 2011 GLAAS country survey (65 country respondents)

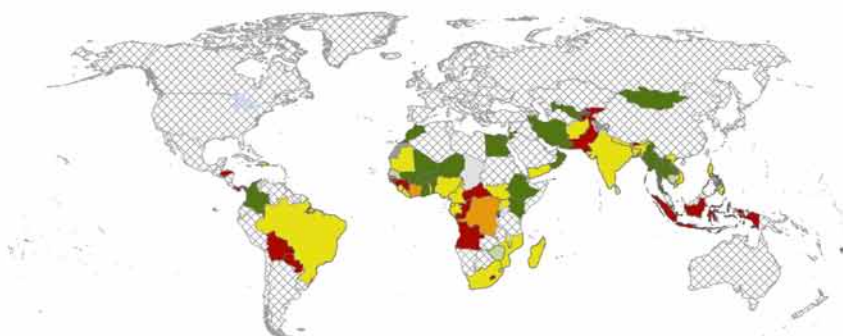
## 4.6 HUMAN RESOURCE PLANNING

A number of countries have already developed human resource strategies for delivering sanitation and drinking-water services, whereas an even greater number are developing their human resource strategies. A minority of countries have no specific human resource strategy for sanitation and drinking-water (Figure 4.5). Several respondent countries in the Latin America and Caribbean region pointed to the formulation of a human resource strategy and to planning as priority areas, indicating that a lack of targets, programmes and specific policies for human resource management are obstacles to attracting and retaining qualified personnel for sanitation and drinking-water.

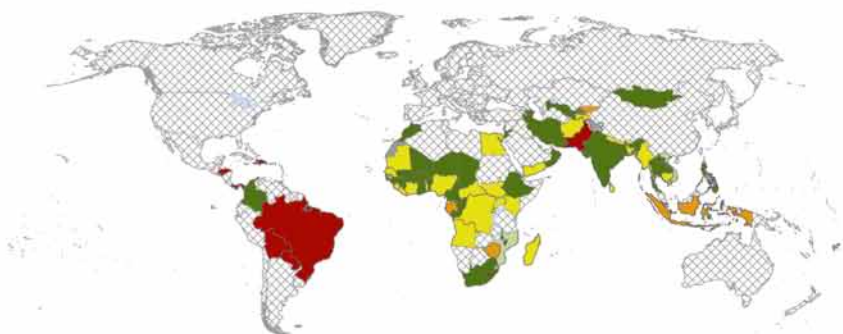
“Largely due to the lack of programmes in the medium and long term, the three spheres (Federal, State and Municipal) of government policies for human resources are still precarious, irregular and unsystematic.” — 2011 GLAAS country response from Latin America and Caribbean region

**Most countries either have or are developing human resource strategies for sanitation and drinking-water (Figure 4.5).**

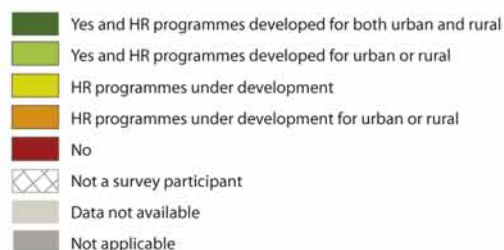
**Sanitation, human resources, 2011**



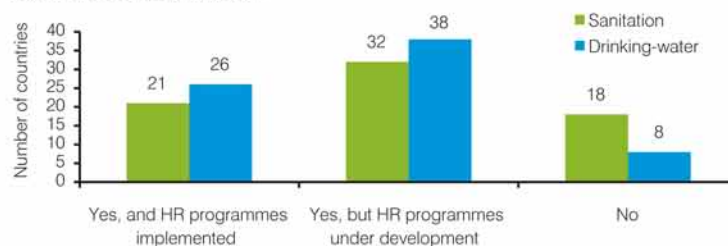
**Drinking-water, human resources, 2011**



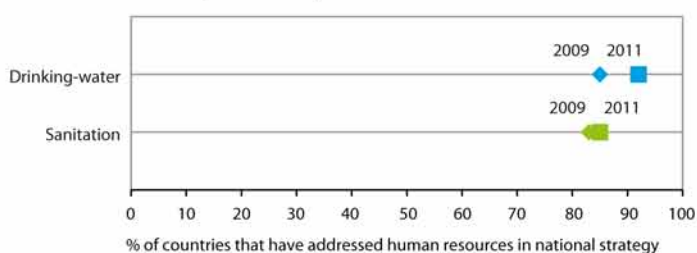
**Are human resources (HR) addressed in national strategies?**



**Human resources (HR), 2011**



**Trend from 2009 to 2011 (38 countries)**



**FIGURE 4.5** Are human resources addressed in national strategies?

Source: 2011 GLAAS country survey (74 country respondents)

### 4.7 IMPLICATIONS FOR THE FUTURE

This section shows that significantly greater efforts are required to assess human resource capacity, gaps and needs. This is a significant challenge, given the complexities of human resource planning. This planning, including the development of post descriptions, requires an appreciation of those competencies and skills needed for the delivery of services now and in the future. It demands an understanding

of the adequacy of secondary and tertiary educational institutions to respond to societal needs. It also requires awareness of the demand for skilled staff by the private sector. Tackling this already difficult task is impeded by the existing paucity of data on human resources within the various organizations responsible for planning, designing and implementing WASH systems and services. Further study is also required to understand the impact of an insufficient human resource base on the capacity of countries to absorb and use funds.

UN-Water GLAAS will work with relevant partners to institutionalize the assessment of HR data. At the same time, governments will need to ensure that the right institutional environment and career development incentives are in place for these opportunities to be seized, in order both to increase WASH services to the unserved and to maintain existing services.





## KEY MESSAGES

- Nearly 80% of countries recognize the right to water, and just over one half the right to sanitation. Progressive realization of these rights can occur as countries recognize their legal obligation to set out and implement policies and programmes that ensure equality, public participation and accountability.
- Other important aspects of realizing the rights to water and sanitation include targeting resources to unserved populations and ensuring that these resources are utilized effectively and fairly without discrimination. However, just one in five countries consistently apply equity criteria in funding allocations for sanitation, whereas one third apply equity criteria to drinking-water investments.
- Over 60% of countries have defined equity criteria, but most report that they are not systematically monitored.
- Over half (57%) of countries indicate that service providers report performance to their customers.
- Strengthening participatory processes through which communities are made aware of their rights can lead to greater ownership, more involvement in operation and maintenance and improved sustainability of sanitation and water services.

Inequity between and within communities in allocation of resources and the corresponding outputs remains a serious challenge. For example, local politics may influence resource allocations in such a way that communities with sufficient water and sanitation receive more funding for water and sanitation than those without. Equity and non-discrimination can be promoted by targeting resources to those facing significant limitations in independently accessing WASH, such as women, people with disabilities, children or the chronically ill.

## 5.1 HUMAN RIGHTS TO WATER AND SANITATION

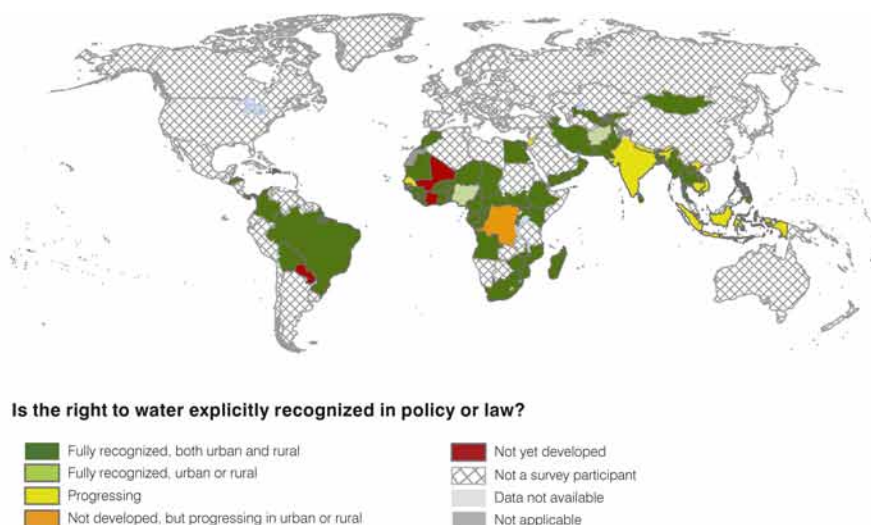
Governments that have recognized the rights to water and sanitation through international treaties and/or national legislation are obliged to establish a strategy or plan of action to ensure that the rights are realized. Governments need to take the lead, with the support of all relevant stakeholders, in taking concrete steps to progressively realize universal access to water and sanitation. This implies developing and implementing strategies to prioritize provision of services to those without access—often poor, vulnerable and marginalized groups.

### RECOGNITION OF THE RIGHTS TO WATER AND SANITATION

Nearly 80% of respondent countries indicate that the right to water is fully recognized in policy or legislation (Figure 5.1), and over 50% fully recognize the right to sanitation (Figure 5.2). While countries have cited the recognition of these rights as a major accomplishment, translation of these stated rights into concrete or explicit equity and non-discrimination provisions and pro-poor policies and strategies appears to be in its early stages.

“The human right to safe drinking water and sanitation is derived from the right to an adequate standard of living and inextricably related to the right to the highest attainable standard of physical and mental health, as well as the right to life and human dignity.”—*UN Human Rights Council (2010)*

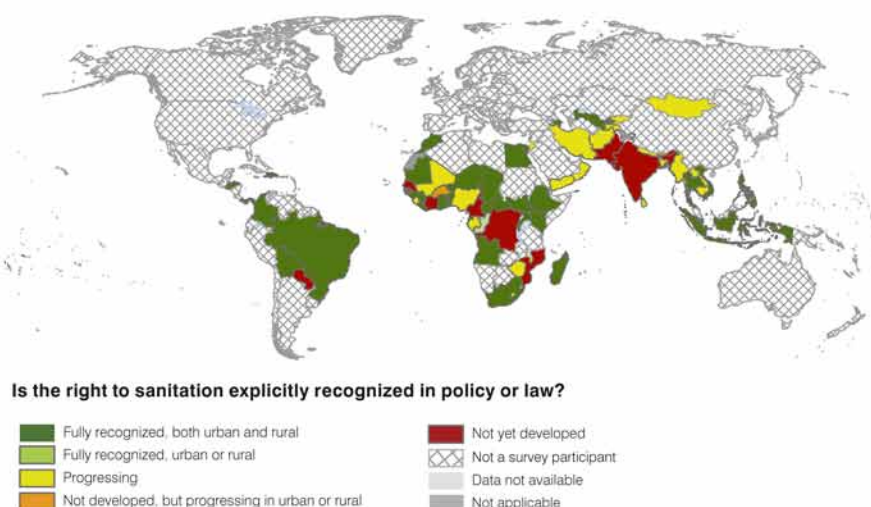
### Nearly 80% of respondent countries indicate that the right to water is fully recognized in policy or law (Figure 5.1).



**FIGURE 5.1** Is the right to water explicitly recognized in policy or law?

Source: 2011 GLAAS country survey (74 country respondents)

### Over 50% of respondent countries indicate that the right to sanitation is fully recognized in policy or law (Figure 5.2).



**FIGURE 5.2** Is the right to sanitation explicitly recognized in policy or law?

Source: 2011 GLAAS country survey (74 country respondents)

### International milestones

In 2002, the United Nations Committee on Economic, Social and Cultural Rights affirmed that water was a human right in its General Comment No. 15, which stipulates that the right to water entitles everyone to sufficient, safe, acceptable, physically accessible and affordable water for personal and domestic uses (UN Economic and Social Council, 2002). In 2010, the UN General Assembly (2010) and the UN Human Rights Council (2010) adopted resolutions recognizing safe and clean drinking-water and sanitation as basic human rights.



## COMPLAINT MECHANISMS AND LEGAL REMEDIES

When a country recognizes the rights to water and sanitation, it is bound by three types of obligations: to respect, to protect and to fulfil those human rights. First, states must refrain from interfering directly or indirectly with the enjoyment of the rights to water and sanitation. Second, states have an obligation to prevent third parties from interfering with the enjoyment of the rights. And third, states have to adopt the necessary measures directed towards the full realization of the rights to water and sanitation. In a majority of countries where the rights to water and sanitation

are recognized, citizen complaint mechanisms<sup>1</sup> and the possibility to judicially claim these rights are in place. For instance, 70% of respondent countries that recognize the right to water have indicated that this right can be claimed in a domestic court, and 75% indicate that effective complaint mechanisms exist for those who have unsatisfactory access. Countries indicate that use of these mechanisms is still limited, however, likely because the rights approach is relatively recent, and there is a consequent lack of awareness among the population and civil society.

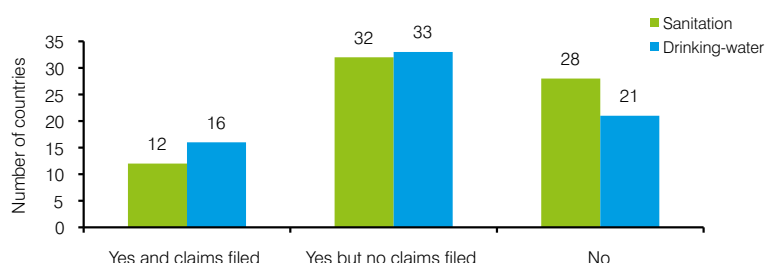
### Informing citizens of their rights and mechanisms to lodge complaints in Kenya

A 2010 pilot study led by the UNDP in Kenya's Bondo District (APS Consultants, undated; UNDP, 2010) helped spread awareness of the right to gain regular access to safe, accessible, sufficient and affordable water, but also about their responsibilities. People were informed of their rights and of a mechanism to lodge complaints, specifically concerning water corruption and vandalism. One of the main lessons learnt was that communities have not been situated as key stakeholders in the planning, design and implementation of WASH projects; as a result, their participation in these processes has been very limited. The project highlighted that where rights holders had been part of the decision-making, they had a stronger sense of ownership and were more involved in operation and maintenance to ensure sustainability of the water supply.

### Case example: Indigenous community in Botswana successfully claims legal right to water

Litigation can often lead to redress for individual victims, while also bringing greater legal certainty to claims on the rights to water and sanitation. This is of particular importance in cases where water access may be tied to land ownership. For instance, in January 2011, the final judgement was delivered on a lawsuit brought by representatives of a group of the Basarwa indigenous community living in the Central Kalahari Game Reserve in Botswana under the country's Water Act to enforce their right to water. The community found itself in the position of lawfully residing in the reserve, but not being allowed to make use of the existing borehole for their water needs. The community suffered from the lack of access to water, not having sufficient water for personal hygiene and other personal and domestic uses, leading to serious consequences for their health. The Court noted that the correct interpretation of the Water Act allowed anyone occupying land to drill boreholes for domestic use without a specific water right. Additionally, informed by General Comment No. 15 of the Committee on Economic, Social, and Cultural Rights (UN Economic and Social Council, 2002) and the 2010 resolutions of the UN General Assembly (2010) and the UN Human Rights Council (2010) on the rights to water and sanitation, the Court upheld the Basarwas' claim that deprivation of water can amount to degrading treatment under the country's Constitution.

## Twenty-three countries indicate that the right to water and/or sanitation has been claimed in a domestic court (Figure 5.3).



**FIGURE 5.3** Can people claim their human right to sanitation and drinking-water in a domestic court?

Source: 2011 GLAAS country survey (72 country respondents)

"Civil society is not aware of the human right to drinking-water". —  
Democratic Republic of the Congo 2011  
GLAAS country survey response

<sup>1</sup> Complaint mechanisms can be used by citizens to voice their concerns regarding the lack of service, the quality of the water and billing and tariff issues, to report vandalism, blockages and spills, etc. While the existence of complaint mechanisms is cited as standard good utility practice, it is also a critical aspect in a participatory approach set forth in the human rights framework.

## PROGRESS TOWARDS REALIZATION

To create an environment conducive to the realization of the rights to water and sanitation, countries are expected to embrace basic principles of 1) non-discrimination and equality, 2) meaningful participation in decision-making and empowerment and 3) accountability and transparency. Through the GLAAS questionnaire, country respondents were able to report on a limited number of elements linked to the realization of the rights to water and sanitation.

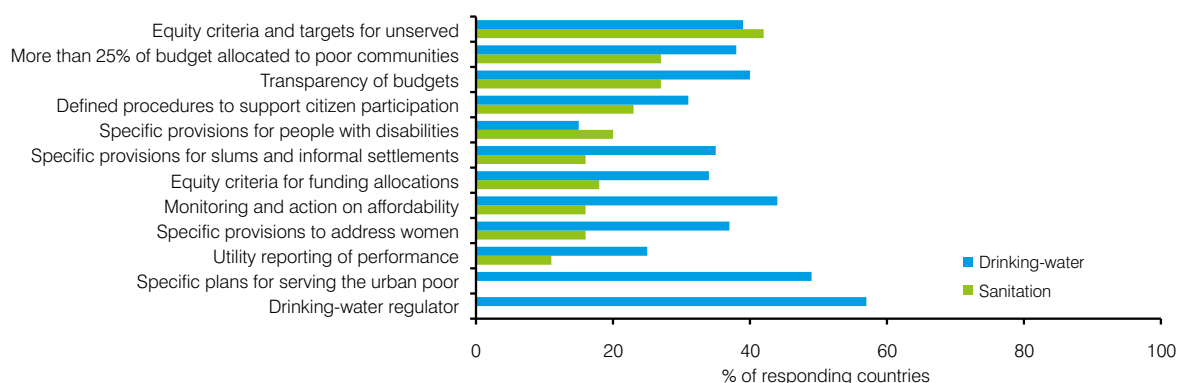
Figure 5.4 shows the percentage of respondent countries that have applied key non-discrimination or equity provisions in national strategy and funding decisions, including whether these provisions include marginalized or vulnerable populations. The chart also shows where there are defined procedures for local participation and the transparency of budgeting and utility performance reporting.

## PUBLIC REPORTING ON PERFORMANCE

To improve accountability and increase transparency, water utilities are

progressively recognizing the value of measuring and publicly reporting on the performance of services—on a range of operational, financial and tariff indicators. Public records of performance allow for benchmarking, which creates incentives to continuously improve services. Moreover, comparison of current performance with historical performance or with national or international standards is expected to trigger internal reforms in terms of policy-making and monitoring, better resource planning, better accounting, auditing and procurement, and better performance.

**Implementation of elements associated with realizing the rights to water and sanitation remain limited. (Figure 5.4)**



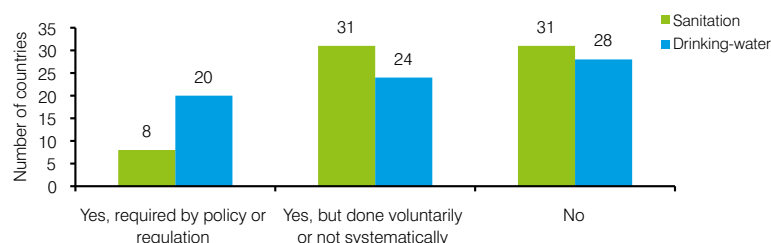
**FIGURE 5.4** Progress on equity, participation and accountability elements (% of countries with elements or provisions applied or implemented)

Source: 2011 GLAAS country survey (64 country respondents)

**Over half (57%) of countries report that service providers report performance to their customers (Figure 5.5).**

### Enforcing building codes in Ghana to increase access to sanitation

The majority of low-income tenants in Ghana lack access to sanitation facilities in their homes, despite requirements that houses include a latrine—building codes and by-laws have been in existence since 1948. Developers often modify plans to exclude toilets in order to maximize the number of rooms they can rent out.



**FIGURE 5.5** Do utilities report their performance results to their customers in their annual report or in bills?

Source: 2011 GLAAS country survey (72 country respondents)



## 5.2 USE OF EQUITY CRITERIA TO ALLOCATE RESOURCES

Consistent use of criteria to allocate resources to unserved and disadvantaged populations is a key tool to improve the equitable allocation of resources. Budget allocation often tends to favour urban areas, which results in inequitable outcomes between rural and urban areas.

### Inclusive water and sanitation

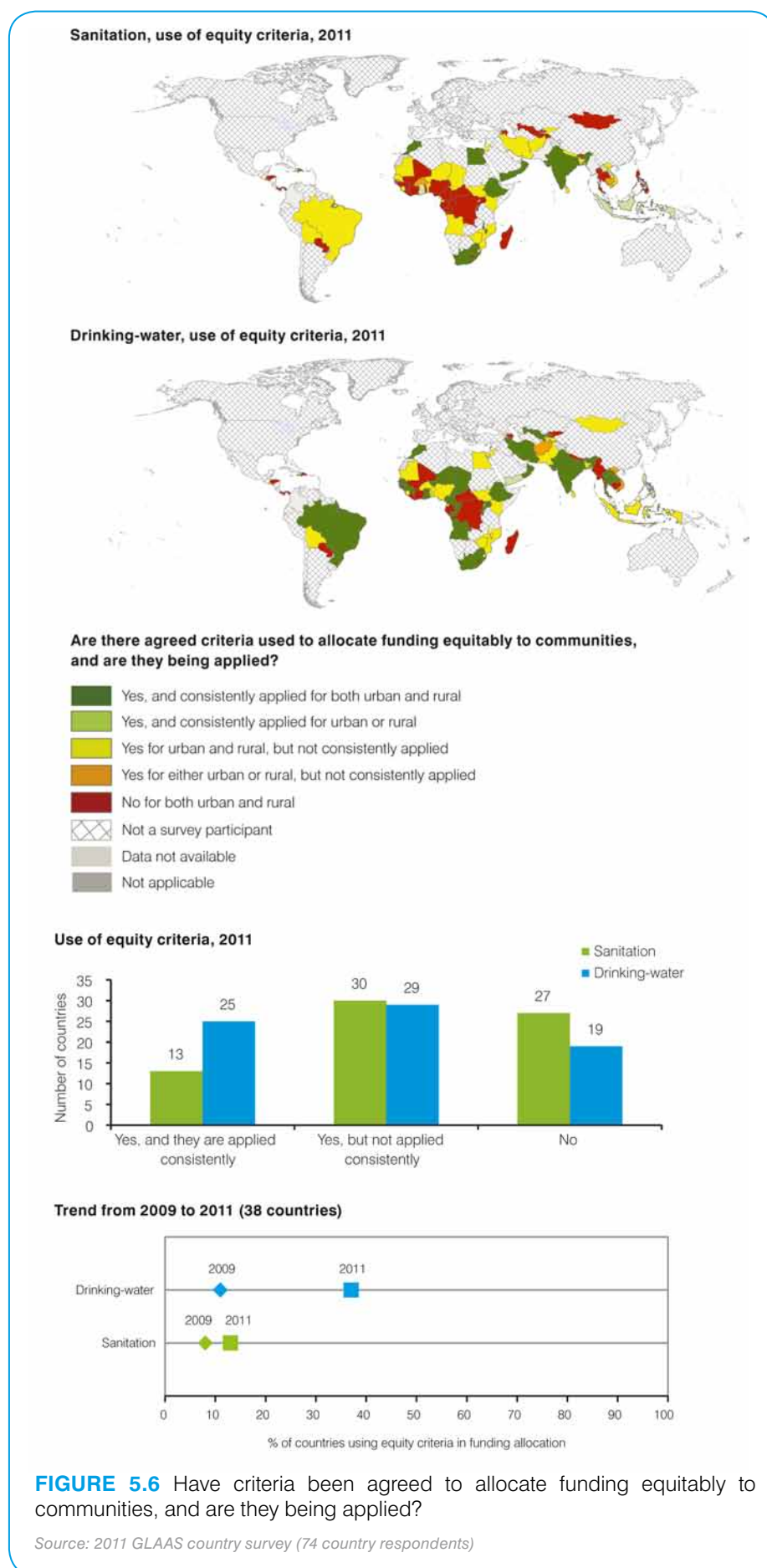
"Persons with disabilities include those who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others."—*Convention on the Rights of Persons with Disabilities* (UN General Assembly, 2006)

Most disabled people live without access to inclusive water and sanitation facilities, which can exacerbate impairments and poverty. Stigma and discrimination can also result in the denial of access to sanitation and drinking-water, making the disabled even more vulnerable. In GLAAS, a number of countries have water and sanitation policies that refer to people with disabilities; however, for the most part, consideration of people with disabilities tends to be included only in the projects of NGOs.

WaterAid and its partners in Madagascar have made the drinking-water supply, sanitation and hygiene facilities installed more accessible. The remodified designs have made the water and sanitation facilities easier to use and more accessible for many in the communities, including children, older people, those who are ill and pregnant women.

Source: Randrianarisoa (2010)

One eighth and one third of countries have consistently applied equity criteria in funding allocations for sanitation and drinking-water, respectively (Figure 5.6).



### 5.3 PERIODIC ASSESSMENT OF EQUITY POLICIES

Periodic assessments by civil society and governments of how resources are being allocated can help to ensure that poor people get their fair share of public spending on services. Such assessments help to increase citizens' participation, especially that of excluded social groups, in the formulation and implementation of sanitation and drinking-water policies and can often deliver more effective and equitable results. Where there are discrepancies between policy statements and actual delivery, civil society organizations play a key role in scrutinizing budgets and demanding more equitable resource allocation for water supply—sometimes resulting in improvements in public spending on services used by poor people and ensuring that public spending actually reaches and benefits poor people. Civil society organizations have also played a role in strengthening routine monitoring systems of WASH through mapping rural water supply and using the data to challenge this inequitable resource allocation, thus contributing to strengthened democracy and improved accountability.

Women's participation is encouraged in decision-making at the community level and is often prescribed in national water and sanitation policy and implementing strategies; however, women still face obstacles to participating in decision-making. The key challenge is to translate policy and affirmative action into a process in which women's participation (as public servants and service providers as well as consumers) is meaningful, not just symbolic.

On the whole, the impact of equity policies for vulnerable and marginalized groups tends not to be measured to see if they have in fact resulted in greater access. Countries confirm that there is a lack of both quantitative and qualitative evidence on equity and inclusion issues in WASH.

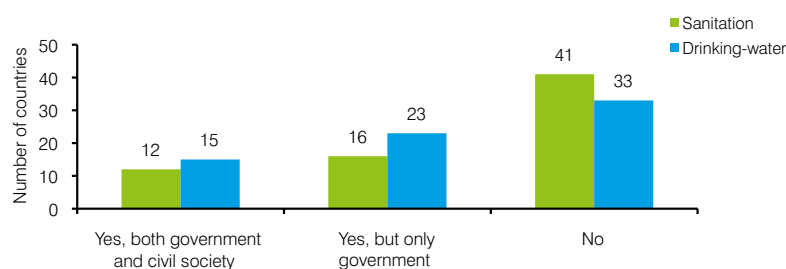
### 5.4 IMPLICATIONS FOR THE FUTURE

This section shows that while most countries have recognized the rights to water and, to a lesser extent, sanitation, greater efforts are required to progressively realize these rights. These include establishing and monitoring the impact of policies that promote equity and non-discrimination, public participation and accountability, as well as improved targeting of the poor and the vulnerable within countries. This implies encouraging multistakeholder participation in decision-making through consultation with users and through regular WASH reviews. Involvement of local communities will likely not only improve equitable outcomes, but, due to increased ownership over operation and maintenance, also promote sustained benefits for those using existing WASH services. How to scale up inclusion and equity issues, how to design services that are suitable for everyone and how to hold service providers to account for this all remain outstanding issues that need focused attention.

#### Commitments to improve targeting to the poor and vulnerable

At the SWA High Level Meeting in 2010, many countries made commitments related to improving targeting of the poor and vulnerable. Many related this to the use of data and evidence to identify groups in need. Angola, Ethiopia and Timor-Leste committed to using access and coverage data to ensure that allocations of funds reached the unserved; all have reported progress in doing this. Angola has since established an information system for water and sanitation to provide reliable data for planning, budgeting and evaluating implementation. Timor-Leste introduced a water information system called Sistema Informasaun Bee to monitor access to improved water sources; this is used to target unserved populations, especially in rural areas, where significant disparities exist. The information is also used to target vulnerable households in the development of district plans. The system has been expanded to include access to improved sanitation facilities. Senegal committed to strengthening its existing pro-poor policy. Likewise, donors made commitments to link identified gaps with aid allocations and report good progress. The United Kingdom is using coverage data to help determine the type of support that the poorest countries need. The African Development Bank is responding to the evidence of gaps in Africa by focusing on rural areas, while also maintaining support for periurban areas, small and medium-sized towns and urban sanitation.

#### Opportunities exist for more involvement of civil society in assessing the application of equity criteria (Figure 5.7).



**FIGURE 5.7** Do government and civil society organizations periodically assess and analyse whether equity criteria set by government have been applied in funding?

Source: 2011 GLAAS country survey (74 country respondents)

# 6

## External support



### KEY MESSAGES

- Despite the global financial crisis, the total amount of development aid for sanitation and drinking-water increased by 3% from 2008 to 2010, to US\$ 7.8 billion. Non-concessional lending for sanitation and water increased from US\$ 2.5 billion in 2008 to US\$ 4.4 billion in 2010.
- Only 7% of sanitation and drinking-water aid is directed at the maintenance of systems and services.
- Development aid for sanitation and drinking-water to fragile and conflict-affected states increased by 50% from US\$ 560 million in 2007 to US\$ 840 million in 2010 and increased from a low of 5% of total WASH aid in 2004 to 11% of total WASH aid in 2010.
- Only half of sanitation and drinking-water aid is targeted at regions where 70% of the global unserved live: the sub-Saharan Africa, Southern Asia and South-eastern Asia MDG regions.
- Aid for basic systems comprised 26% of aid for sanitation and water in 2010, an increase from 16% in 2008.
- Opportunities exist for increasing alignment with country priorities through sector budget support, which is currently used for less than 5% of WASH disbursements.



Despite the deep global financial crisis, ESAs remain committed to supporting countries in their quest to help governments achieve the MDGs. This commitment has been the key argument for ring-fencing parts of the aid budgets in general, and for sanitation and drinking-water in particular. The commitment is further reflected in a gradually rising aid budget globally, driven by the strong push from the European Union (EU), a number of bilateral agencies and international financing institutions.

ESAs have an equally strong desire to ensure that the commitments made translate into results that can be measured. This push by a number of ESAs to enhance the accountability agenda emerges as more ESAs are in the spotlight from their own electorates or constituencies. The added pressure to attribute success to an individual ESA's programme or project may reduce use of flexible, country-led funding mechanisms, such as general budget support or sector budget support. ESAs increasingly demand that the recipient countries report in more detail how aid has been used and how the recipient countries themselves report to their own constituencies. This increased openness is reflected in the International Aid Transparency Initiative, which grew out of the High Level Fora on Aid Effectiveness that started in Rome in 2002 and subsequently took place in Paris in 2005, in Accra in 2008 and, most recently, in Busan in 2011. In Busan, participants recognized the heavy burden placed on developing countries by the increase in the number of donors that provide aid to recipient countries, up from an average of two donors per receiving country in 1960 to 28 donors in 2006. Five guiding principles emerged from these High Level Fora: local ownership, alignment of development programmes around a country's development strategy, harmonization of practices to reduce transaction costs, avoidance of fragmented efforts and the creation of results frameworks.

A reliable and accessible database of information is necessary, given the emphasis on increased accountability and transparency and on the need to demonstrate results. Compared with other sectors, however, in particular health and education, the

sanitation and drinking-water sectors lack basic information, such as what different interventions cost, how much governments, the private sector and households invest in sanitation and drinking-water and spend on maintaining and improving the facilities they have, what human resources are available to sanitation and drinking-water and what human resource gaps need to be filled.

The world is coming under increased pressures from the effects of population growth. Increased wealth and consumption patterns bring added pressures on water resources and water usage by households. While globalization brings people closer together, it also brings conflicts from remote places closer to the donor countries. Countries suffering from fragility and conflict are increasingly becoming the focus of attention for external support, recognizing that these countries have the potential to undo the results of concerted development efforts and reverse many of the gains of the last two decades in reducing global poverty.

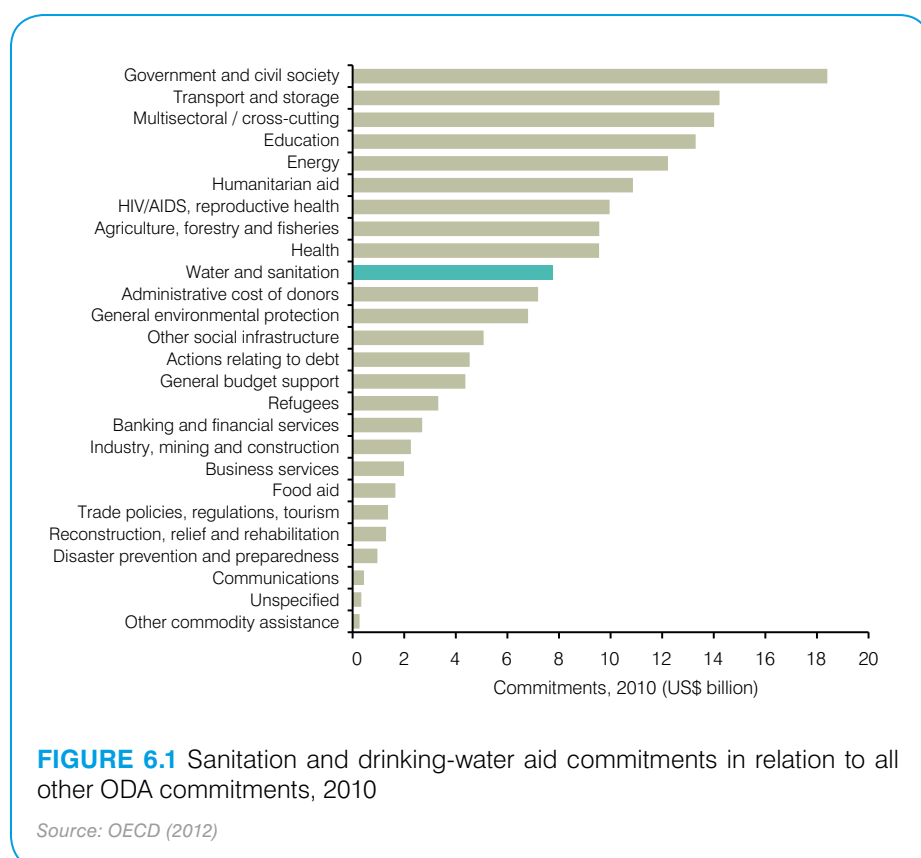
## 6.1 TARGETING OF AID SECTORS

Aid commitments from donors reporting to the OECD-CRS totalled US\$ 164 billion in 2010 (US\$ 163 billion at constant 2009 prices), up from US\$ 160 billion in 2008—an increase of 2.5%. Comparing 2008 and 2010, aid commitments for water and sanitation increased from US\$ 7.5 billion to US\$ 7.8 billion, a 3.2% increase.

It is notable that 2009 appears to be an exceptional year, when aid commitments for water and sanitation increased 17% from the previous year, largely due to a one-year increase of US\$ 1.1 billion in aid commitments from Japan.

Development aid commitments to sanitation and drinking-water were lower than those for most social sectors, including health and education, and lower than those for government and civil society, transport and storage, energy and agriculture.

### Aid commitments to water and sanitation remained at 4.7% (US\$ 7.8 billion) of total reported development aid in 2010 (Figure 6.1).





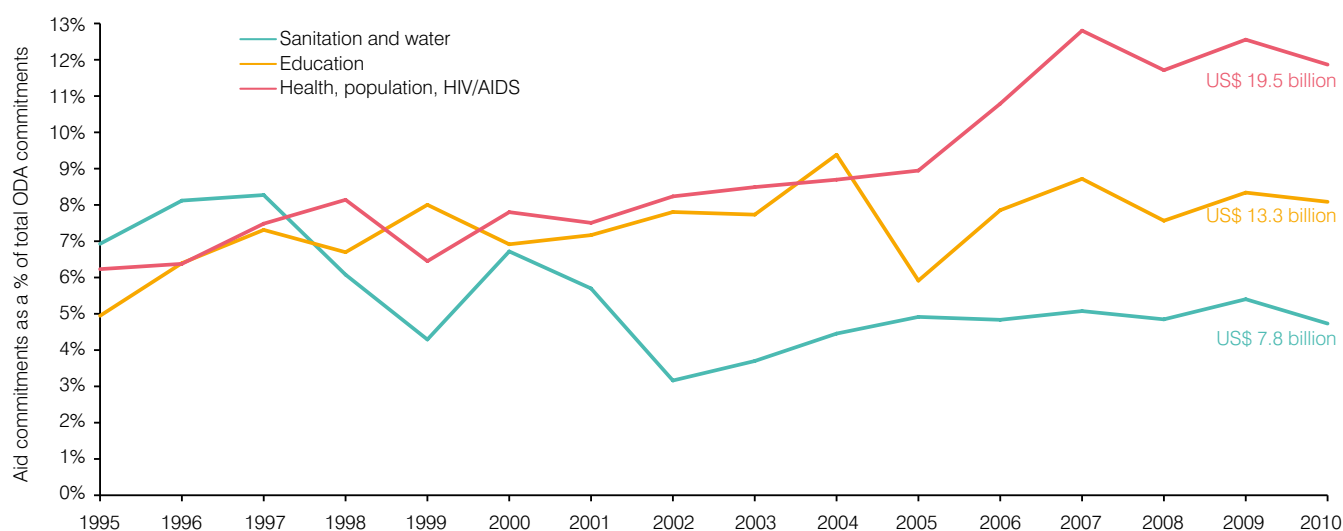
By comparison, the US\$ 13.3 billion committed to education represents 8.0% of total development aid, and the US\$ 19.5 billion committed for health, population, reproductive health and human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS) represents 11.9% of aid from donors reporting to OECD (Figure 6.2). This relatively high proportion of aid for health and education is mirrored in the responses to the 2011 GLAAS ESA survey in which both these sectors were frequently cited as being at or near the top of their priorities, whereas sanitation and drinking-water were frequently cited as being in the top one third of their priorities. This comparative analysis is not to suggest that development aid should be shifted from other sectors to water and sanitation; however, it is intended to provide insight into the trends and priorities of ESAs overall.

## 6.2 EXTERNAL FINANCING FLOWS

External development assistance to sanitation and drinking-water is provided by countries, multilateral organizations, NGOs and private foundations. Aid is provided through a range of funding channels and for various purposes, including general budget support and sector budget support, as well as to projects directly for infrastructure development, planning, training, advocacy, education and monitoring. Financial aid can be in the form of grants, concessional loans or credits and may cover the majority of national (government and external, but not including household) spending on sanitation and drinking-water—in some countries, near 90%.



**Aid for drinking-water and sanitation has risen slowly as a percentage of total development aid since the low point of 2002, but is still significantly below aid for social sectors, such as health and education (Figure 6.2).**



**FIGURE 6.2** Trends in aid for water and sanitation, education, and health/population/HIV/AIDS, as a percentage of total ODA commitments, 1995–2010

Source: OECD (2012)

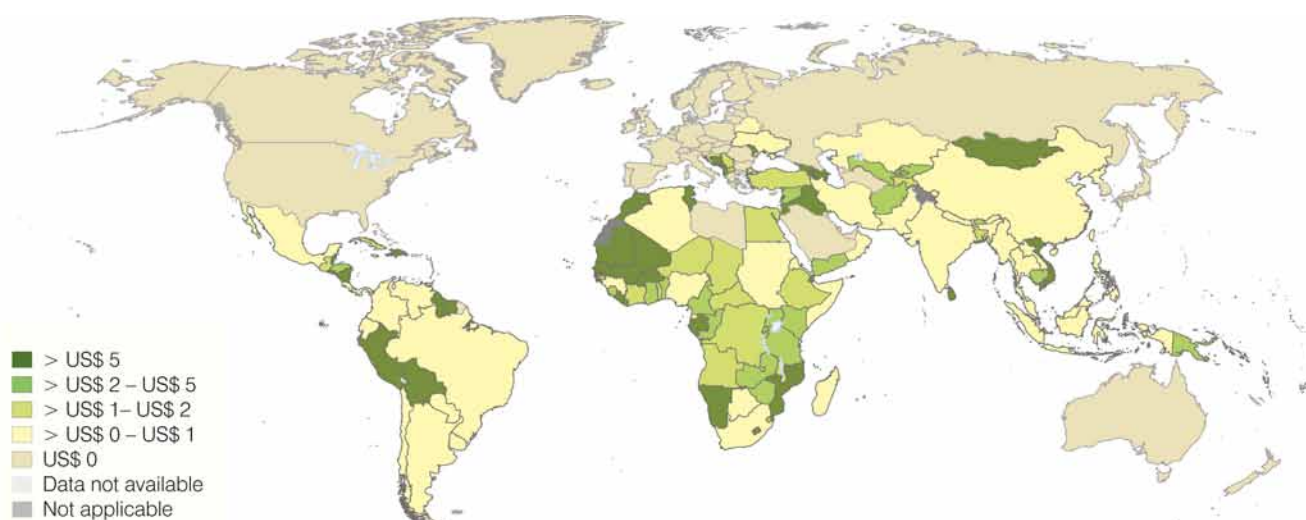
**The total amount of development aid for sanitation and drinking-water increased to over US\$ 7.8 billion in 2010, from US\$ 7.5 billion in 2008. Non-concessional lending increased from US\$ 2.5 billion in 2008 to US\$ 4.4 billion in 2010 (figure 6.3, 6.4).**

#### **AID COMMITMENTS (2008–2010 AVERAGE)**

In 2010, the grant and loan aid commitments of bilateral and multilateral ESAs to sanitation and drinking-water

amounted to more than US\$ 7.8 billion (as reported to OECD-CRS). Of this amount, US\$ 3.6 billion was in the form of grants, whereas US\$ 4.2 billion was in the form of concessional ODA loans.

Figure 6.3 shows the geographical distribution of US\$ 7.8 billion in annual average commitments made from 2008 to 2010 (in 2009 constant US dollars).



**FIGURE 6.3** Commitments per capita made to sanitation and drinking-water, 2008–2010 average

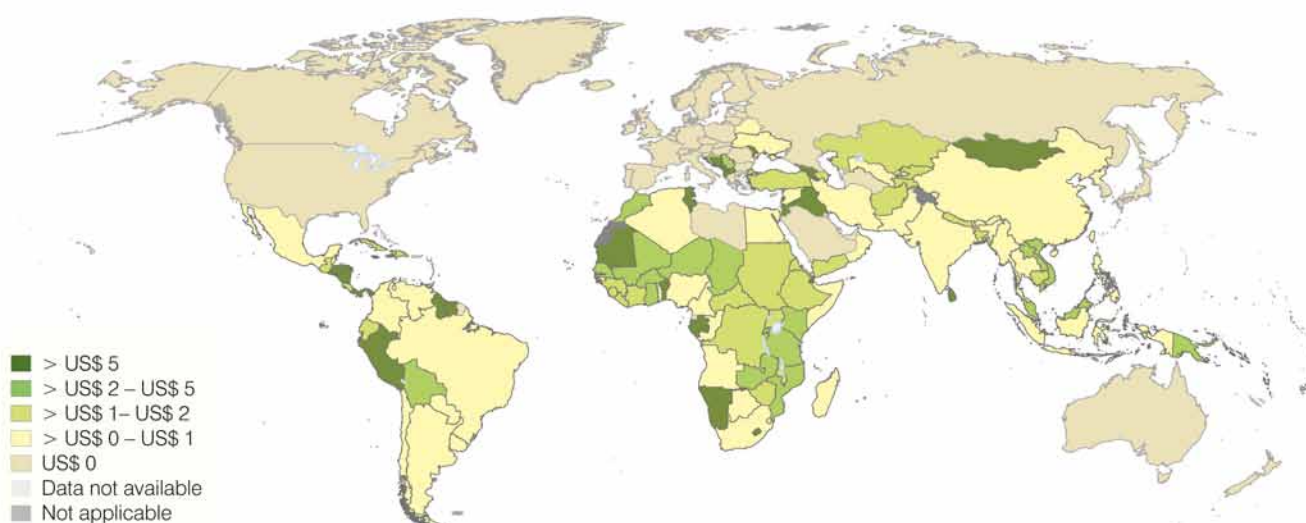
Source: OECD (2012)

#### **AID DISBURSEMENTS (2010)**

Disbursement data are available for OECD Development Assistance Committee members and several

multilateral agencies. The total external aid disbursements for sanitation and drinking-water amounted to US\$ 6.2 billion in 2010 (Figure 6.4), an increase

of 10% from the US\$ 5.6 billion reported in 2009.



**FIGURE 6.4** Disbursements per capita made to sanitation and drinking-water, 2010

Source: OECD (2012)

## NON-CONCESSIONAL LOAN COMMITMENTS (2010)

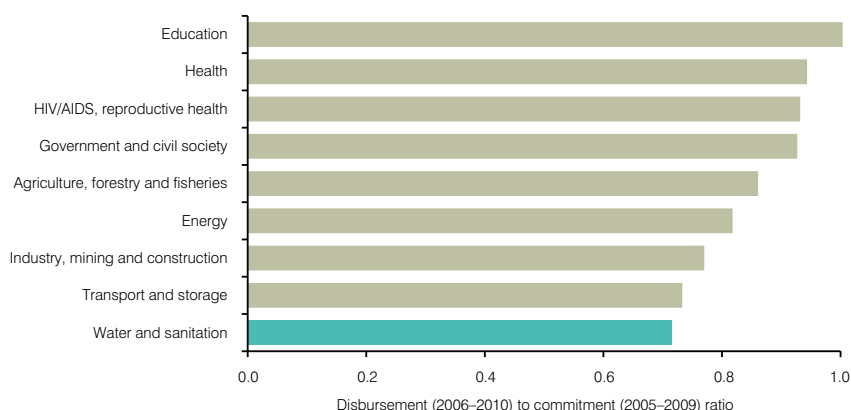
Non-concessional loan commitments (i.e. "other official flows" not classified as ODA) comprised US\$ 4.4 billion in commitments for water and sanitation in 2010. This represents a 78% increase in non-concessional loan commitments since 2008. This increase is reflected in the doubling of loan disbursements for water and sanitation from US\$ 1.6 billion to US\$ 3.4 billion from 2009 to 2010.

## RATIO OF DISBURSEMENTS TO COMMITMENTS

Water and sanitation development aid commitments and disbursements amounted to US\$ 7.8 billion and US\$ 6.2 billion, respectively, in 2010. This represents a disbursement to commitment ratio of 0.8 for funds in 2010, which is higher than the long-term average of 0.71. Low capacity to spend the funds committed by donors was reported as an issue by countries in the 2011 GLAAS country survey.

This difference between commitments and disbursements can be seen more clearly from Figure 6.5, where the ratios are compared over two five-year periods, 2006–2010 for disbursements and 2005–2009 for commitments, the one-year time lag allowing for project/programme administration to be put in place. It can be seen that both health and education disburse nearly 100% of the commitments made, whereas water and sanitation disbursement is near 70% of the commitments made. This is primarily due to the focus on higher capital expenditure as a proportion of disbursements in water and sanitation programmes compared with the emphasis on recurrent expenditure in health and education. Infrastructure sectors such as transport and construction are similar to water and sanitation in their disbursement to commitment ratios, whereas the agriculture, forestry and fisheries sector is significantly higher, at over 85%.

**The ratio of development aid disbursed versus committed is approximately 0.71 for water and sanitation, which is low compared with those for health and education, but comparable with those for infrastructure sectors (Figure 6.5).**



**FIGURE 6.5** Ratio of disbursements (2006–2010) to commitments (2005–2009) for sanitation and water

Source: OECD (2012)

## Donor commitments

The 2010 SWA High Level Meeting was a forum at which many donors made public statements relating to their plans to increase funding commitments to water and sanitation. The Asian Development Bank announced that it expected funding commitments to increase from 8.5% in 2003–2007 to about 17% for 2008–2010 and to double investment in the WASH sector to US\$ 10 billion during 2006–2010. Both of these targets have since been achieved. The African Development Bank stated that it plans to increase annual funding from US\$ 460 million in 2009 to over US\$ 1 billion by 2013. Germany stated that because it recognizes the challenges in sub-Saharan Africa, it planned to double the resources made available through the German Federal Ministry for Economic Cooperation and Development between 2008 and 2010, and in 2012 it reported that this commitment has been met. The commitment to the water sector in Africa doubled, with an increase from €149 million in 2008 up to almost €300 million in 2010. The European Commission repeated its commitment of €200 million with the objective of helping to achieve the MDGs and contribute to improving water governance and to the sustainable development of hydraulic infrastructure. Japan reiterated its grant and technical assistance of ¥30 billion for water and sanitation in African countries for five years between 2008 and 2012. Several donors made statements relating specifically to catching up on sanitation. Switzerland announced that approximately 45% of its WASH expenditure (3% of its total ODA) is spent on sanitation, and the Netherlands and Germany stated that 31% and 40%, respectively, of their development assistance budgets for WASH are allocated to sanitation.

### 6.3 PRIORITIZING COUNTRIES AND REGIONS

ESAs use a number of criteria to select countries to which to allocate development aid to sanitation and drinking-water. Recognized needs, based on poverty levels and on sanitation and drinking-water access and use data, influence the decisions of all the ESAs without exception, as does the actual ESA presence in the particular country. The influence of quality of the governance or reform efforts or the number of donors working in a particular sector is less certain. ESAs are particularly influenced by whether a country is a fragile or conflict-affected state (with these countries being a priority for many donors). Conversely, the presence of a human rights framework for sanitation and drinking-water thus far seems to have limited influence on the decision as to whether to support a particular recipient (Figure 6.6).

#### LOW-INCOME POPULATIONS

The world's poor are no longer strictly confined to low-income countries. With ESAs prioritizing poor people, knowing how to reach them is important. While the majority of poor people used to live in low-income countries—20 years ago, 93% of the world's poor lived in low-income countries—development in a number of these countries has moved them into the middle-income country category, and three quarters of the world's 1.3 billion poor now live in middle-income countries (Sumner, 2010). At the same time, recent work by the World Bank underlines the need for strong leadership and concerted national and international efforts in fragile and conflict-affected states where many of the poorest people live, and these countries have become an increased focus for many ESAs (World Bank, 2011).

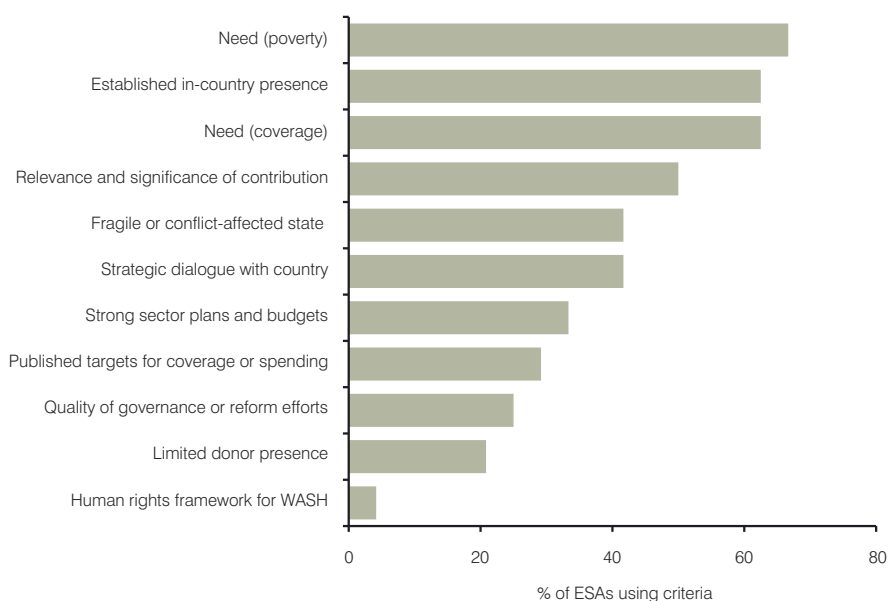
#### FRAGILE AND CONFLICT-AFFECTED STATES

Fragile and conflict-affected countries are furthest away from achieving the MDGs—no low-income fragile or conflict-affected country has yet to achieve a single MDG (World Bank, 2011). In general, 30% of ODA is spent in fragile and conflict-affected contexts (OECD, 2011a), but for water and

sanitation, the figure was only 11% in 2010 (up from a low of 5% in 2004). There are many current initiatives to increase attention to these countries. For instance, at the Fourth High Level Forum on Aid Effectiveness in Busan, Republic of Korea, in November/

December 2011, a number of countries and international organizations endorsed an agreement on a new global direction for engagement with fragile states.

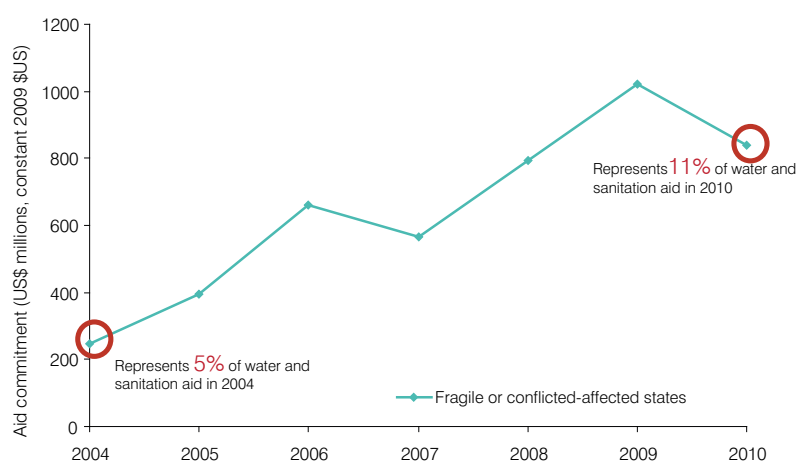
#### Multiple factors influence donor aid prioritization (Figure 6.6).



**FIGURE 6.6** Percentage of ESAs using criteria to select priority recipient countries/regions

Source: 2011 GLAAS ESA survey

#### Development aid for sanitation and drinking-water to fragile and conflict-affected states increased by 50% from US\$ 560 million to US\$ 840 million from 2007 to 2010 (Figure 6.7).



**FIGURE 6.7** Trends in sanitation and water aid commitments for fragile or conflict-affected states, 2004–2010

Source: OECD (2012)



## REGIONAL TARGETING

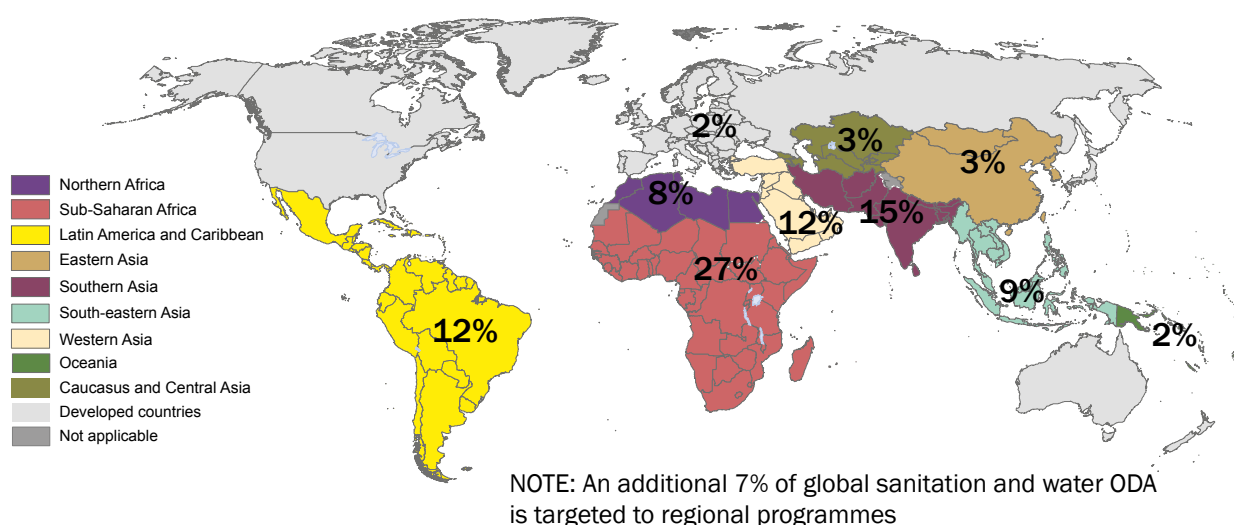
Seventy per cent of the world's population without sustainable access to basic sanitation and safe drinking-water live in the sub-Saharan Africa, Southern Asia or South-eastern Asia MDG regions. In 2010, sub-Saharan Africa received the most aid for sanitation and drinking-water of any region in absolute terms, followed by the Southern Asia and Western Asia regions.

## RELATIONSHIP BETWEEN AID ALLOCATIONS AND WATER AND SANITATION COVERAGE

To determine the relationship between donor aid targeting and coverage, recipient aid (average commitments from 2008–2010 reported to OECD) per capita is compared with average coverage level for sanitation and drinking-water for each aid recipient country. Twelve countries with less than 50% average coverage were found to

receive less than the median aid per capita amount of US\$ 2.80. If country coverage level is an important factor for donors when selecting priority countries, it would be expected that more of these countries would receive higher aid levels.

**Half (51%) of sanitation and drinking-water aid is targeted to the sub-Saharan Africa, Southern Asia and South-eastern Asia MDG regions, those parts of the world where 70% of the unserved live (Figure 6.8).**



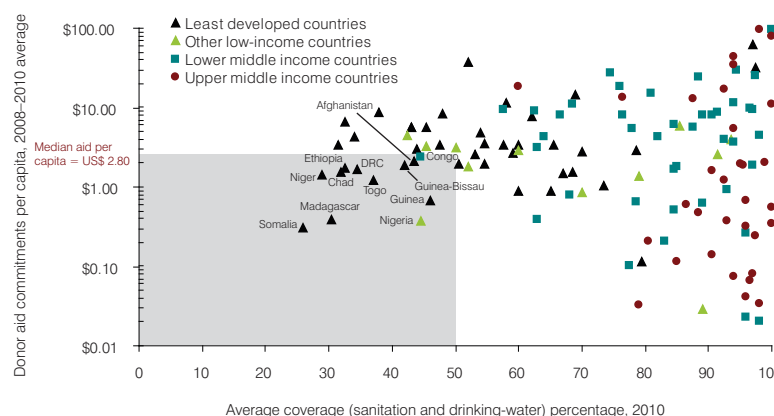
**FIGURE 6.8** Sanitation and water aid commitments by MDG region, 2010

Sources: 2011 GLAAS ESA survey; OECD (2012)

### g7+ countries

In 2010, a group of seven of the world's most fragile states formed the g7+. The group has grown to 19 states and now includes countries across Asia, Africa and the Pacific, representing 350 million people globally. Participating countries in the g7+ are Afghanistan, Burundi, the Central African Republic, Chad, Côte d'Ivoire, the Democratic Republic of the Congo, Ethiopia, Guinea, Guinea-Bissau, Haiti, Liberia, Nepal, Papua New Guinea, Sierra Leone, Solomon Islands, Somalia, South Sudan, Timor-Leste and Togo. The g7+ meets regularly within the framework of the International Dialogue on Peacebuilding and Statebuilding. High on the agenda of reforms being promoted by the g7+ are strengthening democratic processes, improvements in security and better resource and revenue management (Verhoeven & Fonseca, 2012).

**Many countries with low coverage levels receive low levels of water and sanitation aid per capita (Figure 6.9).**



**FIGURE 6.9** Donor aid (average annual commitment, 2008–2010, constant 2009 \$US) per capita versus average coverage in countries

DRC, Democratic Republic of the Congo

Sources: OECD (2012); UNICEF/WHO (2012)

## 6.4 AID ALLOCATION BREAKDOWNS

### SANITATION AND DRINKING-WATER

The UN General Assembly put the spotlight on sanitation when it declared 2008 the International Year of Sanitation. The goal was to raise awareness and to accelerate progress in sanitation, which, then and now, lags behind drinking-water in terms of progress towards attaining the MDG target. Further, in 2009, the OECD responded to Member State requests by disaggregating reporting codes for water and sanitation with the intention of improving monitoring of development aid for sanitation separately from that for water.

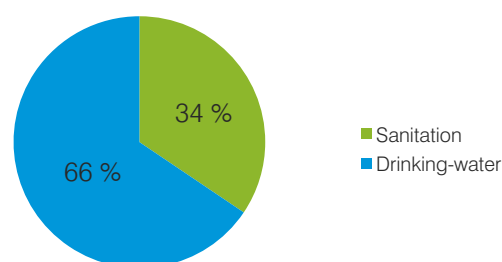
The first year (2010) of disaggregated data from the OECD-CRS confirms previous data from GLAAS, highlighting the difficulties for donors to report separately on aid for water versus sanitation. Of the US\$ 7.8 billion in commitments for sanitation and water development aid in 2010, US\$ 3.0 billion was allocable to either sanitation or drinking-water. However, only 4 donors (Arab Fund for Economic and Social Development, Belgium, Japan and the World Bank) out of 20 that committed more than US\$ 50 million in 2010 could allocate more than one half of their aid specifically to sanitation or drinking-water. Some of the difficulty is due to the fact that a portion of aid for sanitation and drinking-water can be attributed to upstream activities that benefit both areas (i.e. governance, advocacy, etc.) or due to information systems not being designed to break down projects in this manner. Table 6.1 lists the top donors in 2010 and the extent to which it was possible to allocate their aid separately to sanitation or drinking-water. Nineteen donors were able to allocate at least a portion (i.e. greater than 1%) of their WASH aid commitments specifically to sanitation or drinking-water. Of the US\$ 3.0 billion in allocable aid reported to OECD for 2010, US\$ 1.0 billion was targeted for sanitation and US\$ 2.0 billion was targeted for drinking-water. In addition, three donor respondents to the GLAAS survey that do not report to the OECD-CRS provided partial breakdowns.

**TABLE 6.1** Ability to allocate aid commitments separately to sanitation or drinking-water, 2010

External support agency	Total aid commitment for sanitation and water, 2010 (millions US\$)	% of 2010 WASH aid commitment allocated separately to sanitation or water
Japan	1850	93
International Development Association (World Bank)	1025	67
Germany	783	0
EU institutions	707	9
France	524	0
USA	427	5
Spain	323	20
Republic of Korea	248	3
African Development Fund, African Development Bank	202	18
Asian Development Bank Special Funds	192	0

Source: OECD (2012)

**Aid commitments for sanitation comprise 34% of allocable commitments to basic and large systems for sanitation and drinking-water (Figure 6.10).**



**FIGURE 6.10** Comparison of donor commitments on sanitation with donor commitments on drinking-water

Sources: 2011 GLAAS ESA survey; OECD (2012)

#### Bill & Melinda Gates Foundation follows a sanitation-focused approach

Since 2009, the Bill & Melinda Gates Foundation has followed a sanitation-focused approach to its grant-making. While the foundation continues to fund current grants that are focused on clean water initiatives, the vast majority of funding will be focused on sanitation projects (BMGF, 2011). According to the foundation's strategy overview (BMGF, 2011), "While problems related to sanitation and water are closely linked, today more than twice as many people lack safe sanitation as safe water. Nonetheless, the problem of poor sanitation has not received the same level of attention and funding as water. Our new strategy in the water, sanitation, and hygiene sector will enable the foundation to play a catalytic role in sanitation, while also supporting efforts to solve water problems."

#### German Development Cooperation increasing focus on sanitation

In sub-Saharan Africa, German Development Cooperation is increasingly focusing on improving access to basic sanitation and hygiene in low-income urban areas and the urban periphery in order to increase the health and living conditions of the poor. A sanitation task force has been formed to inform decision-making and to find the best sanitation solutions for the given context at large scale, focusing especially on the poor. The task force supports partners and staff in the design of sanitation and hygiene projects and in the introduction of sustainable faecal sludge management concepts.—2011 GLAAS survey response

## BASIC SYSTEMS

In the 2010 GLAAS report, it was reported that aid commitments for large sanitation and drinking-water systems amounted to US\$ 4.6 billion and that only US\$ 1.2 billion was committed to basic sanitation and drinking-water systems in calendar year 2008. This information, along with the observed trend that aid to basic systems, had decreased from 27% to 16% of total aid to sanitation and water between 2003 and 2008, catalysed high-level commitments by donors to increase aid to basic systems.

Recently reported data for 2010 suggest that aid commitments to basic systems increased from 16% to 26% of total aid to sanitation and water between 2008 and 2010 and even peaked to 35% of total sanitation and water aid in 2009 (OECD, 2012). A preliminary review of the data indicates, however, that these increases are primarily due to potential discrepancies in the application of the purpose code for basic systems from one large donor; these figures should therefore be interpreted with caution.

Figure 6.12 illustrates that only a few bilateral donors—notably Japan, Spain, the United Kingdom, the Netherlands and Australia—target a significant proportion of aid for basic sanitation and

drinking-water services. Other important contributors, in terms of aid amounts to basic services, include Germany, the World Bank and EU institutions.

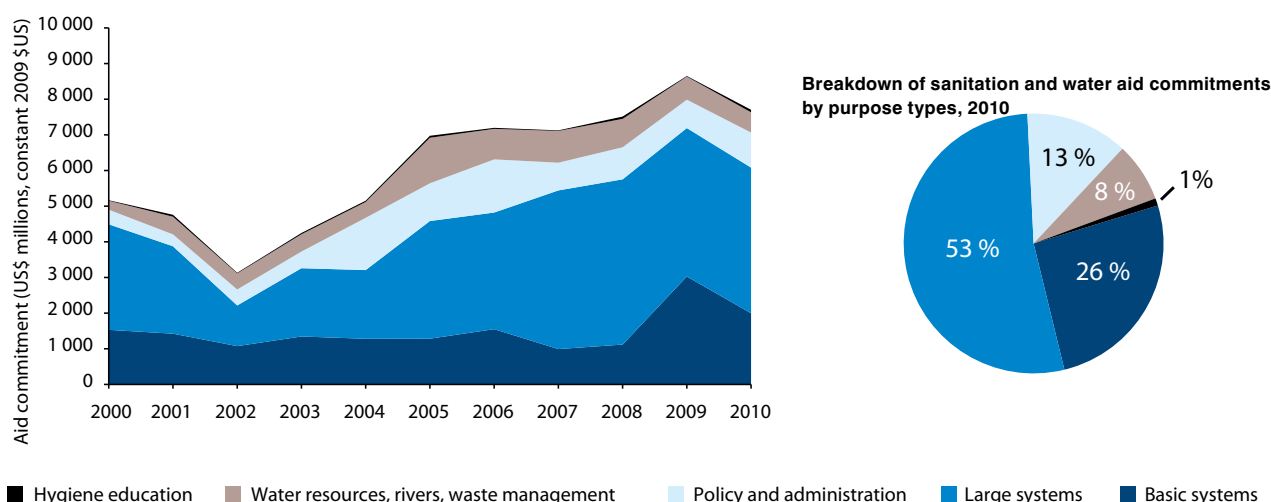
### Purpose code definitions

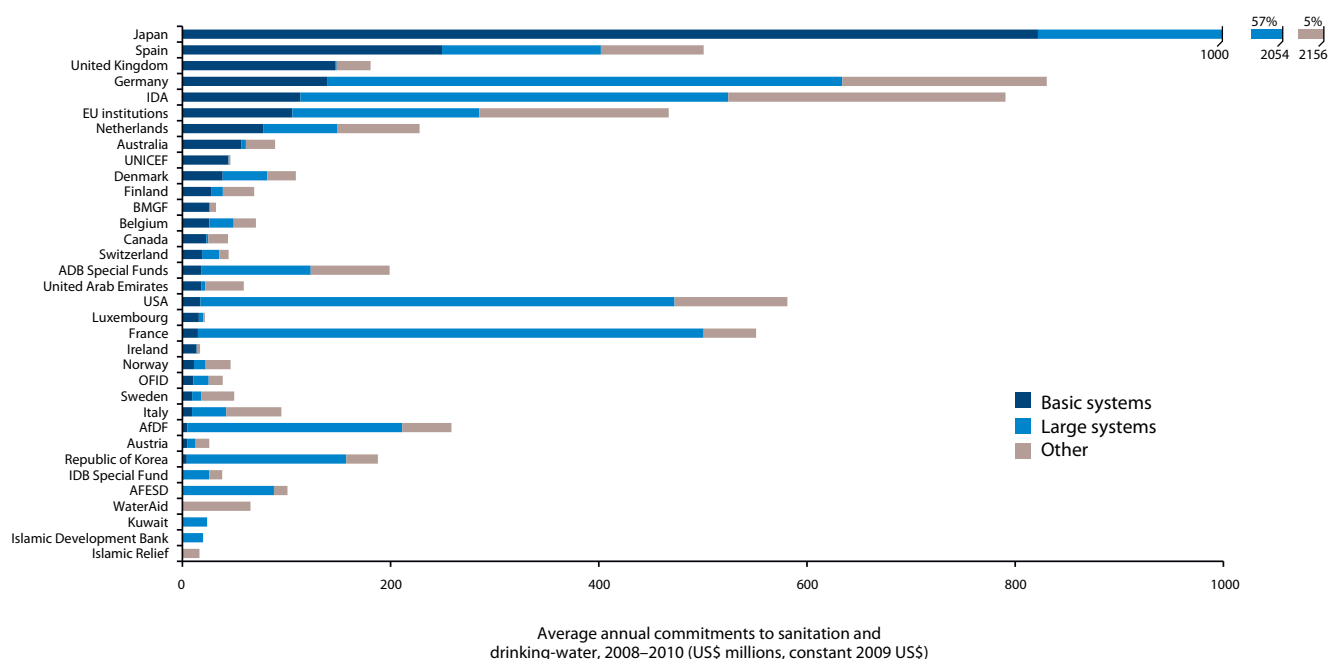
A guidance note has been recently issued by OECD and the EU Water Initiative to offer guidance for reporters and users of the OECD-CRS concerning the use of recently revised purpose codes for water and sanitation (EUWI/OECD, 2012). The guidance note indicates the following definitions for basic and large drinking-water and sanitation systems:

- Basic drinking-water systems include rural water supply schemes using handpumps, spring catchments, gravity-fed systems, rainwater collection and fog harvesting, storage tanks, and small distribution systems typically with shared connections/points of use; and 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.
- Large systems for drinking-water include potable water treatment plants, intake works, storage, water supply pumping stations and large-scale transmission/conveyance and distribution systems.
- Large systems for sanitation include large-scale sewerage, including trunk sewers and sewage pumping stations, and domestic and industrial wastewater treatment plants.

In addition, the guidance note stresses that the distinction between “large” and “basic” is not based only on the adopted technology, but also includes the associated management systems that are necessary for the technologies to function.

## Aid for basic sanitation and drinking-water services increased from 16% to 26% of overall sanitation and water aid commitments between 2008 and 2010 (Figure 6.11 and Figure 6.12).





**FIGURE 6.12** Breakdown in aid commitments to sanitation and drinking-water, among purpose types, by ESA, 2008–2010 annual average

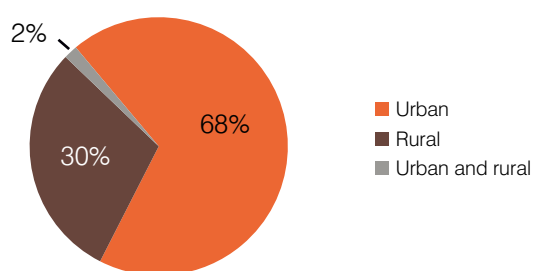
ADB, Asian Development Bank; AfDF, African Development Fund, African Development Bank; AFESD, Arab Fund for Economic and Social Development; BMGF, Bill & Melinda Gates Foundation; EU, European Union; IDA, International Development Association, World Bank; IDB, Inter-American Development Bank; OFID, OPEC Fund for International Development; OPEC, Organization of the Petroleum Exporting Countries; UNICEF, United Nations Children's Fund; USA, United States of America

Source: OECD (2012)

## URBAN AND RURAL AREAS

From the responses it can be deduced that urban areas receive more than twice as much aid as rural areas, even though the majority of the unserved populations live in rural areas. Rural areas are usually the responsibility of decentralized departments within governments. It can take time and considerable effort to reach large numbers of rural people in a way that ensures that services can be sustained. Urban populations, especially those in secondary towns, are also growing rapidly, and the number of unserved urban people in the world for both sanitation and drinking-water is increasing. It is important, therefore, that ESAs work together with countries to ensure a balanced approach with regard to allocating resources to reach rural as well as urban populations.

**ESAs indicate that 68% of aid for sanitation and water is directed to urban areas (Figure 6.13).**



**FIGURE 6.13** Breakdown of development aid by urban/rural areas, 2010 (11 ESAs with disbursements of US\$ 2.1 billion)

Source: 2011 GLAAS ESA survey



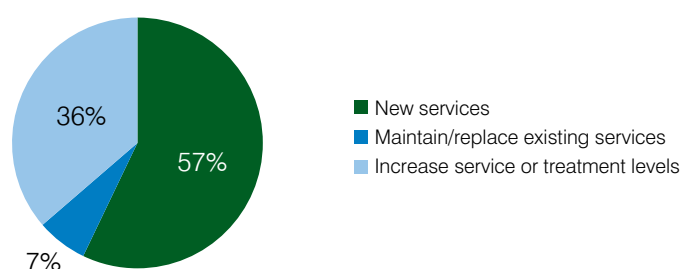
## NEW VERSUS EXISTING SERVICES

Unlike the situation with some other sectors, ESAs allocate limited funds to the recurrent budgets of sanitation and drinking-water systems, despite these budget allocations being important for the operation and maintenance of the infrastructure that is required to deliver the services. No doubt the desire to focus resources on increasing coverage for new populations—given the large

number of people who need to gain access to meet the MDG target—is the driver behind this phenomenon. This shows the downside of a targeted, time-limited effort. Sustaining services to existing users will become increasingly important as country coverage levels increase and targets are attained. Waiting too long will mean that part of the investments made will go to waste. It will take time and effort to shift to a

systems approach to sanitation and drinking-water; GLAAS will increasingly look at allocation of finances and the development and mobilization of human resources from the perspective of meeting the needs of people already served. As the target date for the MDG period comes near, this sustainability aspect will increasingly gain importance.

**Data from 11 ESAs show that 57% of their aid to drinking-water and sanitation is disbursed for new services, whereas only 7% is for maintaining or replacing existing services (Figure 6.14).**



**FIGURE 6.14** Breakdown of development aid among project objectives, 2010 (11 ESAs with disbursements of US\$ 1.7 billion)

Source: 2011 GLAAS ESA survey



## 6.5 ALIGNMENT AND COORDINATION

In-country donor coordination helps to avoid duplication of efforts and the waste of resources. As part of the 2005 Paris Declaration on Aid Effectiveness, donors made commitments to ensure the coherence of their aid programmes by reducing the number of countries and sectors

in which they operate. In 2007, EU donors made further commitments and agreed on new guidelines for division of labour in the EU Code of Conduct on Complementarity and Division of Labour.

The GLAAS survey invited ESAs to report on their efforts to coordinate among themselves and to harmonize their activities with national counterparts.

Table 6.2 presents respondent countries that had 15 or more donors disbursing funds (at least US\$ 100 000) for sanitation and drinking-water in 2010. Many recipient countries have coordination and harmonization platforms; these platforms have a particularly important role to play, given the relatively few instances of sector budget support.

## Donor coordination and harmonization are essential, especially in those countries where a high number of donors operate (Table 6.2).

**TABLE 6.2** Donor/organization coordination, sanitation and drinking-water (GLAAS countries)

Recipient country	Number <sup>1</sup> of donors	Donors with leading roles	Donors active in national coordination or harmonization platforms	Other donors that provided over US\$ 1 million in aid <sup>2</sup>
Afghanistan	15	—	Germany, IFRC	USA (21), Germany (17), EU institutions (4), UNICEF (4), Canada (2), IDA (2), Norway (2), ADB Special Funds (1), Japan (1), Netherlands (1), United Kingdom (1)
Bangladesh	15	ADB, Netherlands	ADB, Australia, IFRC, Netherlands, WaterAid	Denmark (50), ADB Special Funds (39), Netherlands (30), Japan (24), IDA (11), United Kingdom (10), Australia (3), UNICEF (2), OFID (1), Switzerland (1)
Burkina Faso	17	—	AfDB, EU institutions, Germany, IFRC, Japan, Sweden, WaterAid	EU institutions (10), Denmark (9), AfDF (8), France (7), Germany (7), Japan (6), Belgium (3), IDA (3), Sweden (2), Luxembourg (1), UNICEF (1), United Arab Emirates (1)
Ethiopia	20	—	AfDB, EU institutions, IFRC, Netherlands, United Kingdom, WaterAid	IDA (21), United Kingdom (20), AfDF (19), Japan (13), Finland (11), Italy (5), EU institutions (4), UNICEF (4), USA (4), Spain (3), France (1), Germany (1), Norway (1)
Kenya	20	France, Germany	Germany, IFRC, Netherlands, Sweden, WaterAid	IDA (42), France (33), Germany (20), Japan (13), EU institutions (7), AfDF (6), Netherlands (5), Finland (4), Sweden (2), Australia (1), UNICEF (1), USA (1)
Mali	15	France, Germany, UNDP	AfDB, Germany, IFRC, Sweden, Switzerland, WaterAid	EU institutions (12), Denmark (6), Japan (6), France (5), Germany (5), IDA (3), AfDF (2), Luxembourg (1), Netherlands (1)
Mozambique	18	AfDB, Netherlands, Switzerland	AfDB, Bill & Melinda Gates Foundation, IFRC, Netherlands, Switzerland, United Kingdom, WaterAid	EU institutions (25), Netherlands (21), Australia (17), AfDF (8), USA (6), France (4), Switzerland (2), Denmark (1), IDA (1), Japan (1), Spain (1), UNICEF (1)
Senegal	15	EU institutions, France	AfDB, EU institutions, IFRC, Japan	IDA (9), Netherlands (6), AfDF (5), France (5), Luxembourg (5), EU institutions (4), Belgium (3), USA (3), Japan (2), Germany (1)
Uganda	17	—	AfDB, Germany, IFRC, WaterAid	Denmark (20), IDA (10), Austria (7), Germany (6), EU institutions (5), UNICEF (2), Ireland (1), Japan (1), USA (1)
Viet Nam	16	Australia, Germany, Denmark and UK	Australia, Germany, IFRC, Norway, United Kingdom	IDA (86), Japan (64), ADB Special Funds (30), Germany (21), United Kingdom (17), Australia (13), Denmark (12), Netherlands (10), Republic of Korea (7), France (6), Norway (6), Belgium (5), Finland (3)

ADB, AfDB, African Development Bank; AfDF, African Development Fund, African Development Bank; Asian Development Bank; EU, European Union; IDA, International Development Association, World Bank; IFRC, International Federation of Red Cross and Red Crescent Societies; OFID, OPEC Fund for International Development; OPEC, Organization of the Petroleum Exporting Countries; UNDP, United Nations Development Programme

<sup>1</sup> Donors providing US\$ 100 000 or more of aid.

<sup>2</sup> Number in parentheses is the amount of disbursement in 2010 in \$US millions.

Note: A full listing of donor coordination in countries responding to GLAAS is included in Annex F.

Sources: 2011 GLAAS ESA survey; OECD (2012)

## Accountability for and transparency of the use of aid funds are increasingly important for ESAs, especially in the current financial crisis.

In part as a result of pressure from their electorate/constituencies and in part due to the growing realization of what is good development practice, ESAs increasingly recognize the need to be more transparent about what they are funding and the impact the funding has. For sanitation and drinking-water, this includes how many people receive a service as a result of their support; whether the support provided reaches those without any access or improves the service levels of those already receiving something; and whether the support focuses on sustaining the gains already achieved. The International Aid Transparency Initiative that emerged from the Third High Level Forum on Aid Effectiveness in Accra in 2008 is a step towards improving openness and transparency concerning aid allocations and expenditures.

### The International Aid Transparency Initiative

The International Aid Transparency Initiative is a global aid transparency standard. It aims to make information about aid spending easier to access, use and understand, by publishing financial flows, results information, budgets, timelines, project descriptions and documentation, activity and sector codes and geographic data. It was designed by developing country governments, donors, NGOs and aid information experts for the timely publishing of open, comparable and reusable data.

Approximately 2000 delegates met in Busan for the Fourth High Level Forum on Aid Effectiveness from 29 November to 1 December 2011 and agreed to:

- recognize the increasing importance of South–South development cooperation;
- re-emphasize the importance of using country systems to support activities by the public sector;
- improve the availability and public accessibility of information on development cooperation;
- commit by 2013 to improve medium-term predictability by providing “regular, timely rolling three- to five-year indicative forward expenditure and/or implementation plans”;
- promote sustainable development in situations of conflict and fragility.

Source: <http://www.aidtransparency.net/>

## 6.6 FUTURE TARGETS

ESAs are accountable to their parliaments or governing bodies (11 of the ESAs that responded confirmed that they reported annually to a parliament or governing body). The financial crisis and the accompanying constraints on budgets motivate ESAs to increasingly want to report not only on the financial resources they commit or disburse, but also on the impact that these have in helping countries to meet the MDG targets or in helping to stimulate growth and human development.

In spite of the rhetoric about the need to demonstrate results, there has been no noticeable increase since 2008 in the number of ESAs specifying what they expect to achieve with their funding. Table 6.3 summarizes targets from 10 ESAs that aim to reach (in aggregate) an equivalent of 90 million persons annually with new access to sanitation and/or drinking-water.

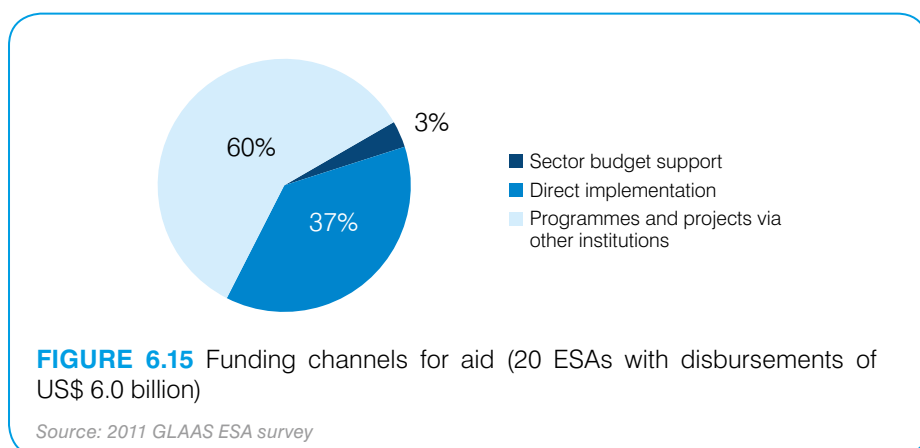
## 6.7 FUNDING CHANNELS

ESAs can use a variety of channels to disburse aid funds, including general budget support, sector budget support, programmes and projects via other institutions (multilateral, academic, NGOs, others) and direct implementation.

Channelling funds through programmes and projects via other institutions comprised 60% of funding (US\$ 3.5 billion) from respondent ESAs in 2010, followed by 37% (US\$ 2.2 billion) through direct implementation. Next to general budget support, sector budget support represents the only funding channel that makes full use of country systems and allows recipient governments to allocate funding according to their own sector

development strategies. Sector budget support is also positive for aid effectiveness, as it comes with lower transaction costs for aid recipients. Although only four ESAs reported on their sector budget support for sanitation and drinking-water in response to the survey, this information is tracked by the OECD-CRS. From this data, Germany is the largest provider of sector budget support to WASH from the bilateral donors, while the EU followed by the World Bank's International Development Association provide the largest amount of WASH sector budget support from the multilateral donors. The Netherlands reported that over 60% of its WASH aid is delivered as sector budget support; it does not disaggregate sector budget support from that for other sectors, so it does not report WASH sector budget support to the OECD.

**Sector budget support from donors for WASH is 3% of total WASH aid in 2010 (Figure 6.15).**



**TABLE 6.3** Specific targets for increasing access to drinking-water and sanitation services globally

External support agency	Target region or country	Population with increased services (drinking-water)	Population with increased services (sanitation)	Time frame
African Development Bank	Africa	271 million	295 million	2015 (Rural Water Supply and Sanitation Initiative)
Asian Development Bank	—	200 million		2006–2010 (Water Financing Program)
France	—	new access 0.8 million per year 2.5 million improved services	new access 0.5 million per year 1.5 million improved service	Annual targets
Germany	Sub-Saharan Africa	25 million	5 million	2015
Inter-American Development Bank	Latin America	2.8 million for new or upgraded services	3.6 million for new or upgraded services	2012–2015
International Federation of Red Cross and Red Crescent Societies	Worldwide	10 million		2005–2015
Japan	Africa	6.5 million	TICAD IV commitments amounting to additional US\$ 340 million to provide capacity building to 5000 water resource managers from 2008 to 2012	
Swiss Development Cooperation	—	1.5 million + household water treatment for 0.4 million households; improved sanitation and hand washing in 400 schools		2011–2012
United Kingdom	—	15 million	25 million + 15 million hygiene	2011–2012 – 2014–2015
WaterAid	—	25 million people to gain access to safe water, improved hygiene and sanitation		2009–2015

TICAD IV, Fourth Tokyo International Conference on African Development

Source: 2011 GLAAS ESA survey

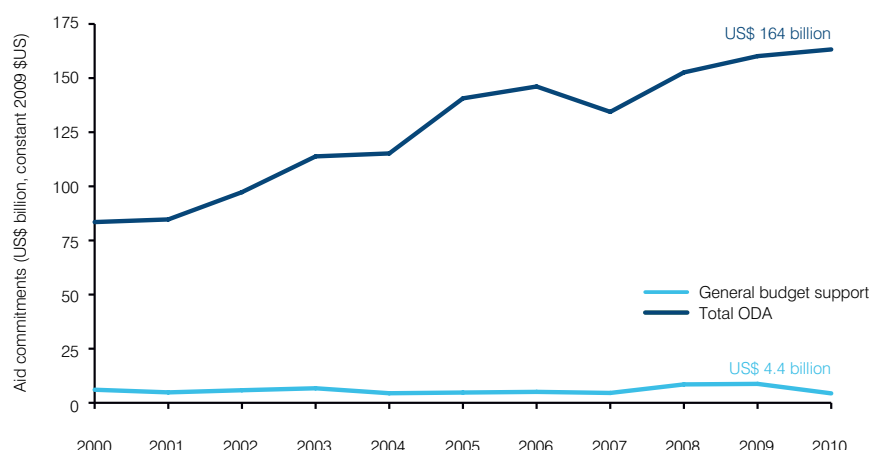
Eleven donor countries confirmed that they used general budget support as one of their channels for aid, but only the Netherlands reported analysing the proportion of general budget support that went to sanitation and drinking-water (2.5% of the total general budget support). Sector budget support is used by a number of donors where conditions in the recipient country are favourable.

Figure 6.16 shows that commitments to general budget support overall were US\$4.4 billion in 2010. The allocation of general budget support to specific sectors depends on domestic priorities. Therefore, while general budget support represents, in many circumstances, the most sustainable aid modality, its targeting to specific sectors depends on their relative priority from the perspective of the recipient country. Furthermore, since the total amount of general budget support is less than US\$ 5.0 billion, the global aid amount targeted for sanitation and drinking-water that is derived from general budget support is likely to be small relative to aid that is directed specifically to sanitation and water.

### Nine out of 10 responding donors use country procurement systems.

In order to limit transaction costs, donors may harmonize their procurement procedures with those of the recipient government. In 2010, 9 out of 10 ESAs indicated the use of partner countries' procurement systems. The United Kingdom indicated that most programmes are coordinated through discussions with the government, but in very fragile states, programmes may be optimally delivered directly through NGOs. The World Bank indicated that a decision as to whether country procurement systems are used is based on a documented procurement risk analysis. The actual procurement system to be used on a project is then based on this risk analysis.

### Despite rising total ODA, general budget support has not risen appreciably (Figure 6.16).



**FIGURE 6.16** Trends in general budget support aid, 2000–2010

Source: OECD (2012)

One of the main achievements mentioned by ESAs in their responses to the survey questions towards increased alignment, harmonization and accountability is the establishment of the SWA initiative. ESAs also mentioned the International Year of Sanitation in 2008 and the 2008 eThekweni Declaration on sanitation as important achievements leading to increased attention to sanitation. Progress is also seen in the implementation of aid effectiveness principles as evidenced by the use of country procurement systems by donors and the development of national sector plans.

## 6.8 IMPLICATIONS FOR THE FUTURE

This section confirmed the importance of external support for WASH, acknowledged a rising trend in such support and recognized improved targeting of resources towards basic systems. At the same time, it identified key gaps in terms of how aid is allocated and showed that the priorities of ESAs are not necessarily aligned with the needs of countries. It is a cause of concern, that the amount of aid directed to sustaining existing services is only 7%. To improve alignment with country priorities, ESAs should consider increasing sector budget support where this is expected to lead to stronger systems to deliver services and increase coverage. More external support should go to supporting operation and maintenance of existing WASH services. Finally, harmonization and collaboration among national line agencies, among donors and between national governments and financing agencies should be intensified.



# 7

## Special focus on water, sanitation and hygiene in schools and health-care facilities



### KEY MESSAGES

- Half the countries did not report access to adequate sanitation in schools or health-care facilities, suggesting a lack of monitoring systems and capacity.
- On average, 34% of primary schools and 25% of rural health-care centres lack improved sanitation facilities.

## 7.1 SANITATION AND HYGIENE IN SCHOOLS

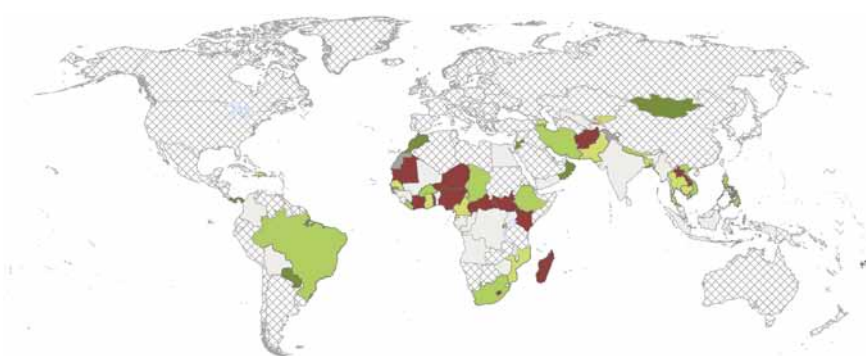
Children's learning is affected by a number of factors, but water and sanitation-related conditions, such as dehydration, diarrhoea and intestinal worm infections, contribute to absenteeism, impair cognitive ability and reduce performance. Countries indicate that schools, particularly those in rural areas, often lack drinking-water and sanitation facilities or that such facilities are in poor condition.

Approximately one third of the countries participating in GLAAS could not provide data on school sanitation coverage, and one fifth reported less than 50% coverage across primary schools (Figure 7.1). This aligns with a body of evidence<sup>1</sup>, mostly anecdotal, suggesting either that many schools lack sanitation facilities completely or that their facilities are in appalling condition.

Most countries have established national sanitation targets for schools, but many do not monitor progress against these targets. Even fewer countries were able to submit school sanitation coverage figures. For targets to be meaningful, national monitoring systems need to be urgently developed and implemented. Several guidance documents on monitoring WASH in schools exist, including a WASH in Schools Monitoring Package, released by UNICEF in April 2011 (UNICEF, 2011). Investing in monitoring systems of this kind can help to ensure the realization of programme objectives and should be considered as a contribution to a common public good.

Acknowledging data gaps and the likelihood that access to sanitation facilities is likely to be lower if one accounts for non-responders, the data suggest that small gains have been made in providing school sanitation coverage among the countries reporting to GLAAS for the 2010 and 2012 reports.

### Countries report an average of 66% of primary schools with improved sanitation facilities (Figure 7.1).



What percentage of primary schools have improved sanitation facilities?

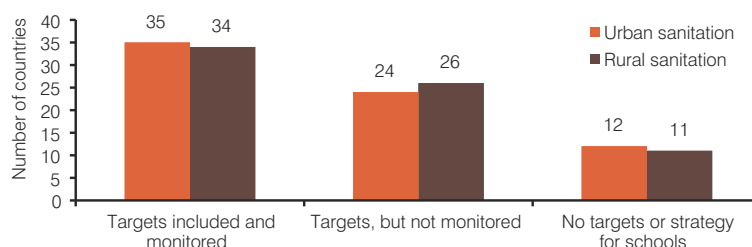


**FIGURE 7.1** What percentage of primary schools have improved sanitation facilities (national)?

Note: Brazil, Kenya, Pakistan, Viet Nam (rural only), Mozambique urban only

Source: 2011 GLAAS country survey (74 countries)

### Half of respondent countries fail to monitor against established targets for school sanitation (Figure 7.2).



**FIGURE 7.2** Have national sanitation targets for schools been established?

Source: 2011 GLAAS country survey (74 country respondents)

"Only 14 percent of sanitation systems in city schools are located inside the buildings. In most cases, the school toilets are old, dirty, constructed of boards, slag block or brick in unsanitary conditions and are not disinfected." —2011 GLAAS country survey response

<sup>1</sup> This broadly aligns with existing UNICEF Country Office data (UNICEF, 2011), which show that about half the UNICEF countries (46% for sanitation) are not able to report on water and sanitation facilities.

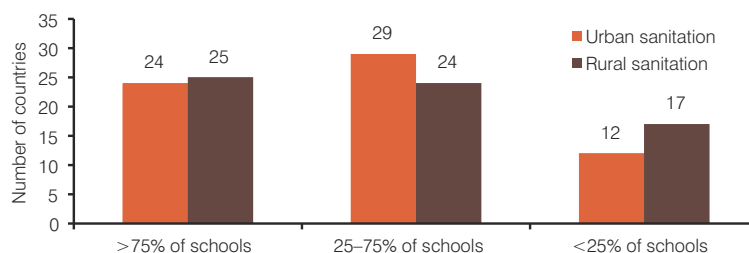
In addition to providing adequate facilities in schools, a programme of cleaning and maintaining these facilities is essential to ensure that they remain usable and are hygienic. A separate budget line for the maintenance of school sanitation facilities is likely to be an important factor in ensuring sustainability of services. Currently, only 29 out of 70 countries (41%) report a separate budget line for maintenance of school sanitation facilities.

There is increasing recognition that dealing with menstrual hygiene with privacy and dignity when faced with inadequate sanitation facilities in schools is a double challenge—this can mean that girls miss classes or are absent from school while menstruating. In order to improve the menstrual hygiene situation for girls over the longer term, menstrual hygiene management needs to become integrated into WASH, as well as education policies and strategies (House, Mahon & Cavill, 2012).

#### Benefits of hygiene promotion in schools

Hand washing in institutions such as primary schools reduces the incidence of diarrhoea by an average of 30% (Ejemot-Nwadiaro et al., 2009). Positive hygiene behaviours can be promoted in schools: for instance, by incorporating hygiene messages in school curricula and health clubs. Teachers can also set an example for students, who can then become advocates for improved hygiene at home and in their communities.

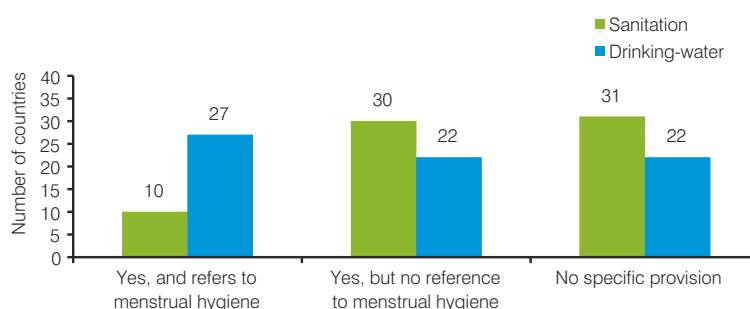
### Only one third of countries estimate that hygiene promotion programmes are scaled up in primary schools (Figure 7.3).



**FIGURE 7.3** Are hygiene promotion programmes implemented in primary schools?

Source: 2011 GLAAS country survey (66 country respondents)

### Countries report that there is great scope to improve policy-making to better respond to the needs of women and girls (Figure 7.4).



**FIGURE 7.4** Do national sanitation and drinking-water policies/strategies include specific provisions for women, including menstrual hygiene management needs?

Source: 2011 GLAAS country survey (74 country respondents)



## 7.2 WATER, SANITATION AND HYGIENE IN HEALTH-CARE FACILITIES

Lack of safe drinking-water, adequate sanitation and hygiene in health centers, clinics and hospitals is particularly intolerable, given that patients are highly susceptible to infections and count on a safe and clean environment. They expect that health-care providers respect the long-recognized maxim, “First, do no harm”. Nevertheless, millions of preventable infections—including neonatal infections—occur every year within the health-care environment because of inadequate attention to WASH (Rehfuss, Bruce & Bartram, 2009; Bartram & Cairncross, 2010).

Poor hand hygiene, which includes no or inadequate hand washing before and after patient contact or after using the toilet, is the key contributor. Hand washing with soap is advocated as the single most important practice to reduce the transmission of infections in health-care settings. Globally, however, hand-washing compliance rates in health-care facilities are poor.

Unsafe water undoubtedly is an issue, particularly in remote rural health-care facilities. Not surprisingly, countries reported drinking-water coverage rates in rural facilities lagging nearly 20% behind those of urban hospitals. Even for those facilities for which countries reported near universal coverage (e.g. urban hospitals), continuous vigilance is required to reduce risks to water quality (see Water safety in section 2.1). Based on the 60% rate of non-response, the majority of countries reporting to GLAAS appear to lack monitoring systems to track sanitation and drinking-water in health-care settings (Figure 7.5 and Figure 7.6).

Lack of sanitation in health-care facilities appears to be a more serious matter than lack of water supply. The small proportion of countries that did provide data reported that 25% of rural health-care facilities lacked improved sanitation facilities. Nearly two thirds of countries could not report on sanitation coverage in health-care centres. If one accounts for non-responders, the situation is likely to be significantly worse.

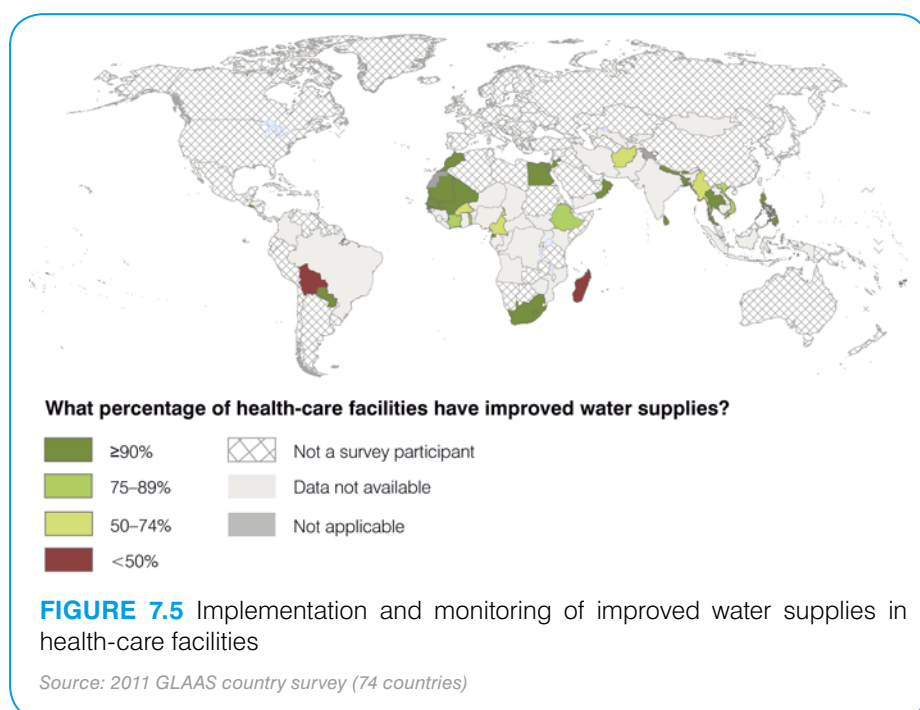
The importance of health sector leadership on this issue is critical:

one review paper recommends that health ministries “ensure a statutory requirement that all health care facilities have adequate and safe HSW [WASH]” and “monitor coverage and maintenance of HSW [WASH] in health care facilities” (Cairncross et al., 2010).

Primary prevention is a key pillar of any effective public health strategy and should be the first consideration in designing health sector infrastructure. Ministerial decrees, internal regulation and independent quality control go a long way in ensuring a rapid improvement in what can be considered the ultimate embarrassment in the health sector: patients seeking treatment who fall ill because of a lack of access to safe drinking-water and adequate sanitation in a health care environment.

Health sector professionals are well placed to lead by example and to demonstrate appropriate practices for the patients they treat, as well as to promote hygiene messages to patients (WaterAid, 2011b).

### Countries report an average of 13% of health-care facilities lack improved water supplies (Figure 7.5).

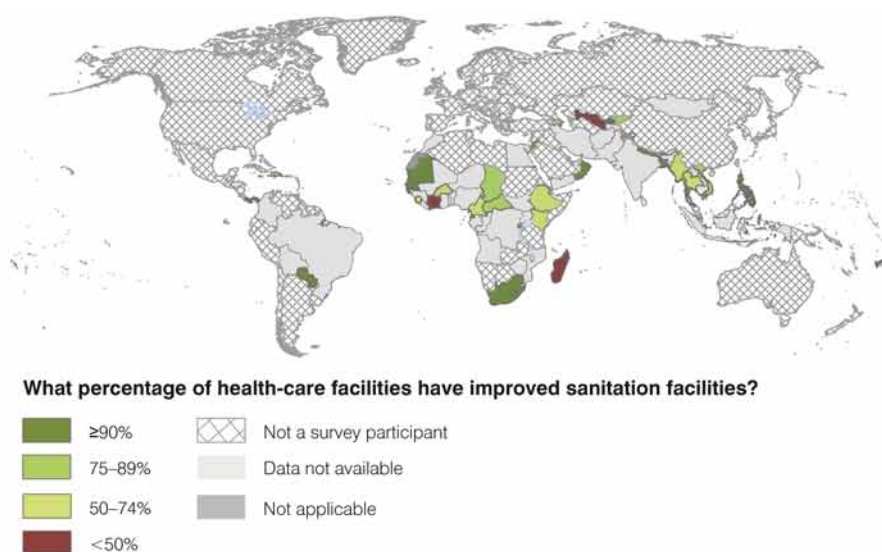




**Countries report an average of 25% of rural health-care facilities lack sanitation facilities (Figure 7.6).**

## 7.3 IMPLICATIONS FOR THE FUTURE

The essential functions of public institutions such as schools and health-care centres include the provision of the services at their core mandate, but also the promotion of adequate sanitation, drinking-water and hygiene. Notwithstanding the crucial role of these institutions, insufficient WASH data are collected. Those countries that did monitor and report to GLAAS indicated that an average of 34% of primary schools and 25% of rural health-care centres lacked access to improved sanitation facilities. Countries need to intensify efforts to establish WASH monitoring in these public institutions and to reinvigorate efforts to increase WASH coverage.

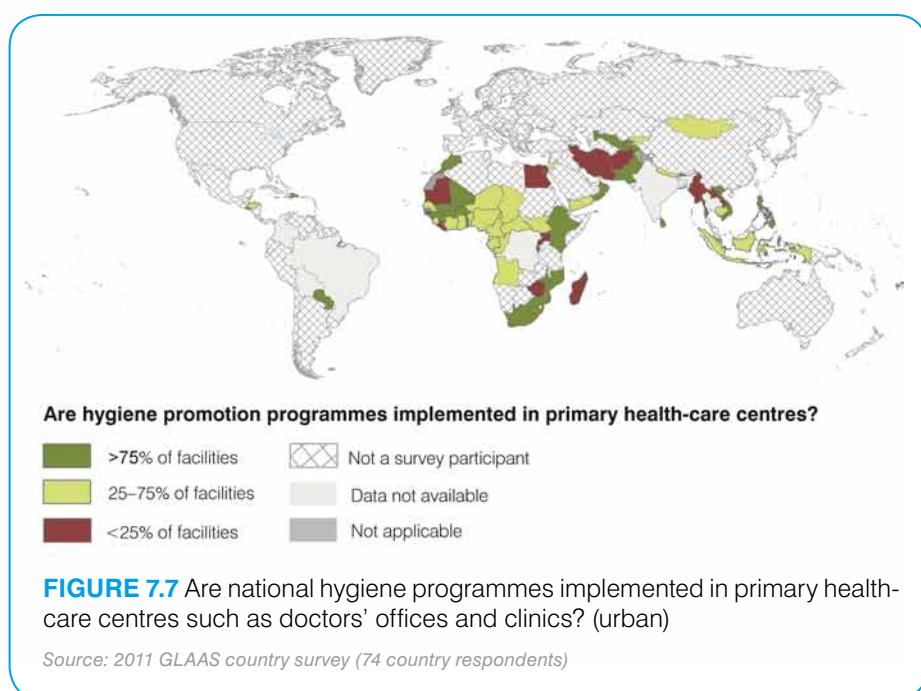


**FIGURE 7.6** Implementation and monitoring of sanitation in rural health-care facilities

Note: Figures for Cameroon, Chad, Ethiopia, Madagascar, Rwanda and Thailand are based on national coverage value aggregating both urban and rural.

Source: 2011 GLAAS country survey (74 countries)

**Over 40% of the country respondents reported widespread implementation of national hygiene promotion programmes in primary health-care facilities (Figure 7.7).**



**FIGURE 7.7** Are national hygiene programmes implemented in primary health-care centres such as doctors' offices and clinics? (urban)

Source: 2011 GLAAS country survey (74 country respondents)

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# Annex A: Methodology

GLAAS provides key information, based on data collected from a large number of sources, concerning sanitation and drinking-water in the developing world. GLAAS uses data collected by different agencies and supplements these with new data collected from countries and ESAs. The process of data collection aims to align with country-level systems of monitoring and evaluation to produce and validate sector data and also to strengthen coordination among WASH stakeholders in responding countries.

## A.1 A BIENNIAL REPORT

The pilot GLAAS report (a “proof of concept”) was published in September 2008 (WHO, 2008). This was followed in 2010 by the first GLAAS report: *UN-Water Global Annual Assessment of Sanitation and Drinking-water: Targeting resources for better results* (WHO, 2010). The first GLAAS report was discussed by the JMP/GLAAS Strategic Advisory Group and evaluated in a meeting of representatives of governments and NGOs of developing countries, donors, WHO country offices, regional offices and headquarters. Based on the recommendations of the Strategic Advisory Group and the Evaluation Meeting, a UN-Water GLAAS strategy 2010–2015 was developed. It was decided that GLAAS would become a biennial report, but will publish an additional report at the end of the MDG period in 2015. Correspondingly, its name was changed to the “UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water”.

## A.2 USE OF EXISTING DATA

GLAAS continues to use several existing sources of data, including global data on sanitation and drinking-water coverage (JMP), donor aid flows (OECD-CRS),

economic and development indicators (World Development Indicators, World Bank), health indicator data (World Health Statistics, WHO) and data from regional assessments.

## A.3 PARTNERSHIPS

A key component of the global assessment process is the need to build partnerships across all relevant global and regional actors in sanitation and drinking-water sector monitoring in order to improve the quality of the information reported in GLAAS and to reduce the reporting burden of national governments. For example, WHO and UNICEF have worked closely to develop information that both supports the GLAAS report and provides information to the ongoing efforts of the SWA initiative, including facilitating data collection at the country level and monitoring high-level meeting commitments.

## A.4 COUNTRY DATA COLLECTION

Both the GLAAS pilot study and the 2010 GLAAS report identified critical information gaps and demonstrated the need for continued collection of data on sanitation and drinking-water from countries and ESAs. Based on the lessons learnt from this process, the 2012 GLAAS continued to use two survey questionnaires to collect information from ESAs and developing countries. These questionnaires are both publicly available and can be accessed online<sup>1</sup>.

The questionnaire for the ESAs, which was slightly modified from the previous version, requested information on aid prioritization, aid flows, future planning, donor coordination and alignment with country programmes. GLAAS also attempted to engage donors that do not report to OECD by inviting a wide

range of ESAs that are not members of the OECD Development Assistance Committee to participate in GLAAS.

To collect country-level data, GLAAS used a modified version of the survey questionnaire used to collect data for the 2010 GLAAS report<sup>2</sup>. After receiving detailed feedback from respondents, evaluators and WHO regional advisors during a series of meetings in 2010–2011, the original questionnaire and the suggested country consultation process were modified to ease data collection, align with country processes and improve country ownership of data. The recommendation that a major new section on hygiene promotion be added was incorporated, along with an expanded set of questions concerning equity, financing and other issues.

The 2011 GLAAS survey questionnaire had four sections: 1) sanitation service provision, 2) drinking-water service provision, 3) hygiene promotion and 4) financing. The first three sections of the questionnaire requested both qualitative and quantitative information to help assess institutional, financial and human resource capacity. In each section, there were questions that had three-option multiple-choice responses for rural and urban contexts. Respondents were asked to choose the response that best fit their situation. Respondents were also asked to elaborate on some responses to highlight achievements and obstacles to progress.

There were eight building blocks in the drinking-water and sanitation sections, including:

1. Current access
2. Policies and institutions
3. Planning, monitoring and evaluation
4. Budgeting and expenditure
5. Equity
6. Outputs
7. Sustainability
8. Human resources

<sup>1</sup> Available at [http://www.who.int/water\\_sanitation\\_health/en/](http://www.who.int/water_sanitation_health/en/).

<sup>2</sup> The 2009 GLAAS country survey questionnaire, which informed both the 2010 GLAAS report and the Country Status Overviews project of the African Ministers' Council of Water, was developed jointly with the World Bank's Water and Sanitation Program.

Data collection for the 2012 GLAAS report began in August 2011. Questionnaires were sent to developing country governments (e.g. ministry of health, ministry of water) through WHO regional and country offices. Seventy-four developing countries responded to the GLAAS questionnaire. These included 35 countries from the WHO African Region, 9 from the WHO Region of the Americas, 10 from the WHO South-East Asia Region, 7 from the WHO Western Pacific Region, 9 from the WHO Eastern Mediterranean Region and 4 from the WHO European Region.

It was recognized that the data required to fill the questionnaire might not be available within one department. Countries responding to the GLAAS questionnaire were requested to identify a nodal department and a national focal person within that department, whose role would be to coordinate data collection, compile the responses to the questionnaire and lead on the process of data validation (see below).

A network of regional facilitators was established to assist the GLAAS data collection process in-country. The regional facilitators provided technical support to government officials and institutions to help them respond to the GLAAS questionnaire.

The GLAAS responses were filled in by respondent countries through a process of self-reporting. This required countries to judge their status on the indicators in the questionnaire and to award themselves appropriate scores. This may have created a degree of variation, based on the interpretation of the questions, where some countries may score themselves lower than others that are at a similar level. This is recognized

as an issue that subsequent surveys will continue to address. For the present report, this has been addressed by using country data to identify broad trends rather than comparisons across regions or countries.

## A.5 VALIDATION

All countries were provided with standard guidance on responding to the GLAAS country questionnaire, including the recommendation that their GLAAS responses be validated through a national workshop involving a range of stakeholders. Countries were requested to report on the processes that they used to collect data and validate responses through a standardized form (see Table A.1). These forms were received from 28 of 74 responding countries. The data indicate that all 28 responding countries performed a stakeholder review to validate GLAAS responses, but documentation supporting the responses was of a medium level (as defined below) in as many countries as it was of a high level, underlining the need for more robust information systems in-country.

All responses to GLAAS questionnaires were also reviewed for internal consistency and completeness. In addition, a more rigorous and targeted validation exercise was undertaken to review GLAAS responses against available country documents. Eleven of the 74 participating countries (3 from the WHO African Region, 2 each from the WHO Region of the Americas, WHO South-East Asia Region and WHO Western Pacific Region and 1 each from the WHO Eastern Mediterranean Region and WHO European Region) were selected for validation. GLAAS

responses were compared against a range of available country documents, including, but not limited to, sector reviews, sector development plans, Country Status Overview reports, UNDP Governance, Advocacy and Leadership for Water, Sanitation and Hygiene (GoAL WaSH) Country Status Assessments and sector regulators' reports, none older than 2009. The key findings of the validation exercise included the following:

1. In all the countries reviewed, the nodal department coordinating the responses was the same as the department identified as the lead actor in the sector in country documents. Six out of 11 of the countries compiled responses from multiple ministries.
2. The difference between urban and rural sanitation was inadequately nuanced in 3 out of the 11 countries reviewed; the Country Status Overview or UNDP Country Status Assessment rated one subsector higher than the other, whereas the GLAAS response received from the country gave both subsectors equal scores on each indicator. Country documents in at least 4 (Bangladesh, Tajikistan, Ethiopia, Ghana) out of 11 countries reviewed indicate that self-supply is an important component of drinking-water supply, whereas only the responses of Ethiopia and Ghana mention this.
3. In general, there was inadequate information available in country documents to validate GLAAS responses on human resources. This appears to be a critical information gap.

**TABLE A.1** Levels of documentation and validation

Documentation		Stakeholder validation	
High	A majority of evidence-based responses based on government documents or referenced materials	High	Multistakeholder review performed including government partners
Medium	Some documentation is available for evidence-based responses, but documentation is incomplete	Medium	Stakeholder review performed, although participation did not include all partners
Low	Very few documents or references provided	Low	No stakeholder review performed

## A.6 EXTERNAL SUPPORT AGENCIES

WHO invited 65 bilateral and multilateral agencies, private foundations and other NGOs that provide development aid, research or other support to sanitation and drinking-water to participate in the GLAAS survey of ESAs.

Twenty-four ESAs responded to the questionnaire, including the African Development Bank, Asian Development Bank, Australia, Bill & Melinda Gates Foundation, European Bank for Reconstruction and Development, European Commission, France, Germany, Inter-American Development Bank, International Federation of Red Cross and Red Crescent Societies, Ireland, Islamic Relief, Japan, the Netherlands, Norway, Portugal, Sweden, Switzerland, UNDP, UNICEF, United Kingdom, USA, WaterAid and World Bank. Together, these ESAs represent 82% of bilateral and 97% of multilateral ODA for water and sanitation, based on the OECD-CRS data for commitments to water and sanitation for 2009.

## A.7 COUNTRY AND EXTERNAL SUPPORT AGENCY FEEDBACK

Countries and external support agencies were requested to provide feedback on a range of factors associated with GLAAS data collection. These responses are being carefully reviewed to inform the next phase of GLAAS.

# Annex B: Tracking national financial flows to WASH

## KEY MESSAGES

- There are substantial gaps in the current understanding and tracking of financial flows to WASH at global and national levels.
- There is no standard methodology for tracking financial flows for the WASH sector, which is similar in scope to the health and education sectors.
- A methodology to track financial flows to WASH is proposed and will be pilot-tested in selected countries.

Effective financing for WASH is essential to accelerate and sustain services that could ultimately save 2 million lives per year. Inadequate monitoring and limited availability of financial data, however, impede the ability of countries to assess progress and improve performance. An internationally agreed standard methodology for tracking financial flows to WASH at the national level does not exist.

A GLAAS-commissioned expert review concluded that developing such a methodology is required and feasible (WHO, 2012). This annex summarizes the key conclusions and recommendations of this expert review, while incorporating new GLAAS data from the country questionnaires and follow-up interviews. It first sets out why such a standard approach is needed, before proposing key elements of a standard approach and recommendations for its pilot testing in a small number of countries. Following such testing, a commonly accepted methodology could then feed into the 2014 GLAAS report data collection and beyond.





## B.1 WHY IMPROVE TRACKING OF FINANCIAL FLOWS TO WASH?

Delivering sustainable WASH services for all requires mobilizing ongoing financial flows to the sector. Forming a good understanding of the financial flows to the sector (both recurrent expenditure and investment) is essential in order to assess whether existing funds are being efficiently used and how they may need to be increased so as to extend access and ensure that services are delivered sustainably. Such data can help with monitoring progress towards achieving targets, benchmarking performance over time and across countries, estimating future needs, mobilizing additional financial resources (if necessary) and helping to ensure value for money.

Despite significant improvements in recent years, there are still substantial gaps in our understanding and tracking of financial flows to the WASH sector at both national and international levels. Attempts to undertake global reporting and monitoring (including through GLAAS in 2008 and 2010) do not provide sufficiently robust evidence for policy-making at the national level or for systematic global analysis.

Out of 74 countries that completed the survey for the 2012 GLAAS report, only 4 submitted complete information with respect to tracking financial flows, and 27 submitted partial financial information. Many countries were able to provide data on central government spending only but remained silent on other sources of revenue for the sector, particularly from households. For the purpose of this annex, respondents in three countries were consulted in order to better understand how they filled in the financial information table in the GLAAS questionnaire and the methodological issues that they encountered in doing so. The selected countries (Bangladesh, Burkina Faso and Jordan) had all provided fairly complete financial information.

## B.2 WHERE DOES FINANCING FOR THE SECTOR COME FROM?

Funding for the sector can come from three main sources: tariffs, taxes and transfers. These three financial sources are commonly referred to as the “3Ts” of WASH.

Due to the lumpy nature of WASH sector investments (relatively large investments with a long asset life), it is seldom possible to finance all necessary investments upfront. If additional financing cannot be raised, either by

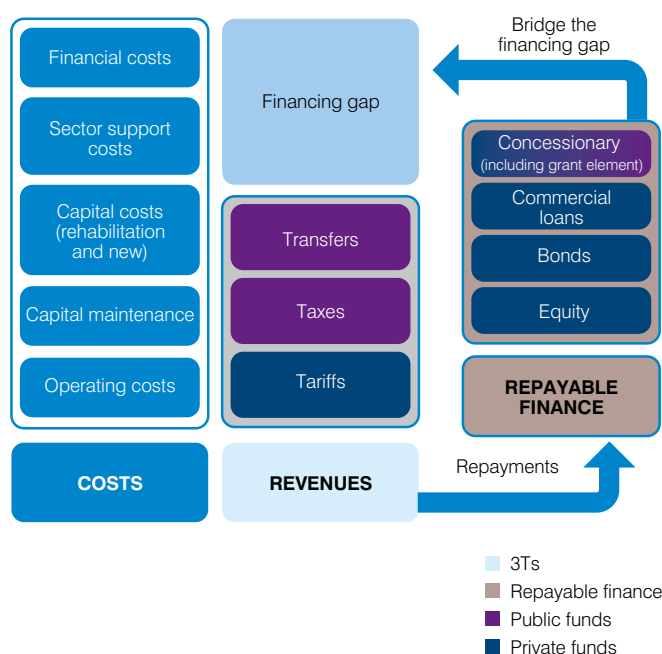
reducing costs or by increasing the 3Ts, the remaining financing gap needs to be “bridged” via a mix of repayable financing sources. At the most basic level, this financing would include loans (on either commercial or concessionary terms) and equity investments from private investors. If repayable financing is not available (either because the cost of borrowing is too high or expected revenue streams are not sufficient to repay), the financing gap would result in an investment gap, which means that necessary investments are not carried out for lack of finance. The way in which these financing sources can be combined is shown in Figure B.1.

### Defining the 3Ts

**“Tariffs” are funds contributed by users of WASH services for obtaining the services.** Users generally make payments to service providers for getting access to the service and for using the service. When the service is self-provided (e.g. when a household builds and operates its own household latrine), the equity invested by the household (in the form of cash, material or time—“sweat equity”) would also fall under “tariffs”.

**“Taxes” refer to funds originating from domestic taxes that are channelled to the sector via transfers from all levels of government, including national, regional and local.** Such funds would typically be provided as subsidies, for capital investment or operations. “Hidden” forms of subsidies may include tax rebates, soft loans (i.e. at a subsidized interest rate) or subsidized services (e.g. subsidized electricity).

**“Transfers” refer to funds from international donors and charitable foundations (including NGOs, decentralized cooperation or local civil society organizations) that typically come from other countries.** These funds can be contributed in the form of grants, concessionary loans (i.e. loans that include a “grant” element in the form of a subsidized interest rate or a grace period) or guarantees.



**FIGURE B.1** Sources of finance for the WASH sector

Source: WHO (2012)

## B.3 WHAT DO WE KNOW ABOUT THESE FINANCIAL FLOWS?

Knowledge about financial flows to the WASH sector at the national level is approximate and partial. In most countries, it is not possible to answer basic questions, such as “How much is being spent at present on WASH services?” This approximate and partial understanding of WASH financial flows is partly due to the fact that the sector is complex, typically with four main subsectors (water and sanitation/hygiene in rural and urban areas) with different institutional setups, various financing sources and financing channels, and a mix of service providers, including public and private ones. As a result, data available at the national level are often incomplete, making it difficult to compare across national boundaries.

Whereas transfers from OECD donors are tracked with some accuracy, data on domestic government spending and private spending (mostly from households via tariffs or direct investments) are either incomplete or unreliable. As a result, there is a tendency to focus on “what we know best” when compiling aggregate data, which can result in a distorted understanding of current financing and potentially wrong policy decisions.

### WHAT WE KNOW ABOUT TARIFFS

According to the cost-recovery principle, the majority of funding for WASH should come from households via tariffs and charges paid to service providers or their own investments (e.g. in on-site sanitation). However, governments typically do not record these financial flows. Information on tariffs paid to formal WASH service providers usually exists, but collecting this information requires careful examination of their financial accounts and tariff schedules. This can be difficult and time-consuming when WASH services are decentralized and there is no mechanism in place to collect this information (e.g. a regulator). Information on other types of tariffs, such as those paid to informal WASH service providers or investments by households, is usually not tracked, even though isolated studies have sought to estimate such tariffs. For example, the Africa Infrastructure Country Diagnostic

led by the World Bank in sub-Saharan Africa (World Bank, 2010a) found that households were the largest funders of WASH services in that region, including for capital investment. Payments to informal service providers, although unrecorded, can also be substantial, as tariffs can be many fold higher than official tariffs.

For the 2012 GLAAS survey, only Bangladesh, the Islamic Republic of Iran, Lesotho and Thailand provided reasonably robust estimates of household-level expenditure. Bangladesh estimated operating expenditures by households only, based on a compilation of tariffs and charges paid to utilities in the country. There are 208 utilities in Bangladesh of varying sizes, and the data collected by the Department of Public Health Engineering cover approximately 90% of these utilities. Even though Bangladesh sought to estimate capital expenditures as well (particularly for on-site sanitation investments, using data on the number of latrines built each year and estimated costs), the government did not deem those figures robust enough to be released. By contrast, Burkina Faso did not provide any information on household expenditure, even though it provided good information on other sources. This was partly due to difficulties in accessing tariff data (particularly from small rural operators) and to the fact that household survey questionnaires do not include questions on water and sanitation expenditure.

### WHAT WE KNOW ABOUT TAXES

Information on taxes channelled to the WASH sector can in theory be obtained from budgetary information. However, there are a number of common difficulties in compiling a comprehensive picture of such budgetary flows, such as the following:

- In a majority of countries, responsibilities for WASH services have been decentralized. As a result, getting information on the share of public budgets allocated to WASH requires obtaining data from a potentially large number of local governments.
- Local governments would usually be funded from a variety of sources, including their own local tax resources, but also transfers from the national government. Such

transfers can come through different ministries or, in some cases, via vertical funds or other forms of pooled funding mechanisms.

- In some countries, a sector-wide approach has been adopted, with a willingness to pool funding to the sector into a common funding basket. However, a considerable percentage of funding often remains channelled outside the sector-wide approach and is difficult to track.
- Some countries have established mechanisms for tracking financial resources at an aggregated level. However, such tracking systems remain relatively rare, with only the most administratively developed countries having such systems in place.

### WHAT WE KNOW ABOUT TRANSFERS

Most transfers in the form of ODA from donor countries and international organizations (bilateral and multilateral cooperation) are tracked by the OECD-CRS database. Although it is the best available, there are a number of issues with using this database for policy-making at the national level, such as the following:

- The information is not sufficiently disaggregated to distinguish between capital investment expenditure and recurrent expenditure or to identify whether it goes to rural or to urban areas.
- A large (and growing) portion of ODA flows are in the form of concessionary loans (i.e. loans with a grant element of at least 25%). If the loan satisfies the ODA criteria, the whole amount is recorded as ODA. From the point of view of the recipient country, however, this should be considered as repayable financing rather than, strictly speaking, as transfers.
- Transfers from non-OECD donors, such as from China or oil-producing countries, are not tracked when there is some evidence that such flows to the WASH sector have increased significantly.
- Transfer flows from the “non-public” sector, such as from NGOs, foundations or remittances from

migrants, are not tracked, even though they can be substantial in some countries. Attempts at obtaining data on such flows at the country level are often unsuccessful.

Some countries have also developed systems to track transfer flows at the national level. For example, Bangladesh records international transfers and NGO funding through the national budget (NGO flows are recorded at the local government level and then aggregated). Jordan has also developed the Jordan Aid Information Management System, which is accessible on the web site of the Ministry of Planning and International Cooperation. The system provides information on ongoing development projects and programmes being implemented in Jordan that are funded by foreign assistance (grants, soft loans and technical assistance) as well as financing institutions and international organizations in various sectors. Attempts at comparing OECD-CRS global data with information on aid flows in a given country can generate some discrepancies, however.

Finally, information on repayable financing to the sector is very limited, besides the information contained in the OECD database on concessionary lending, and there is no tracking of commercial lending.

## B.4 WHAT INITIATIVES HAVE BEEN UNDERTAKEN TO IMPROVE OUR UNDERSTANDING OF WASH FINANCING?

Several initiatives have been undertaken by a wide range of actors (including WHO, OECD, the Water and Sanitation Program of the World Bank and WaterAid) to track financial flows to the WASH sector. These have greatly improved our current understanding of financial flows in the countries where these exercises have been conducted, but there has been no attempt so far to scale up these initiatives. Most of these initiatives aimed at assessing whether sector targets were likely to be met and identifying possible financial

gaps, resulting in a strong focus on capital expenditure and insufficient attention paid to financial flows for operation and maintenance of existing systems. These initiatives have all faced comparable difficulties in terms of access to comprehensive and reliable data. They have typically required substantial external inputs rather than being “owned” by the countries. As a result, they have often been carried out in a limited number of countries as “one-off” exercises, rather than being institutionalized.

At a broader “water sector” level, the UN Statistics Division has developed the System of Environmental Economic Accounting for Water (SEEA-Water), which provides a good basis for developing a commonly applied methodology for tracking financial flows. This system provides a conceptual framework for organizing the hydrological and economic information in a comprehensive, consistent and comparable manner, using as a basis the 1993 System of National Accounts, which is the international standard system for the compilation of economic statistics. In 2007, the SEEA-Water framework was adopted by the UN Statistical Commission, which also encouraged countries to implement it. To date, more than 50 countries have expressed interest in compiling national statistics following the SEEA-Water framework. However, this methodology has yet to be used on a large scale, and it would need to be refined in order to more accurately capture the reality of financing flows in the sector and explained to sector professionals.

By contrast, a commonly accepted methodology to track sector financial flows has been used for both the health and education sectors, even though they are also highly complex sectors, with a broad range of service providers, multiple services delivered, a mix of capital and recurrent expenditures and a mix of financing sources (household payments being very substantial in the health sector, even though they are still inadequately tracked). In the health sector, for example, National Health Accounts have been developed for more than 100 countries (more than once in several countries), following a commonly accepted

methodology based on a clear definition of sector boundaries, cost classification, sector matrices and guidance documents published by international organizations such as WHO and the OECD.

Comparable data are produced based on these accounts and are then drawn together into annual reports produced by WHO, available on the Internet<sup>1</sup>.

A common methodological framework for tracking financial flows to the WASH sector at the national level is urgently needed.

As in the health sector, a better understanding of financial flows at the national level would be critical to support policy development and implementation, so that policy choices can be based on sound evidence, expenditure can be tracked against targets and additional financing to the sector can be attracted, particularly when it is in competition with other sectors for resources. This is a difficult and challenging task, considering the existing gaps in terms of financial data in the sector. However, it is feasible, as long as the methodology is gradually developed over time and embedded into national systems.

## B.5 OVERVIEW OF THE PROPOSED METHODOLOGY

As a first step, it is proposed that a methodology be developed to improve our understanding of current expenditure in the WASH sector so as to answer four basic questions on a consistent, reliable and comparable basis:

1. What is the total expenditure in the sector?
2. How are the funds distributed to the different WASH services and expenditure types?
3. Who pays for WASH services, and how much do they pay?
4. Which entities are the main channels of funding in the WASH sector?

Obtaining sound and reliable data to answer these questions would enable

<sup>1</sup> See <http://www.who.int/nha/en/> for more information.

probing some of the existing targets that are expressed in financial rather than physical terms.

For example, in 2008, sub-Saharan African countries committed to spending 0.5% of their GDP on sanitation via the eThekweni Declaration. As there is no commonly accepted methodology for compiling this figure, however, the ability to monitor delivery against such an important commitment is very limited.

The methodology that is proposed in subsequent paragraphs draws from the National Health Accounts methodology as well as from the SEEA-Water system. Such a methodology will need to be developed and rolled out over time, preferably by leading international WASH sector organizations in partnership with water ministries and statistics departments at international and national levels (UN Statistics Division and national statistical services). As it develops, the methodology could seek to answer more ambitious questions, such as estimating value for money of alternative interventions (see Table B.1 for potential next steps in terms of methodological development).

The proposed methodology basically consists of a process that can help countries track financial flows in the WASH sector and analyse this information in a coherent and consistent manner across several countries. Figure B.2 outlines the main steps of the proposed methodology, which will need to be tailored to some extent depending on country circumstances.

Additional explanation for each step of the process is provided in the following paragraphs, in which we refer to the application of the methodology as the “tracking exercise”.

### DEFINING THE BOUNDARIES OF THE WASH SECTOR

First, it is essential to define the “boundaries” of the WASH sector—i.e. to identify the list of services for which costs are to be tracked. The definition of the WASH sector (i.e. the types of services that are included) often varies from one country to another, and it is therefore

essential to clarify what is included in the sector in each country where the analysis is conducted. For example, in Jordan, the water sector has remained highly centralized, and services are provided by a small number of public authorities that fall under the responsibility of the Ministry of Water and Irrigation. Data provided for the 2012 GLAAS questionnaire included government expenditure from the Ministry of Water and Irrigation, the Water Authority of Jordan, public utilities owned by the Water Authority of Jordan and the Jordan Valley Authority. However, the Jordan Valley Authority is in charge of large irrigation investment programmes in the Jordan Valley, which are substantial, given that agriculture is highly dependent on irrigation in this area. As a result, reported figures include investments that go beyond the provision of WASH services as it tends to be in other countries, making them less comparable.

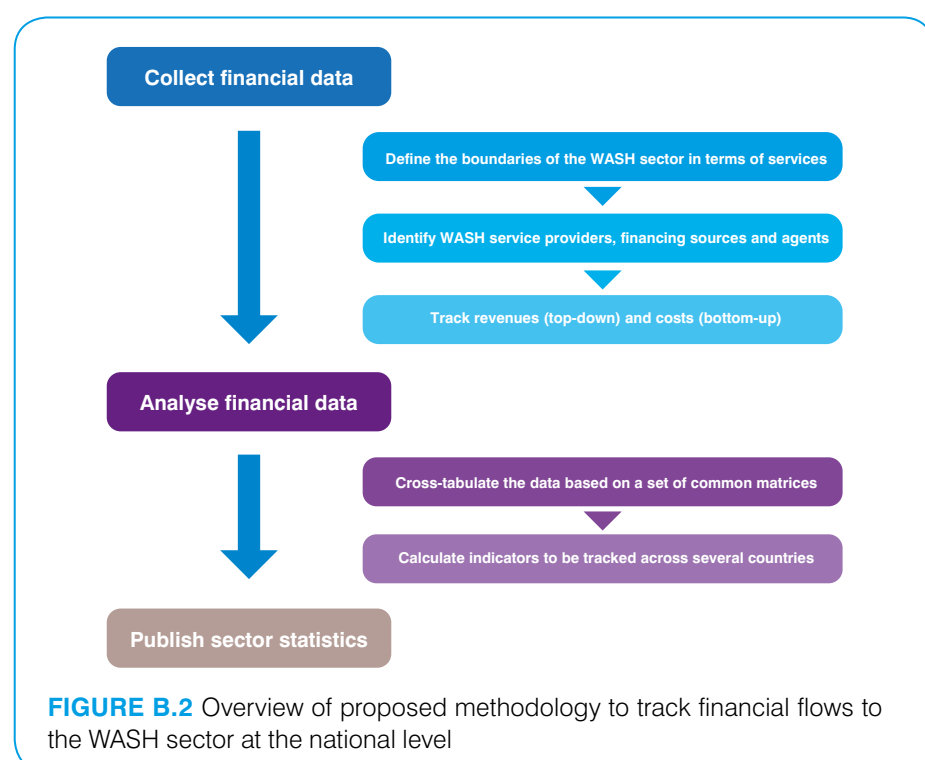
To define the boundaries of the WASH sector, it may be possible to rely on several classifications of economic activities that are in use at international and national levels, including those developed by the UN Statistics Division, such as the International Standard Industrial Classification (ISIC) of all economic activities within the overall framework of the UN System of National Accounts (SNA, 2009). Existing WASH

sector-led initiatives that have sought to rely on such classifications (e.g. the Africa Infrastructure Country Diagnostic or the Country Sector Overview studies conducted by the Water and Sanitation Program of the World Bank) have found that the ISIC classification was seldom adequate, however, because it does not allow disaggregation by funding source and does not reflect the full range of WASH services<sup>2</sup>.

One potential way of addressing this issue would be for the WASH sector to agree on a more disaggregated international classification of WASH sector functions and services, which could then be aggregated up to the existing ISIC classification<sup>3</sup>. A proposed detailed list of services is included in the expert review (WHO, 2012) as a basis for discussion.

### IDENTIFY WASH SERVICE PROVIDERS, FINANCING SOURCES AND FINANCING AGENTS

Second, it is critical to map out the way in which funds circulate around the sector in order to determine the scope of the tracking exercise. Such mapping involves identifying WASH service providers, financing sources (typically, households and domestic and international governments) and financing channels. A schematic representation of a typical



**FIGURE B.2** Overview of proposed methodology to track financial flows to the WASH sector at the national level

<sup>2</sup> For example, hygiene does not fit in ISIC 36 and 37 categories as currently defined. In addition, ISIC 36 is defined as the activity related to the collection, purification and distribution of water (not necessarily potable and not necessarily to households). Besides, ISIC does not allow distinguishing according to the type of institutional sector that owns the services or the source of the funding provided (government, donor, private utility or households).

<sup>3</sup> In the health sector, the OECD developed the International Classification for Health Accounts reflected in the System of Health Accounts published in 2000, 2011 edition (OECD, 2011b).



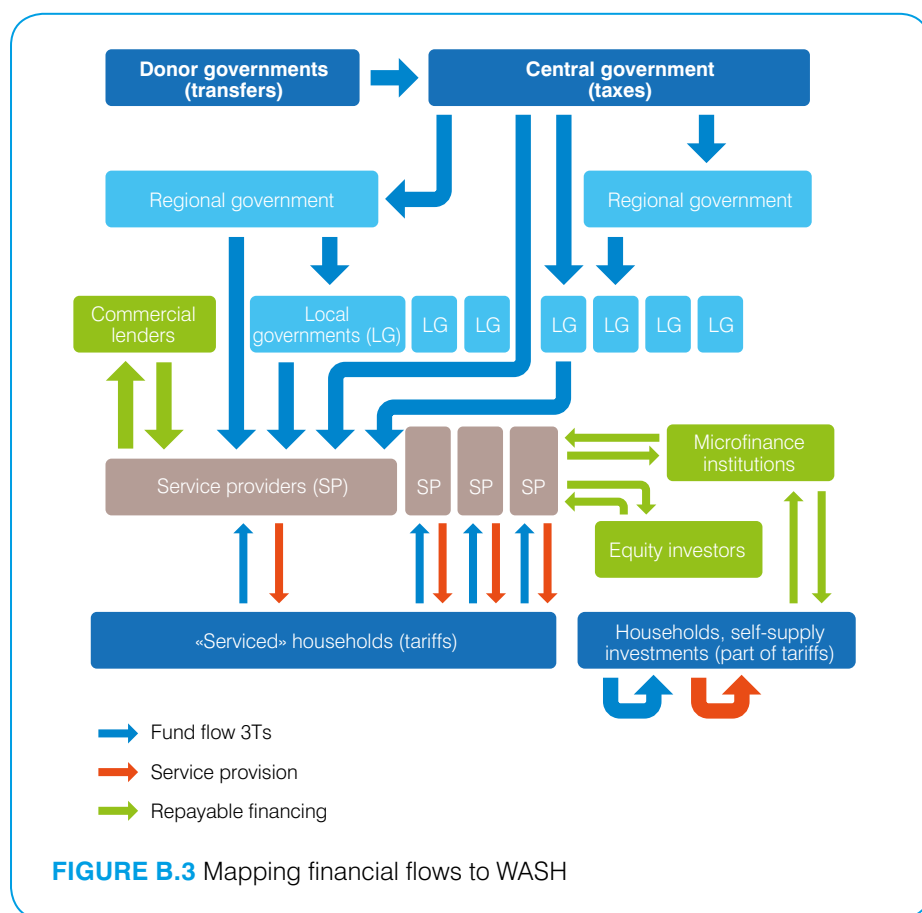
decentralized WASH sector is presented in Figure B.3, where the dark blue boxes show the financing sources and the light blue boxes show the financing agents (or channels) for public funding (note that the central government or its agencies may play the role of both financing source and financing agent at the same time).

### IDENTIFYING SERVICE PROVIDERS

The organization of the WASH sector varies greatly from one country to another, depending on factors such as water resource availability, historical legacy, official coverage of WASH services or the extent to which services are decentralized. For example, in Burkina Faso, a public urban utility, ONEA, is in charge of providing water services in the main urban centres (as well as sanitation services in the big cities). By contrast, service provision in rural areas is decentralized, with rural communities being responsible for the delivery of water services. While boreholes in rural areas are managed by water committees or by users' associations, rural municipalities with a water network are supposed to sign contracts with private operators. To date, about 70 such municipalities (30%) have signed contracts with four official private providers. In the remaining municipalities, the network is managed by a recognized community association (20%), by the municipality itself or by an informal provider. Informal providers are also found in periurban areas. Concerning sanitation, in rural areas, services are typically self-provided. In other countries, such as in Bangladesh, service provision is decentralized, meaning that there are a large number of urban water service providers operating the services.

Sanitation services may be provided jointly with water services or separately. In a large number of cases, there is no formal sanitation service provider. As a result, households invest in on-site sanitation solutions and maintain those installations themselves (referred to as "self-supply").

Despite these variations, it is possible to identify patterns in service provision in the WASH sector. It would therefore be possible to establish a commonly accepted classification of WASH service providers, as has been done in the health sector. Identifying who is in



charge of providing the service would then allow the identification of how revenues and costs can be tracked.

### UNDERSTANDING FINANCING SOURCES

Although financing sources are likely to be similar in all countries, they tend to be tracked differently from one country to another. When seeking to track financial flows at the national level, it would be essential to rely on data that are already available, such as information available at the level of national statistics bureaux complemented with information from budgetary sources for national and local government, utilities' financial accounts, existing household surveys, financial flow tracking reports and interviews with key informants.

In some cases, it will be necessary to collect survey data, particularly for the financial flows of certain service providers (e.g. informal service providers) or certain financing sources (e.g. household investment in on-site sanitation), that have not been collected before. When such surveys are not possible or too expensive, it will be necessary to formulate assumptions to derive ballpark estimates.

When tracking financing sources, it is important to ensure that no double-counting is taking place. For example, the origin of public funds may be external transfers; such flows should not be counted twice as taxes and transfers. Some countries track this issue very carefully, whereas others do not, so avoiding double-counting requires taking a number of methodological precautions.

### IDENTIFYING FINANCING AGENTS

Financing agents can be defined as "those that control the strings of the purse"—i.e. those that receive funds from financing sources and make spending decisions. These can include national, regional or local authorities as well as international donor organizations or NGOs and, in some cases, utilities. In the water sector, these financing agents may be the same as the service providers, but not always. For example, a water sector development fund may not provide any specific service, but simply channel financing to particular areas of the sector. Each country would need to identify the relevant financing agents, which could later be allocated to specific categories if a common classification of financing agents is deemed to be necessary for international comparisons.

## COLLECTING DATA: TRACKING COSTS AND REVENUES

Once the financing flows have been mapped out, there are broadly two methods for collecting information on such flows:

1. The “top-down” approach consists of tracking revenues from each financing source—i.e. estimating how much money is allocated to the sector—and aggregating those estimates.
2. The “bottom-up” approach consists of tracking the costs of different services—i.e. what is being spent—and aggregating those expenses in order to derive total expenditure figures.

The top-down approach is the most straightforward approach for tracking public financing flows, as most public entities would have a budget allocation for the sector and should be able to report on this. Such an approach is not sufficient when seeking to track all sources of finance, however.

For example, there are no readily available aggregate data on how much households spend on the services that they self-supply, although there is evidence that such amounts can be substantial. In addition, service providers receive financing from several sources, and tracking information about their revenues only does not allow analysing what the funds are spent on.

The “bottom-up” approach consists of evaluating the costs of providing the services. This needs to be done based on a commonly agreed typology of costs, which would at least distinguish between capital expenditure (including large maintenance costs), operating costs and minor maintenance expenditure. Ideally, those costs would need to be collected at the level of each service provider. However, in countries with a large number of service providers, that may need to be done on a sample basis and then extrapolated.

Data collection will need to be conducted based on a combination of the top-down and bottom-up approaches, so as to be in a position to answer two essential questions: “What is being spent?” and “Who are the main financiers of the sector?” A reconciliation of these two sets

of data would also allow the identification of any discrepancies between the two sets of figures.

With respect to capital expenditure, we recommend that it be tracked on the basis of capital stocks as well as flows. Most existing financial tracking initiatives in the WASH sector have so far focused on tracking investment flows—i.e. the amount of new capital investment made every year. Focusing exclusively on financial flows can result in misleading results, given that such flows can vary substantially from year to year and that some flows are currently not tracked. By contrast, estimating existing investment stocks and how such values evolve over time would allow tracking all sources of investment on a comparable basis. As this kind of estimate has not been attempted before on an aggregated basis, however, methodological development will be needed to estimate the value of these assets and identify whether such an approach is feasible at scale.

## ANALYSING FINANCIAL DATA

The information collected will then need to be analysed based on a set of commonly agreed matrices and indicators<sup>4</sup>. Two-dimensional matrices allow tracking the distribution of WASH expenditure by financing source, service provider, financing agent or type of service provided. In addition, data can be used to estimate common headline indicators, such as:

- total expenditure on the WASH sector at the national level (and total expenditure on each subsector taken separately, such as drinking-water, sanitation and hygiene);
- total expenditure on WASH per capita;
- total WASH asset stock per capita;
- total expenditure on WASH as a percentage of GDP;
- total expenditure on WASH as a percentage of total public spending;
- recurrent and capital expenditures as a percentage of total WASH expenditure;
- sanitation expenditure as a percentage of total WASH expenditure.

These common indicators can be used for time-based and cross-national comparisons. It would be preferable to define a small set of common indicators estimated in a consistent manner across countries and then let individual countries define their own sets of indicators, depending on what is most relevant in their own policy determination processes.

## B.6 NEXT STEPS

In 2012, the proposed methodology will be tested through a multicountry study under the guidance and leadership of a panel comprising experts from the WASH sector as well as experts on statistics and national accounting. The developed methodology will take the form of a guidance manual for tracking investment and financial flows to WASH and providing practical guidance for countries on how to implement it. This methodology will then be rolled out in a larger group of countries for the 2014 GLAAS report. Beyond, the methodology could be developed further, as shown in Table B.1.

Reaching consensus on a commonly agreed methodology and rolling it out to a large number of countries will require engaging with WASH sector actors and with national statistics offices around the world. In each country, a national-level institution should take the lead for managing the data collection exercise and reporting on the basis of the commonly agreed framework, with limited external support from international organizations and their consultants. This institution could be either a sector institution (e.g. the ministry of water or ministry of the environment) or the national bureau of statistics, or both in cooperation. Indeed, much of the required information is consistently collected by countries through their own local system of national accounts. However, the information is usually published aggregated with other subjects, perhaps because the policy needs have not been clearly received by the national statistics offices. It is therefore important that the policy needs for distinct WASH sector statistics are clearly expressed.

<sup>4</sup> The National Health Accounts have defined a set of commonly agreed matrices, which facilitate comparisons across countries.

As this kind of exercise becomes more institutionalized, it is suggested that data collection and analysis could take place every 2–4 years in a given country, in order to provide updated information for cross-country analyses. The exact timing of such exercises would need to take account of policy definition processes

in each country. Coordination with data collection of physical indicators, such as with data collected for GLAAS or for JMP, should be encouraged, so as to allow for economies of scale in data collection and the potential computation of cost-effectiveness indicators.

**TABLE B.1** Overview of the gradual extension of the proposed methodology

	Immediate coverage (GLAAS 2014)	Potential future developments
Proposed objectives	<ul style="list-style-type: none"> <li>Track actual expenditure in the sector over a small number of years (2–3)</li> <li>Evaluate capital stocks invested in the sector at a given date (value of existing assets)</li> </ul>	<ul style="list-style-type: none"> <li>Track actual expenditure over a longer period</li> <li>Define and track “value-for-money” indicators</li> <li>For taxes and transfers, compare planned expenditure (or commitments) with actual expenditure</li> </ul>
Proposed scope	<ul style="list-style-type: none"> <li>Funding for all activities that provide sustainable WASH services</li> <li>All costs (including capital expenditures, operating expenditures, capital maintenance, support costs)</li> <li>All financial sources (tariffs, including household contributions, taxes and transfers)</li> <li>Formulate transparent assumptions and rely on surveys based on samples where no reliable data exist</li> </ul>	<ul style="list-style-type: none"> <li>Identical scope as for immediate coverage</li> <li>Improve methodologies and coverage of data collection in subsequent exercises</li> </ul>

# Annex C: Glossary

## **Absorption rate (donor funds)**

The absorption rate indicates the percentage of official donor commitments utilized over a given period. The 2011 GLAAS country survey questionnaire referred to a three-year average percentage of official donor commitments utilized.

## **African Development Fund**

Established in 1972, the African Development Fund (AfDF) is administered by the African Development Bank (AfDB) with an objective to reduce poverty in regional member countries by providing loans and grants. The AfDF contributes to the promotion of economic and social development in 38 least developed African countries by providing concessional funding for projects and programmes, as well as technical assistance for studies and capacity-building activities.

## **Asian Development Fund**

Established in 1973, the Asian Development Fund (ADF), administered by the Asian Development Bank (ADB), is a multilateral source of concessional assistance dedicated exclusively to the needs of the region. Resources consist mainly of contributions mobilized under periodic replenishments from ADB's members and reflows from ADF loan repayments.

## **Basic drinking-water**

Basic drinking-water systems include rural water supply schemes using handpumps, spring catchments, gravity-fed systems, rainwater collection and fog harvesting, storage tanks, and small distribution systems typically with shared connections/points of use; and urban schemes using handpumps and local neighbourhood networks, including those with shared connections (EUWI/OECD, 2012).

## **Basic sanitation**

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 (EUWI/OECD, 2012).

## **Capital investments**

Capital investments include expenditures on fixed assets such as buildings, treatment structures, pumps, pipes and latrines, including the cost of installation/construction.

## **Commitment**

A commitment is a firm written obligation by a government or official agency, backed by the appropriation or availability of the necessary funds, to provide resources of a specified amount under specified financial terms and conditions and for specified purposes for the benefit of the recipient country (OECD, 2010).

## **Concessional loans**

Concessional loans are extended on terms substantially more generous than market loans. The concessionality is 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 (OECD, 2010).

## **Country compact agreement**

A country compact agreement is a multiyear agreement between a donor and a recipient country to fund specific programmes aimed at an objective such as reducing poverty or stimulating economic growth. The agreement may be developed in consultation with country stakeholders, may include streamlined access to funds, will include programme objectives and specific activities to be implemented and may include mechanisms to monitor progress.

## **Disbursements**

Disbursements reflect the execution of projects/programmes and the real transfer of funds. Disbursements record the actual transfer of financial resources, goods and services. As a project or programme is usually not realized in a year, there is no direct relationship between the level of commitment and the level of disbursement during one period (OECD, 2010).

## **Gross domestic product**

Gross domestic product (GDP) is the sum of gross value added by all resident producers in the economy plus any product taxes (less subsidies) not included in the valuation of output. It is calculated without deducting for depreciation of fabricated capital assets or for depletion and degradation of natural resources (World Bank, 2010b).



### **Gross national income**

Gross national income (GNI) is the sum of value added by all resident producers plus any product taxes (less subsidies) not included in the valuation of output plus net receipts of primary income (compensation of employees and property income) from abroad (World Bank, 2010b).

### **Improved drinking-water supply**

Improved drinking-water supplies include sources that, by the nature of their construction or through active intervention, are protected from outside contamination, particularly faecal matter. These include piped water in a dwelling, plot or yard and other improved sources, including public taps or standpipes, tubewells or boreholes, protected dug wells, protected springs and rainwater collection.

### **Improved sanitation**

Improved sanitation includes facilities that ensure hygienic separation of human excreta from human contact. They include 1) flush or pour-flush toilet/latrine to piped sewer system, septic tank or pit latrine, 2) ventilated improved pit latrine, 3) pit latrine with slab or 4) composting toilet.

### **Inter-American Development Bank**

The Inter-American Development Bank (IDB) was established in 1959 to support the process of economic and social development in Latin America and the Caribbean. The IDB provides solutions to development challenges by partnering with governments, companies and civil society organizations, thus reaching its clients, ranging from central governments to city authorities and businesses. The IDB provides grants and lends money at competitive rates to its clients in its 26 borrowing member countries.

### **International Development Association**

Established in 1960, the International Development Association (IDA) is a part of the World Bank that aims to reduce poverty by providing interest-free loans and grants for programmes that boost economic growth in the world's poorest countries.

### **Large drinking-water systems**

Large drinking-water systems include potable water treatment plants, intake works, storage, water supply pumping stations and large-scale transmission/conveyance and distribution systems (EUWI/OECD, 2012).

### **Large sanitation systems**

Large sanitation systems include trunk sewers and sewage pumping stations and domestic and industrial wastewater treatment plants (EUWI/OECD, 2012).

### **Least developed country**

The UN General Assembly, on the recommendation of the Committee for Development Policy, decides on the countries to be included in the list of the least developed countries (LDCs). The Committee for Development Policy used the following three criteria to identify LDCs:

1. a low-income criterion, based on a three-year average estimate of the gross national income per capita (under US\$ 905 for inclusion, above US\$ 1086 for graduation);
2. a human capital status criterion, involving a composite Human Assets Index based on indicators of (a) nutrition: percentage of population undernourished; (b) health: mortality rate for children aged five years or under; (c) education: the gross secondary school enrolment ratio; and (d) adult literacy rate;
3. an economic vulnerability criterion, involving a composite Economic Vulnerability Index based on indicators of (a) population size; (b) remoteness; (c) merchandise export concentration; (d) share of agriculture, forestry and fisheries in gross domestic product; (e) homelessness owing to natural disasters; (f) instability of agricultural production; and (g) instability of exports of goods and services.

To be added to the list, a country must satisfy all three criteria. In addition, since the fundamental meaning of the LDC category (i.e. the recognition of structural handicaps) excludes large economies, the population must not exceed 75 million (UNOHRLLS, 2010).

### **Lower middle income country**

The World Bank classifies countries in one of four income categories: low, middle (lower and upper) and high. Lower middle income countries are defined as countries with a per capita gross national income of more than US\$ 1006 and less than US\$ 3975 in 2010 (World Bank, 2012).

### **Low-income country**

The World Bank classifies countries in one of four income categories: low, middle (lower and upper) and high. Low-income countries are defined as countries with a per capita gross national income of US\$ 1005 or less in 2010 (World Bank, 2012).

**Non-revenue water**

Non-revenue water is calculated as the difference between water produced and water billed per kilometre of water network per day. This measure captures both physical and commercial losses (World Bank, 2011).

**Official development assistance**

Official development assistance (ODA) consists of grants or loans to countries and territories on Part I of the Development Assistance Committee List of Aid Recipients (developing countries) that 1) are undertaken by the official sector, 2) have promotion of economic development and welfare as the main objective and 3) have concessional financial terms (if a loan, having a grant element of at least 25%) (OECD, 2012).

**On budget**

On-budget projects are resources (internal and external) that are allocated to specific activities or cost centres that are presented in government budget documents.

**Operating ratio**

For purposes of GLAAS, operating ratio has been defined as revenues (user fees and public subsidies) divided by expenses. Operating ratios may also be reported as operating expenses/operating revenues (WHO, 1990).

**Other low-income country**

The World Bank classifies countries in one of four income categories: low, middle (lower and upper) and high. Low-income countries are defined as countries with a per capita gross national income of US\$ 1005 or less in 2010. Other low-income countries are defined as low-income countries that do not meet all criteria to be classified as a "least developed country" (World Bank, 2012).

**Other official flows**

Other official flows are transactions by the official sector with countries on the List of Aid Recipients that do not meet the conditions for eligibility as official development assistance or official aid, either because they are not primarily aimed at development or because they have a grant element of less than 25% (OECD, 2012).

**Paris Declaration on Aid Effectiveness**

Endorsed on 2 March 2005, the Paris Declaration on Aid Effectiveness was an international agreement to which over 100 ministers, heads of agencies and other senior officials adhered and by which they committed their countries and organizations to continue to increase efforts in harmonization, alignment and managing aid for results with a set of monitorable actions and indicators.

**Pooled funding**

Pooled funding is a mechanism in which contributions from more than one donor are combined (i.e. pooled) and disbursed upon instructions from the fund's decision-making structure by an administrative agent. Pooled funds can be established in support of one theme (e.g. water and sanitation), or they can be country or region specific and designed for a variety of purposes (UNDG, 2010).

**Procurement systems**

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

**Upper middle income country**

The World Bank classifies countries in one of four income categories: low, middle (lower and upper) and high. Upper middle income countries are defined as countries with a per capita gross national income of more than US\$ 3976 and less than US\$ 12 275 in 2010 (World Bank, 2012).

# Annex D: Summary of responses to 2011 GLAAS country survey<sup>1</sup>

## SECTION A: SANITATION; AND SECTION B: DRINKING-WATER SUPPLY

Question 2: Coverage targets and coverage of schools and health-care facilities

Country	Question 2b – National coverage target?		Question 2b – Year national coverage target will be reached?		Question 2c – What is percentage of primary schools with improved sanitation/drinking-water facilities?		Question 2c – What is percentage of secondary schools with improved sanitation/drinking-water facilities?		Question 2c – What is percentage of hospitals with improved sanitation/drinking-water facilities?		Question 2c – What is percentage of health-care clinics with improved sanitation/drinking-water facilities?	
	Sanitation	Drinking-water	Sanitation	Drinking-water	Sanitation	Drinking-water	Sanitation	Drinking-water	Sanitation	Drinking-water	Sanitation	Drinking-water
Afghanistan	50	50	2014	2014	45	45	45	45	80	56	80	56
Angola	70	90	2015	2015	—	43	—	77	—	—	—	—
Azerbaijan	85	100	2014	2014	68	—	92	—	100	—	100	—
Bangladesh	100	100	2013	2011	65	81	85	100	85	100	90	100
Benin	46	—	—	—	—	—	—	—	—	—	—	—
Bhutan	100	100	—	2013	—	78	—	71	100	100	100	100
Bolivia (Plurinational State of)	61	83	2015	2015	—	—	—	—	—	27	—	27
Brazil	75	93	2015	2015	90.7	91.3	94.5	98.9	—	—	—	—
Burkina Faso	—	—	—	—	—	—	—	—	—	—	—	—
Burundi	—	—	—	—	—	—	—	—	—	—	—	—
Cambodia	—	—	—	—	60	60	56	56	—	—	—	—
Cameroon	75	75	2020	2015	60	70	50	60	67	70	55	60
Central African Republic	50	63	2015	2015	43	—	66	—	—	—	—	—
Chad	35	63	2015	2015	80	—	50	—	60	—	80	—
Colombia	—	—	2015	2015	—	—	—	—	—	—	—	—
Congo	—	—	—	—	—	—	—	—	—	—	—	—
Côte d'Ivoire	60	82	2015	2015	44	54	—	—	99	99	77	77
Democratic Republic of the Congo	—	49	—	2015	—	—	—	—	—	—	—	—
Dominican Republic	30	—	2015	2020	50	—	50	—	65	—	50	—
Egypt	60	100	2013	2012	—	100	—	100	—	100	—	100
El Salvador	—	83	—	2015	—	100	—	100	—	100	—	100
Equatorial Guinea	80	80	2020	2020	55	55	35	35	100	100	100	100
Ethiopia	100	98	2015	2015	77	32	—	—	81	98	70	77
Fiji	—	—	—	—	95	100	95	100	100	100	100	100
Gabon	—	—	—	—	—	—	—	—	—	—	—	—
Gambia	73	100	2015	2020	54	—	—	—	—	—	—	—
Ghana	54	78	2015	2015	52	59	79	97	—	—	—	—
Guinea	—	76	—	2015	—	—	—	—	—	—	—	—
Guinea-Bissau	61	45	2015	—	—	—	—	—	—	—	—	—
Haiti	—	—	—	—	—	—	—	—	—	—	—	—
Honduras	95	95	2015	—	—	—	—	—	100	—	—	—
India	—	—	—	—	—	—	—	—	—	—	—	—
Indonesia	75	67	2014	2014	—	—	—	—	—	100	—	—
Iran (Islamic Republic of)	39	99	2015	2015	86	89	93	99	44	100	—	—
Jordan	70	99	2015	2015	—	100	—	100	—	100	—	100
Kenya	—	—	—	—	—	—	—	—	—	—	—	—
Kyrgyzstan	—	—	—	—	69	—	69	—	87	—	87	—
Lao People's Democratic Republic	60	80	2015	2015	49	29	—	—	—	—	—	—
Lebanon	100	100	2020	2020	—	—	—	—	100	100	—	—
Lesotho	100	100	2020	2020	40	50	80	80	100	100	100	100
Liberia	56	50	2017	2011	82	82	82	82	—	—	—	—
Madagascar	11	39	—	—	31	21	—	—	75	75	39	16
Malawi	—	74	—	—	—	—	—	—	—	—	—	—
Maldives	—	—	—	—	97	97	97	97	—	—	—	—
Mali	35	76	2011	2011	—	85	—	—	—	100	—	100
Mauritania	64	50	2020	2008	7	—	—	—	100	100	100	100
Mongolia	40	48	2015	2015	95	—	95	—	43	—	—	—
Morocco	—	—	—	—	—	—	—	—	—	—	—	—
Mozambique	45	62	2011	2015	—	69	—	69	—	—	—	—
Myanmar	90	90	2015	2015	—	—	—	—	100	80	70	70
Nepal	100	100	2017	2017	85	65	85	65	100	100	100	90
Niger	53	—	2020	—	32	18	—	—	100	100	—	—
Nigeria	32	58	—	—	32	—	48	—	—	—	—	—
Oman	95	80	2015	2015	95	90	95	90	100	99	100	99
Pakistan	—	—	—	—	—	—	—	—	—	—	—	—
Panama	95	94	2015	2015	100	—	100	—	100	—	100	—
Paraguay	—	—	—	—	100	—	100	100	100	100	100	100
Philippines	86	87	2015	2015	77	58	51	63	100	100	100	100
Rwanda	55	—	—	—	80	—	80	—	80	—	80	—
Samoa	94	88	2006	2010	—	95	—	95	—	95	—	95
Senegal	70	90	2015	2015	61	53	42	84	100	100	100	100
Sierra Leone	57	62	2012	—	—	—	—	—	—	—	90	—
South Africa	81	94	—	2014	87	92	87	92	100	100	100	100
South Sudan	20	41	2013	2013	48	61	76	79	—	—	—	—
Sri Lanka	100	100	2020	2020	—	—	—	—	—	100	—	100
Tajikistan	—	80	—	2020	—	—	—	—	—	—	—	—
Thailand	—	95	—	—	57	85	57	100	77	100	71	100
Timor-Leste	65	—	2015	—	74	—	—	—	—	—	—	—
Togo	—	66	2015	2015	48	34	52	50	—	100	—	80
Uganda	72	65	2012	2015	—	—	—	—	—	—	—	—
Uzbekistan	15	—	2020	2020	—	—	18	—	28	—	—	—
Viet Nam	—	—	—	—	—	—	80	80	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—	—	—	—
Zimbabwe	85	100	2015	2015	—	—	—	—	—	—	—	—

<sup>1</sup> This Annex presents key questions selected from the 2011 GLASS survey, available at [http://www.who.int/entity/water\\_sanitation\\_health/glaas/glaas2011/en/index.html](http://www.who.int/entity/water_sanitation_health/glaas/glaas2011/en/index.html). The original numbering of the questions is retained for reference.

## Question 4: Policies and institutions

Country	Question 4a – Are targets included in Poverty Reduction Strategy Paper or National Development Plan?				Question 4b – Is there a policy agreed by stakeholders and approved and gazetted?				Questions 4c and 4e – Is there a government agency lead (sanitation) or are institutional roles clearly defined (drinking-water)?				Question 4f – Access targets for schools?		Questions 4n and 4i – To what degree has decentralization of service been carried out?			
	Sanitation		Drinking-water		Sanitation		Drinking-water		Sanitation		Drinking-water		Sanitation		Sanitation		Drinking-water	
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
Afghanistan	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.0	1.0	1.0	1.0	0.0	1.0	0.5	0.5	0.5	0.5
Angola	1.0	1.0	1.0	1.0	0.5	0.5	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Azerbaijan	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	—	—	1.0	1.0	0.0	0.0	0.0	0.0
Bangladesh	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5
Benin	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.0	1.0
Bhutan	0.5	0.5	1.0	1.0	0.0	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Bolivia (Pluri-national State of)	1.0	1.0	1.0	1.0	0.5	0.5	1.0	1.0	1.0	1.0	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.0
Brazil	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Burkina Faso	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	1.0	0.5	0.5
Burundi	1.0	1.0	—	1.0	0.5	0.5	—	1.0	1.0	1.0	—	1.0	0.5	0.5	—	—	—	1.0
Cambodia	1.0	1.0	1.0	1.0	0.5	1.0	1.0	1.0	0.5	1.0	1.0	1.0	0.5	0.5	1.0	0.5	1.0	0.5
Cameroon	1.0	0.5	1.0	1.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.5	0.5	0.0	0.0
Central African Republic	1.0	1.0	1.0	1.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	—	—	0.5	0.5
Chad	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	—	—	0.5	0.5
Colombia	1.0	1.0	1.0	1.0	1.0	—	1.0	0.0	1.0	1.0	1.0	1.0	—	—	1.0	1.0	1.0	1.0
Congo	1.0	0.5	1.0	1.0	1.0	0.0	1.0	1.0	—	1.0	0.5	0.5	1.0	0.5	1.0	0.5	0.0	0.0
Côte d'Ivoire	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.5	0.5	0.0	0.0	0.5	0.5	0.0	0.5
Democratic Republic of the Congo	1.0	1.0	1.0	1.0	0.0	0.5	0.0	0.0	1.0	1.0	0.5	0.0	0.0	0.5	0.0	0.5	1.0	0.5
Dominican Republic	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	1.0	0.5	0.0	0.0	1.0	0.0
Egypt	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5
El Salvador	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	1.0	1.0	1.0	0.5	0.5	0.0	0.5	0.5	0.5	0.5
Equatorial Guinea	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Ethiopia	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	1.0	1.0	1.0	1.0
Fiji	—	—	1.0	1.0	0.5	0.5	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.0	0.0	0.5	0.5
Gabon	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.0	0.0	—	—
Gambia	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5
Ghana	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Guinea	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	1.0	1.0	1.0	1.0
Guinea-Bissau	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	1.0	1.0	0.0	0.0	0.0	0.0
Haiti	1.0	1.0	1.0	1.0	—	—	1.0	1.0	—	—	—	—	0.0	0.0	—	—	—	—
Honduras	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	1.0	1.0	0.5	0.5	0.5	0.5	1.0	1.0	0.5	1.0
India	—	1.0	—	1.0	—	1.0	—	1.0	—	1.0	—	1.0	—	1.0	—	1.0	—	—
Indonesia	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	1.0	1.0	0.5	0.5	0.0	0.0	1.0	1.0	1.0	1.0
Iran (Islamic Republic of)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Jordan	1.0	1.0	1.0	1.0	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5
Kenya	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.0
Kyrgyzstan	0.5	—	1.0	1.0	0.5	—	1.0	1.0	0.0	0.0	1.0	1.0	0.5	0.5	0.5	1.0	0.5	0.5
Lao People's Democratic Republic	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	1.0	1.0	0.5	1.0	1.0
Lebanon	—	—	—	—	1.0	—	1.0	—	1.0	—	0.5	—	0.0	—	0.5	—	0.5	—
Lesotho	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.0	0.5
Liberia	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.5	0.5	0.5	0.5
Madagascar	1.0	1.0	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	1.0	1.0	1.0	0.5	1.0	0.5
Malawi	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.5	1.0	1.0	1.0
Maldives	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.0	0.5	0.5	1.0	0.5	1.0	0.5
Mali	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.0
Mauritania	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	1.0	1.0	1.0	1.0	0.5	0.5	1.0	1.0	1.0	1.0
Mongolia	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	1.0	1.0	0.5	0.5	0.5	0.0	0.5	0.5
Morocco	1.0	—	1.0	1.0	1.0	—	1.0	1.0	1.0	—	1.0	1.0	1.0	—	1.0	1.0	1.0	1.0
Mozambique	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Myanmar	1.0	1.0	1.0	1.0	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	1.0	1.0	1.0	1.0
Nepal	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	1.0	1.0	0.5	0.5	0.5	0.5
Niger	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5
Nigeria	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.0
Oman	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	1.0	1.0	0.5	1.0	0.5
Pakistan	1.0	1.0	1.0	1.0	1.0	1.0	—	—	1.0	1.0	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.0
Panama	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	1.0	0.0	1.0
Paraguay	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.5	1.0	0.0	0.0
Philippines	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Rwanda	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Samoa	0.0	0.0	0.0	0.0	1.0	1.0	0.5	0.5	1.0	1.0	0.5	0.5	0.5	0.0	0.5	1.0	—	—
Senegal	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.0	0.5
Sierra Leone	1.0	1.0	1.0	1.0	0.0	0.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
South Africa	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
South Sudan	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	1.0	0.5	0.5	1.0	1.0	0.5	0.5	0.5	0.5
Sri Lanka	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	1.0	1.0	0.5	0.5	0.5	0.5	1.0	—	0.5	1.0
Tajikistan	1.0	1.0	1.0	1.0	0.0	0.0	1.0	1.0	—	—	0.5	0.5	1.0	1.0	0.5	0.5	0.5	0.5
Thailand	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	—	—	1.0	1.0
Timor-Leste	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.5	0.5	0.0	0.0
Togo	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.0	0.5	0.0
Uganda	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	1.0	0.5	0.5	1.0	1.0	1.0	1.0
Uzbekistan	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5
Viet Nam	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	1.0	1.0	—	—
Yemen	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	1.0	0.0	1.0	0.5
Zimbabwe	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.0	1.0	0.5	1.0	0.5	1.0	1.0

The scores found in these annexes represent country responses to multiple choice questions with three option responses. «0.0» typically represents little or no progress; «0.5» some progress or in development; and «1.0» good progress or complete. Definitions for each numerical score are specific to each question and described fully in the questionnaire.



Question 5: Planning, monitoring and evaluation

Country	Question 5a – Is there a national information system used?				Question 5c – Is there an investment programme agreed and published?				Questions 5d and 5f – Is there an annual or biennial review to monitor sector?				Questions 5i and 5h – Year last national assessment done?			
	Sanitation		Drinking-water		Sanitation		Drinking-water		Sanitation		Drinking-water		Sanitation		Drinking-water	
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
Afghanistan	0.5	0.5	0.0	1.0	0.0	0.0	0.5	1.0	0.5	0.0	0.5	0.0	2008	2008	2008	2008
Angola	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.0	—	2011	2011	2011
Azerbaijan	0.5	0.5	1.0	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2005	2005	2005	2005
Bangladesh	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	2009	2009	—	—
Benin	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	—	—	—	—
Bhutan	1.0	1.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.5	1.0	1.0	2010	2010	2010	2010
Bolivia (Plurinational State of)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2007	2007	2008	2008
Brazil	1.0	1.0	1.0	1.0	1.0	0.5	1.0	1.0	0.0	1.0	0.0	1.0	2010	2010	2010	2010
Burkina Faso	1.0	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2010	2010	2010	2010
Burundi	0.0	0.0	1.0	1.0	0.0	0.0	0.5	0.5	1.0	1.0	1.0	1.0	2007	2007	2009	2007
Cambodia	0.5	0.5	0.5	1.0	0.0	0.5	0.5	0.5	0.0	1.0	0.0	0.0	2008	2008	2008	2008
Cameroon	0.0	0.0	0.5	0.5	0.0	0.0	1.0	1.0	0.0	0.0	0.5	0.5	—	—	2010	2011
Central African Republic	0.5	0.5	0.5	0.5	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0	—	—	2010	2010
Chad	1.0	1.0	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0	0.0	0.0	2011	2011	2010	2010
Colombia	1.0	0.5	1.0	0.5	1.0	0.0	1.0	0.5	1.0	—	1.0	—	—	2002	—	—
Congo	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	0.0	0.0	1.0	1.0	—	—	2010	2010
Côte d'Ivoire	0.0	0.0	1.0	1.0	0.5	0.5	0.0	0.0	1.0	0.0	0.0	0.0	2011	2011	2006	2006
Democratic Republic of the Congo	0.0	0.5	0.0	0.0	0.0	0.5	1.0	0.0	0.0	1.0	0.0	0.5	2010	2010	2010	2010
Dominican Republic	1.0	1.0	1.0	0.5	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	—	—	—	—
Egypt	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	1.0	1.0	2010	2010	2010	2010
El Salvador	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.0	2007	2007	2011	2010
Equatorial Guinea	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.0	0.0	2002	2002	—	—
Ethiopia	1.0	1.0	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.0	2011	2011	—	—
Fiji	1.0	1.0	1.0	1.0	0.5	0.5	0.0	0.0	0.0	0.0	1.0	1.0	2007	2007	—	—
Gabon	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.0	0.0	0.5	0.5	—	—	2004	2004
Gambia	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	2009	2009	2009	2009
Ghana	0.0	0.0	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2008	2008	2010	2010
Guinea	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.5	0.5	1.0	1.0	—	—	2010	2008
Guinea-Bissau	0.0	0.0	1.0	1.0	0.5	0.5	1.0	1.0	0.0	0.0	0.0	0.0	2009	2009	2010	2010
Haiti	0.5	0.5	—	—	0.5	0.5	1.0	1.0	0.5	0.5	—	—	—	—	—	—
Honduras	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	—	—	—	—
India	—	1.0	—	1.0	—	1.0	—	1.0	—	1.0	—	1.0	—	2009	—	2011
Indonesia	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0	2010	2010	2010	2010
Iran (Islamic Republic of)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	2010	2010	2010	2010
Jordan	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	2010	2010	2010	2010
Kenya	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.0	2008	2008	2010	2010
Kyrgyzstan	0.0	0.0	1.0	1.0	0.0	1.0	1.0	1.0	—	0.5	0.5	0.5	—	—	—	—
Lao People's Democratic Republic	0.5	0.5	1.0	0.5	1.0	0.5	1.0	1.0	0.5	0.5	1.0	1.0	2007	2007	2007	2007
Lebanon	0.5	—	0.5	—	1.0	—	1.0	—	1.0	—	1.0	—	2007	—	2009	—
Lesotho	0.5	0.5	0.5	0.5	0.0	0.0	1.0	0.5	0.5	0.5	0.5	0.5	2006	2006	2006	2006
Liberia	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	2012	2012	2011	2011
Madagascar	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2010	2010	2010	2010
Malawi	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.0	2008	2008	—	—
Maldives	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	2009	2009	2009	2009
Mali	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.0	2012	2012	2010	2010
Mauritania	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.0	0.5	0.5	0.0	0.0	2009	2009	2009	2009
Mongolia	0.5	0.5	0.5	0.0	0.0	0.0	1.0	1.0	0.5	0.5	1.0	1.0	2009	2009	2011	2011
Morocco	1.0	—	1.0	1.0	1.0	—	1.0	1.0	—	1.0	—	1.0	2009	2009	2010	2010
Mozambique	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.0	2010	2010	2011	2011
Myanmar	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	—	—	2004	2004
Nepal	1.0	1.0	0.5	1.0	0.5	0.5	1.0	1.0	1.0	1.0	0.5	0.5	2010	2010	2011	2011
Niger	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2006	2006	2011	2011
Nigeria	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.0	2008	2008	—	—
Oman	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	—	—	2010	—
Pakistan	—	—	0.5	0.0	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	—	—	—	—
Panama	0.0	0.0	0.5	0.5	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	2010	2010	2010	2010
Paraguay	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	2009	2009	2010	2010
Philippines	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	2010	2010	2010	2010
Rwanda	1.0	1.0	1.0	1.0	0.0	0.0	0.5	0.5	1.0	1.0	1.0	1.0	2008	2008	2008	2008
Samoa	0.5	0.0	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2010	2010	2010	2010
Senegal	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2010	2010	2010	2010
Sierra Leone	0.5	0.5	0.0	0.0	0.5	0.5	0.5	0.5	1.0	1.0	0.0	0.0	2010	2010	2010	2010
South Africa	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2011	2011	2011	2011
South Sudan	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.0	0.0	2010	2010	2010	2010
Sri Lanka	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2010	2010	2007	2007
Tajikistan	—	—	0.5	0.5	1.0	1.0	1.0	1.0	0.0	0.0	1.0	1.0	—	—	—	—
Thailand	1.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0	1.0	0.0	1.0	1.0	—	—	2010	2010
Timor-Leste	1.0	1.0	0.0	0.5	0.0	0.0	0.5	0.5	0.0	0.0	0.5	0.5	2010	2010	—	—
Togo	1.0	1.0	0.5	0.5	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0	2010	2010	2010	2010
Uganda	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2010	2010	2011	2011
Uzbekistan	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2010	2011	—	—
Viet Nam	0.5	1.0	0.5	1.0	0.5	0.5	0.5	1.0	1.0	0.5	1.0	0.0	2011	2010	2008	2010
Yemen	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.0	2009	2009	2009	—
Zimbabwe	1.0	0.5	1.0	0.5	1.0	0.5	1.0	1.0	1.0	1.0	1.0	1.0	2010	2010	2010	2010

## Question 6: Budgeting and expenditure

Country	Question 6a – Is there a separate and defined budget line for sanitation?		Question 6b and 6a – Are financial flows sufficient to meet MDG targets?				Question 6d and 6e – What is the percentage of official donor capital commitments utilized?				Question 6f and 6e – What is the percentage of domestic capital commitments utilized?				Question 6h and 6f – What is the estimated percentage of WASH budget that is targeted to address the poor?			
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
Afghanistan	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	—	0.0	0.0	0.0	—	0.0	0.0	0.5	0.5	0.5
Angola	1.0	0.5	1.0	0.0	0.5	0.5	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.0
Azerbaijan	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	1.0	1.0	1.0	0.5	1.0	1.0	—	—	0.0	0.0
Bangladesh	0.5	0.5	0.5	0.5	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.5	0.5
Benin	1.0	1.0	0.0	0.0	0.5	0.5	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	—	—	—	—
Bhutan	0.5	0.5	0.5	0.0	1.0	1.0	1.0	1.0	0.0	0.0	1.0	1.0	1.0	1.0	0.0	0.0	0.5	0.5
Bolivia (Plurinational State of)	0.0	0.0	0.5	0.5	1.0	1.0	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0
Brazil	1.0	1.0	1.0	0.5	1.0	1.0	0.0	0.0	0.0	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Burkina Faso	1.0	1.0	0.0	0.0	1.0	0.5	1.0	0.0	—	1.0	1.0	0.0	—	1.0	1.0	1.0	—	1.0
Burundi	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	—	—	0.0	0.0	—	—	0.0	0.0	0.0	0.0
Cambodia	0.0	1.0	0.0	0.0	0.5	0.5	0.0	0.5	0.0	—	0.0	0.0	0.5	—	0.0	0.5	0.5	—
Cameroon	0.0	0.0	0.0	0.0	0.5	1.0	0.0	0.0	1.0	1.0	0.0	0.0	0.5	0.5	0.0	0.0	0.5	1.0
Central African Republic	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0
Chad	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0
Colombia	0.0	0.0	0.0	0.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Congo	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	—	—	1.0	1.0	—	—	0.0	0.0	—	—
Côte d'Ivoire	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0
Democratic Republic of the Congo	0.5	0.5	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dominican Republic	0.0	0.0	0.0	0.0	0.0	0.0	—	—	0.0	0.0	—	—	—	—	1.0	1.0	1.0	0.0
Egypt	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	1.0	1.0
El Salvador	0.0	0.0	1.0	1.0	0.0	0.5	0.5	0.5	0.0	0.0	—	—	0.5	0.5	1.0	1.0	—	—
Equatorial Guinea	0.5	0.5	1.0	1.0	0.5	0.5	—	—	1.0	1.0	—	—	—	—	—	—	—	—
Ethiopia	0.0	0.0	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.0	0.5	1.0
Fiji	1.0	0.0	0.5	0.0	0.5	0.5	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0
Gabon	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	—	—	0.0	0.0	—	—	0.0	0.0	1.0	1.0
Gambia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	—	—
Ghana	1.0	1.0	0.0	0.0	1.0	1.0	1.0	1.0	0.5	1.0	1.0	1.0	0.0	0.0	0.5	0.5	0.5	0.5
Guinea	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Guinea-Bissau	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Haiti	—	—	—	—	0.0	0.0	—	—	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Honduras	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.5	1.0	0.5	1.0
India	—	1.0	—	0.5	—	1.0	—	—	—	1.0	—	1.0	—	1.0	—	1.0	—	1.0
Indonesia	1.0	1.0	0.5	0.5	0.5	0.5	0.0	0.0	0.5	0.5	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0
Iran (Islamic Republic of)	1.0	1.0	1.0	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	—	—	—	—
Jordan	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	1.0	1.0
Kenya	1.0	1.0	0.5	0.5	1.0	0.5	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Kyrgyzstan	0.0	0.0	—	—	0.0	0.0	—	—	—	—	1.0	0.0	1.0	—	—	—	0.5	—
Lao People's Democratic Republic	1.0	0.5	0.5	1.0	0.0	0.0	1.0	0.5	1.0	0.5	0.5	0.0	0.0	0.0	—	—	0.5	1.0
Lebanon	1.0	—	0.0	—	0.5	—	0.5	—	0.5	—	0.0	—	0.0	—	—	—	—	—
Lesotho	0.5	0.0	0.0	0.0	1.0	0.5	1.0	1.0	0.5	0.5	1.0	1.0	1.0	1.0	0.0	1.0	0.0	1.0
Liberia	0.0	0.0	0.0	0.0	0.0	0.0	—	—	—	—	—	—	—	—	—	—	—	—
Madagascar	1.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Malawi	1.0	1.0	0.0	0.0	0.5	0.5	1.0	1.0	—	—	1.0	1.0	0.5	0.5	1.0	1.0	—	—
Maldives	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	—	—	—	—
Mali	1.0	1.0	0.0	0.0	0.5	0.0	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mauritania	1.0	1.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	1.0	1.0
Mongolia	1.0	1.0	0.5	0.0	0.5	0.0	1.0	0.5	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.0
Morocco	1.0	—	1.0	—	1.0	1.0	1.0	—	1.0	1.0	1.0	—	1.0	1.0	0.0	—	0.0	0.0
Mozambique	0.5	0.5	0.0	0.0	0.5	0.5	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.5	0.0	0.0	0.0	1.0
Myanmar	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0
Nepal	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	1.0	1.0	1.0	0.5	1.0	1.0	0.0	0.5
Niger	1.0	1.0	0.0	0.0	0.5	0.5	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.5	0.5
Nigeria	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	—	—	0.0	0.0	—	—
Oman	1.0	1.0	0.5	0.5	1.0	1.0	0.0	0.0	—	—	0.5	0.5	1.0	1.0	0.0	0.0	1.0	1.0
Pakistan	0.0	0.0	0.0	0.0	0.5	0.5	0.0	0.0	—	—	0.5	0.5	—	—	1.0	1.0	—	—
Panama	1.0	1.0	0.5	0.5	1.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	—	—	1.0	1.0
Paraguay	0.5	0.5	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.5	0.0	0.0	1.0	0.5	0.5	0.5	1.0	1.0
Philippines	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0
Rwanda	1.0	1.0	0.5	0.5	0.5	0.5	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.5	1.0
Samoa	0.5	0.5	1.0	0.5	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.5	0.0	0.5	0.5
Senegal	0.5	0.5	0.0	0.0	0.0	0.5	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Sierra Leone	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5
South Africa	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
South Sudan	0.5	0.5	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.0
Sri Lanka	1.0	1.0	1.0	1.0	1.0	0.5	1.0	—	1.0	1.0	1.0	—	1.0	1.0	—	—	0.0	0.0
Tajikistan	1.0	1.0	0.0	0.0	0.5	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
Thailand	0.5	0.0	—	—	0.5	1.0	—	—	0.5	0.5	—	—	0.5	0.5	—	—	0.5	0.5
Timor-Leste	0.5	—	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	1.0	1.0	—	—	1.0	1.0
Togo	0.5	0.5	0.0	0.0	0.0	0.0	—	—	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.0	0.5
Uganda	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	—	—	0.0	0.0	—	—	0.0	0.0	—	—
Uzbekistan	1.0	1.0	0.0	0.0	0.5	0.5	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	—	—	—	—
Viet Nam	0.5	0.5	0.5	0.0	0.0	1.0	0.0	0.0	0.0	1.0	0.5	0.0	0.5	1.0	0.5	0.5	0.5	0.5
Yemen	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	—	—	0.5	0.5	—	—	0.0	0.0	—	—
Zimbabwe	0.5	0.5	0.5	0.0	0.5	0.0	0.5	0.0	0.5	1.0	0.5	1.0	1.0	1.0	0.0	1.0	0.0	0.5

Question 7: Participation and equity

Country	Question 7a – Procedures for informing, consulting and supporting participation by individuals/community?				Question 7c – Are there agreed criteria used to distribute funding equitably to communities, and are they applied?				Question 7f – Do national strategies include specific provision for slums and informal settlements?				Question 7i – Has the impact of equity policies been measured?			
	Sanitation		Drinking-water		Sanitation		Drinking-water		Sanitation		Drinking-water		Sanitation		Drinking-water	
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
Afghanistan	0.0	0.5	0.0	1.0	0.0	1.0	0.0	0.5	0.0	0.5	0.0	1.0	0.0	0.5	0.5	0.5
Angola	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.5	0.0	1.0	1.0	0.5	0.5	1.0	1.0
Azerbaijan	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0
Bangladesh	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Benin	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bhutan	0.5	0.5	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bolivia (Plurinational State of)	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.0	0.0	0.0	0.0
Brazil	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.5	0.5	0.5	0.5	0.0	1.0	0.0	0.0
Burkina Faso	1.0	0.5	0.5	1.0	0.0	0.5	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	1.0	0.0
Burundi	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0
Cambodia	0.5	1.0	0.5	0.5	0.0	0.5	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.5	0.0
Cameroon	0.0	0.0	0.5	0.5	0.0	0.0	1.0	1.0	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0
Central African Republic	0.5	0.5	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Chad	1.0	1.0	1.0	1.0	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5
Colombia	0.5	0.5	0.5	0.0	—	—	—	—	—	—	1.0	—	—	—	—	—
Congo	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0
Côte d'Ivoire	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0
Democratic Republic of the Congo	0.0	0.5	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.5	0.0	0.0
Dominican Republic	1.0	0.5	1.0	0.5	1.0	1.0	0.0	0.0	1.0	0.5	1.0	1.0	1.0	1.0	1.0	1.0
Egypt	0.5	0.5	0.5	0.5	1.0	1.0	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.0	0.0	0.0
El Salvador	0.5	0.5	0.5	0.5	0.5	0.0	0.5	0.5	1.0	0.5	1.0	1.0	0.5	0.5	—	0.0
Equatorial Guinea	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Ethiopia	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	1.0	1.0	0.0	0.0	1.0	1.0
Fiji	0.0	1.0	0.5	0.5	0.0	1.0	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0
Gabon	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gambia	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ghana	1.0	1.0	1.0	1.0	1.0	0.5	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	1.0	1.0
Guinea	0.5	0.5	0.5	0.5	0.0	0.0	1.0	1.0	0.0	0.5	1.0	1.0	0.0	0.0	0.0	0.0
Guinea-Bissau	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Haiti	—	—	0.5	0.5	—	—	0.5	0.5	0.5	0.5	—	—	0.0	0.0	0.0	0.0
Honduras	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0
India	—	1.0	—	0.5	—	1.0	—	1.0	—	0.0	—	1.0	—	1.0	—	1.0
Indonesia	1.0	1.0	0.5	0.5	0.5	1.0	0.5	0.5	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0
Iran (Islamic Republic of)	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0
Jordan	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.0	0.0	—	—
Kenya	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.0	0.0	1.0	0.5	0.0	0.0	0.0	0.0
Kyrgyzstan	0.5	0.5	0.5	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	—	—	0.0	—
Lao People's Democratic Republic	1.0	1.0	1.0	1.0	1.0	0.5	1.0	1.0	—	—	—	—	0.0	0.0	1.0	1.0
Lebanon	0.0	—	0.0	—	0.5	—	1.0	—	1.0	—	1.0	—	0.0	—	0.0	—
Lesotho	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liberia	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0
Madagascar	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Malawi	1.0	1.0	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0	1.0	1.0	0.5	0.5	0.0	0.0
Maldives	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.0	—	—	—	—	—	—	—	—
Mali	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0
Mauritania	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Mongolia	0.0	0.0	0.5	0.5	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.5	0.5
Morocco	1.0	—	1.0	1.0	1.0	—	1.0	1.0	1.0	—	1.0	1.0	0.0	—	0.0	0.0
Mozambique	0.0	0.5	0.5	1.0	0.5	0.5	0.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	1.0
Myanmar	0.5	0.5	0.5	0.5	—	—	0.0	0.0	0.5	—	0.5	0.5	1.0	1.0	0.0	0.0
Nepal	1.0	1.0	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Niger	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0	1.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0
Nigeria	0.5	0.5	0.5	0.5	0.0	0.0	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0
Oman	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.5	0.5	0.0	0.0
Pakistan	0.0	0.0	0.5	0.5	—	—	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	—	—
Panama	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0
Paraguay	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Philippines	0.0	0.0	0.5	0.5	0.0	0.0	0.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rwanda	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0
Samoa	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Senegal	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0	0.5	0.5	1.0	—	0.0	0.0	0.0	0.0
Sierra Leone	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
South Africa	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
South Sudan	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sri Lanka	1.0	1.0	0.5	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0
Tajikistan	0.5	0.5	0.5	0.5	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Thailand	0.5	0.5	1.0	1.0	0.0	0.0	1.0	1.0	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0
Timor-Leste	0.5	0.5	1.0	0.5	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5
Togo	0.0	0.0	1.0	1.0	0.0	0.0	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0
Uganda	0.5	0.5	0.5	0.5	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0
Uzbekistan	1.0	1.0	1.0	1.0	0.0	0.0	1.0	1.0	—	—	1.0	1.0	—	—	1.0	1.0
Viet Nam	1.0	0.5	0.5	0.5	0.5	0.5	0.0	0.5	0.0	0.5	0.0	0.0	1.0	1.0	0.5	0.5
Yemen	0.5	0.5	1.0	0.5	1.0	1.0	1.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5
Zimbabwe	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5

## Question 8: Outputs; Questions 4 and 5 concerning human rights

Country	Question 8a – Is the annual increase in access sufficient to meet national targets?				Question 8b – Is funding available at the local level from the national level (in line with decentralization policy?)				Question 4d – Is the right to sanitation/drinking-water explicitly recognized in policy or law?				Questions 5f and 5e – Can people claim their human right to sanitation or drinking-water in a domestic court?			
	Sanitation		Drinking-water		Sanitation		Drinking-water		Sanitation		Drinking-water		Sanitation		Drinking-water	
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
Afghanistan	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.5	0.5	0.5	1.0	0.5	0.0	0.0	0.5	0.5
Angola	0.0	0.0	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.0	0.0
Azerbaijan	1.0	0.5	1.0	1.0	1.0	0.5	0.0	0.0	1.0	1.0	1.0	1.0	0.5	0.5	1.0	1.0
Bangladesh	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.0	0.0	0.5	0.5
Benin	0.0	0.0	1.0	1.0	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0
Bhutan	1.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.5	1.0	1.0	0.0	0.0	0.5	0.5
Bolivia (Plurinational State of)	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0
Brazil	1.0	0.5	1.0	0.5	1.0	0.5	1.0	0.5	1.0	1.0	1.0	1.0	—	1.0	—	1.0
Burkina Faso	0.0	0.0	1.0	0.5	0.0	0.0	0.0	1.0	0.0	0.5	1.0	1.0	0.0	0.0	0.5	0.0
Burundi	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0	1.0	1.0	—	1.0	1.0	1.0	0.0	0.0
Cambodia	0.0	1.0	1.0	1.0	0.0	0.5	0.0	0.0	0.0	1.0	0.5	—	0.5	0.0	0.0	0.0
Cameroon	0.0	0.0	1.0	0.5	0.0	0.0	0.5	0.5	0.0	0.0	1.0	1.0	0.5	0.5	1.0	1.0
Central African Republic	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5
Chad	1.0	1.0	1.0	1.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5
Colombia	—	—	—	—	1.0	—	1.0	0.5	1.0	1.0	1.0	1.0	—	—	—	—
Congo	0.0	0.0	0.5	0.5	1.0	1.0	1.0	1.0	1.0	0.5	1.0	1.0	0.0	0.0	0.0	0.0
Côte d'Ivoire	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Democratic Republic of the Congo	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0
Dominican Republic	1.0	0.5	1.0	1.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5
Egypt	1.0	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0
El Salvador	0.0	0.0	0.0	0.0	—	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	1.0	1.0
Equatorial Guinea	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Ethiopia	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5
Fiji	0.5	0.5	0.5	0.5	1.0	1.0	0.0	0.0	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5
Gabon	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0
Gambia	0.0	0.0	—	—	0.0	0.0	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0	—	—
Ghana	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5
Guinea	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	1.0	1.0	1.0	1.0	0.0	0.0	0.5	0.0
Guinea-Bissau	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0
Haiti	0.0	0.0	—	—	—	—	—	—	0.0	0.0	—	—	0.0	0.0	0.5	0.5
Honduras	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5
India	—	1.0	—	1.0	—	1.0	—	1.0	—	0.0	—	0.5	—	0.0	—	0.5
Indonesia	1.0	1.0	0.0	0.0	1.0	1.0	0.5	0.5	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5
Iran (Islamic Republic of)	1.0	1.0	1.0	1.0	0.5	0.0	0.5	1.0	0.5	0.5	1.0	1.0	0.0	0.0	0.0	0.0
Jordan	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.5	0.5
Kenya	0.0	0.0	1.0	0.5	0.0	0.0	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Kyrgyzstan	0.0	0.0	1.0	0.0	0.0	0.0	0.5	—	0.5	—	1.0	1.0	1.0	1.0	0.5	1.0
Lao People's Democratic Republic	1.0	0.5	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.0	0.0	—	—
Lebanon	0.5	—	0.5	—	0.0	—	0.5	—	1.0	—	1.0	—	0.5	—	1.0	—
Lesotho	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0
Liberia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0
Madagascar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5
Malawi	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.5	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0
Maldives	—	—	—	—	0.5	0.5	—	—	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5
Mali	0.0	0.0	0.5	0.5	0.5	0.5	1.0	1.0	0.5	0.5	0.0	0.0	1.0	1.0	0.0	0.0
Mauritania	0.0	0.0	0.0	0.0	0.5	0.5	0.0	0.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5
Mongolia	0.5	0.5	0.5	1.0	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0
Morocco	1.0	—	1.0	1.0	1.0	—	1.0	1.0	1.0	—	1.0	1.0	1.0	—	1.0	1.0
Mozambique	0.0	0.0	1.0	0.5	0.5	0.5	1.0	0.5	0.0	0.0	1.0	1.0	0.5	0.5	1.0	1.0
Myanmar	0.0	0.0	0.0	0.0	—	0.0	0.0	0.0	0.5	0.5	1.0	1.0	0.0	0.0	0.5	0.5
Nepal	0.5	0.5	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Niger	0.0	0.0	0.0	0.5	0.0	0.0	0.5	0.5	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5
Nigeria	0.0	0.0	0.5	0.0	0.5	0.5	1.0	0.0	0.5	0.5	1.0	0.5	0.0	0.0	0.5	0.0
Oman	1.0	1.0	1.0	0.5	1.0	1.0	1.0	1.0	0.5	0.5	1.0	1.0	0.5	0.5	0.5	0.5
Pakistan	1.0	0.0	0.5	0.0	1.0	0.5	0.5	0.5	0.0	0.0	1.0	1.0	—	—	—	—
Panama	1.0	1.0	1.0	1.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5
Paraguay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Philippines	0.5	0.5	0.5	0.5	0.0	0.0	0.5	0.5	1.0	1.0	1.0	1.0	0.0	0.0	0.5	0.5
Rwanda	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0
Samoa	0.5	0.5	—	—	—	—	—	—	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5
Senegal	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.5	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0
Sierra Leone	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.5	0.5	0.0	0.0
South Africa	0.0	0.0	1.0	1.0	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
South Sudan	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0
Sri Lanka	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.5	1.0	1.0	1.0
Tajikistan	0.0	0.0	0.5	0.0	0.0	0.0	0.5	0.0	0.5	0.5	1.0	1.0	0.5	0.5	0.5	0.5
Thailand	0.5	—	1.0	1.0	0.0	—	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	1.0	1.0
Timor-Leste	0.5	0.5	0.0	0.0	—	—	0.5	0.5	0.5	0.5	1.0	1.0	0.0	0.0	0.0	0.0
Togo	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	1.0	1.0	1.0	1.0	0.5	0.5	0.0	0.0
Uganda	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	1.0	1.0	1.0	1.0	0.0	0.0	0.5	0.5
Uzbekistan	1.0	1.0	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Viet Nam	0.5	0.5	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.0	0.5
Yemen	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.5	0.5	0.5	0.5
Zimbabwe	0.5	0.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.5	0.0	1.0	0.5



## Question 9: Sustainability

Country	Question 9a – Equipment and products sufficient to meet demand and affordability?		Question 9c – Sufficient supply-side artisans/technicians to meet needs?		Question 9d – Sufficient companies to meet demand for sanitation facilities?		Question 9f – Government plans to expand service along with projected urbanization?		Question 9g – Is there a government programme to develop private sector?		Question 9a – Are inventories prepared for rural drinking-water?		Question 9b – Is there an effective supply chain for spare parts?	
	Sanitation		Sanitation		Sanitation		Sanitation		Sanitation		Drinking-water		Drinking-water	
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
Afghanistan	—	0.0	—	0.5	1.0	—	0.5	—	0.5	0.5	—	0.5	—	0.5
Angola	—	1.0	—	0.5	0.5	—	0.5	—	0.5	0.5	—	1.0	—	0.0
Azerbaijan	—	1.0	—	0.0	1.0	—	1.0	—	0.0	0.0	—	0.5	—	1.0
Bangladesh	—	0.5	—	1.0	0.5	—	0.5	—	0.5	0.5	—	0.5	—	0.0
Benin	—	0.5	—	0.5	0.5	—	0.5	—	1.0	1.0	—	1.0	—	1.0
Bhutan	—	1.0	—	0.5	0.5	—	0.5	—	0.5	0.5	—	0.5	—	0.5
Bolivia (Plurinational State of)	—	0.0	—	0.5	1.0	—	0.5	—	0.0	0.0	—	0.5	—	0.0
Brazil	—	1.0	—	1.0	1.0	—	1.0	—	0.0	0.0	—	0.0	—	0.5
Burkina Faso	—	0.0	—	0.5	0.5	—	0.0	—	1.0	0.5	—	1.0	—	1.0
Burundi	—	0.0	—	0.5	0.5	—	0.0	—	0.0	0.0	—	1.0	—	0.5
Cambodia	—	0.0	—	0.5	0.0	—	0.5	—	0.0	1.0	—	0.5	—	0.0
Cameroon	—	0.0	—	0.5	0.5	—	0.5	—	0.0	0.0	—	1.0	—	0.0
Central African Republic	—	0.0	—	0.5	0.0	—	0.5	—	0.5	0.0	—	0.5	—	0.5
Chad	—	0.5	—	1.0	0.5	—	1.0	—	1.0	1.0	—	1.0	—	0.5
Colombia	—	—	—	—	1.0	—	0.5	—	1.0	—	—	0.0	—	0.0
Congo	—	0.0	—	0.5	0.5	—	0.5	—	0.0	0.0	—	0.5	—	0.0
Côte d'Ivoire	—	0.0	—	1.0	1.0	—	0.5	—	0.5	0.5	—	0.5	—	0.5
Democratic Republic of the Congo	—	0.0	—	0.5	0.5	—	0.0	—	0.0	0.5	—	0.5	—	0.0
Dominican Republic	—	0.5	—	1.0	1.0	—	0.0	—	0.5	—	—	—	—	—
Egypt	—	1.0	—	0.5	1.0	—	1.0	—	0.5	0.5	—	0.5	—	0.5
El Salvador	—	0.5	—	1.0	0.5	—	0.5	—	0.5	0.5	—	0.5	—	0.0
Equatorial Guinea	—	0.0	—	0.5	0.5	—	1.0	—	0.5	0.5	—	0.0	—	0.0
Ethiopia	—	0.5	—	0.5	0.5	—	0.5	—	0.5	0.5	—	0.5	—	0.5
Fiji	—	0.5	—	0.5	0.5	—	1.0	—	0.5	0.5	—	0.5	—	1.0
Gabon	—	0.0	—	0.5	0.0	—	0.5	0.0	0.0	0.0	—	0.5	—	0.0
Gambia	—	0.0	—	0.0	0.0	—	0.5	—	0.5	0.5	—	0.5	—	0.0
Ghana	—	0.0	—	1.0	0.5	—	1.0	—	1.0	1.0	—	1.0	—	0.5
Guinea	—	0.0	—	0.5	0.5	—	0.0	—	1.0	1.0	—	1.0	—	1.0
Guinea-Bissau	—	0.0	—	0.5	0.5	—	0.0	—	0.0	0.0	—	0.5	—	0.0
Haiti	—	0.0	—	0.0	0.0	—	0.0	—	—	—	—	—	—	0.0
Honduras	—	0.5	—	0.5	1.0	—	0.0	—	0.0	0.0	—	0.5	—	0.0
India	—	0.5	—	1.0	—	—	—	—	—	0.5	—	1.0	—	0.5
Indonesia	—	0.5	—	0.5	0.5	—	0.5	—	0.5	0.5	—	0.0	—	0.5
Iran (Islamic Republic of)	—	0.5	—	0.5	1.0	—	0.0	—	0.5	0.5	—	1.0	—	0.5
Jordan	—	0.0	—	0.0	1.0	—	1.0	—	1.0	0.5	—	0.5	—	0.5
Kenya	—	1.0	—	1.0	1.0	—	1.0	—	0.5	0.5	—	0.5	—	1.0
Kyrgyzstan	—	0.5	—	0.5	0.5	—	0.5	—	0.5	—	—	0.0	—	1.0
Lao People's Democratic Republic	—	0.5	—	0.5	1.0	—	0.5	—	1.0	0.5	—	0.0	—	0.0
Lebanon	—	—	—	—	1.0	—	1.0	—	0.0	—	—	—	—	—
Lesotho	—	0.5	—	0.5	1.0	—	0.5	—	0.0	0.0	—	0.5	—	1.0
Liberia	—	0.5	—	0.5	0.5	—	0.5	—	0.5	0.5	—	0.5	—	0.0
Madagascar	—	0.0	—	0.5	0.5	—	0.5	—	0.5	0.5	—	0.5	—	0.0
Malawi	—	0.0	—	0.5	0.5	—	0.5	—	0.5	0.5	—	0.5	—	0.0
Maldives	—	0.0	—	0.0	1.0	—	1.0	—	1.0	1.0	—	0.0	—	0.0
Mali	—	0.0	—	0.5	0.5	—	1.0	—	1.0	1.0	—	0.5	—	1.0
Mauritania	—	0.5	—	0.5	0.5	—	0.5	—	0.5	0.5	—	0.5	—	0.5
Mongolia	—	0.0	—	0.5	1.0	—	1.0	—	0.0	0.0	—	0.5	—	0.5
Morocco	—	—	—	0.5	1.0	—	1.0	—	1.0	—	—	1.0	—	1.0
Mozambique	—	0.0	—	0.5	0.0	—	0.5	—	0.5	0.5	—	1.0	—	0.0
Myanmar	—	1.0	—	1.0	1.0	—	1.0	—	0.5	0.5	—	0.5	—	0.0
Nepal	—	0.5	—	0.5	0.5	—	0.5	—	0.5	0.0	—	0.5	—	0.0
Niger	—	0.5	—	0.5	0.5	—	1.0	—	0.0	0.0	—	1.0	—	1.0
Nigeria	—	0.5	—	0.5	0.0	—	0.5	—	0.5	0.5	—	—	—	—
Oman	—	1.0	—	1.0	1.0	—	1.0	—	1.0	1.0	—	1.0	—	1.0
Pakistan	—	0.5	—	0.5	0.5	—	—	—	—	—	—	0.5	—	0.5
Panama	—	0.0	—	0.5	1.0	—	0.5	—	0.0	0.5	—	0.5	—	0.0
Paraguay	—	0.0	—	0.0	1.0	—	0.5	—	0.0	0.0	—	0.5	—	0.0
Philippines	—	0.5	—	0.5	0.5	—	0.5	—	0.5	0.5	—	0.5	—	0.0
Rwanda	—	0.5	—	0.5	1.0	—	1.0	—	1.0	1.0	—	0.5	—	0.0
Samoa	—	0.5	—	0.5	0.5	—	0.5	—	0.5	0.5	—	1.0	—	1.0
Senegal	—	0.5	—	0.5	1.0	—	0.5	—	0.5	0.5	—	1.0	—	0.0
Sierra Leone	—	0.0	—	0.0	0.0	—	0.5	—	0.5	0.5	—	0.5	—	0.5
South Africa	—	0.5	—	0.5	1.0	—	0.5	—	0.5	0.5	—	1.0	—	0.5
South Sudan	—	0.0	—	0.5	0.0	—	0.5	—	0.5	0.5	—	0.5	—	0.0
Sri Lanka	—	1.0	—	1.0	1.0	—	0.5	—	0.5	0.5	—	0.5	—	0.0
Tajikistan	—	0.0	—	0.0	0.5	—	0.5	—	0.0	0.0	—	0.5	—	0.0
Thailand	—	0.0	—	0.0	0.5	—	0.5	—	1.0	1.0	—	1.0	—	1.0
Timor-Leste	—	—	—	—	—	—	—	—	—	—	—	0.5	—	1.0
Togo	—	0.0	—	0.5	1.0	—	0.5	—	0.5	0.5	—	0.5	—	0.0
Uganda	—	0.0	—	0.5	0.5	—	0.5	—	0.5	0.5	—	1.0	—	0.0
Uzbekistan	—	1.0	—	1.0	1.0	—	1.0	—	1.0	1.0	—	1.0	—	0.5
Viet Nam	—	0.5	—	0.5	1.0	—	1.0	—	1.0	0.5	—	1.0	—	1.0
Yemen	—	0.0	—	0.0	0.0	—	0.5	—	0.0	0.0	—	0.0	—	0.0
Zimbabwe	—	0.5	—	0.5	1.0	—	1.0	—	1.0	0.5	—	0.5	—	0.0

## Question 9: Sustainability (continued)

Country	Question 9c – Are small town systems recognized as operational entities?		Question 9f – Are O&M systems in place for rural water points?		Question 9g – What is the average per cent non-revenue water?		Question 9h – Are O&M costs for utilities covered by user fees?		Question 9i – Are tariff reviews conducted and tariffs adjusted and published?		Question 9j – Can utilities make operational and fiscal decisions?		Question 9o – Are water scarcity plans developed and operational?		Question 9p – Is there a national policy to develop and implement WSPs?	
	Drinking-water		Drinking-water		Drinking-water		Drinking-water		Drinking-water		Drinking-water		Drinking-water		Drinking-water	
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
Afghanistan	—	0.5	—	1.0	0.0	—	0.0	—	0.5	—	0.0	—	0.0	1.0	0.5	0.5
Angola	—	1.0	—	1.0	0.5	—	0.5	—	1.0	—	1.0	—	0.0	0.0	0.0	0.0
Azerbaijan	—	1.0	—	1.0	0.0	—	0.5	—	1.0	—	1.0	—	0.5	0.5	1.0	1.0
Bangladesh	—	0.5	—	0.5	0.5	—	0.0	—	0.5	—	0.0	—	0.0	0.0	0.5	0.5
Benin	—	1.0	—	0.5	—	—	1.0	—	1.0	—	1.0	—	0.0	0.0	0.0	0.0
Bhutan	—	1.0	—	1.0	0.5	—	1.0	—	1.0	—	1.0	—	0.5	0.5	0.5	0.5
Bolivia (Plurinational State of)	—	0.5	—	0.5	0.5	—	0.5	—	0.0	—	1.0	—	0.5	0.5	1.0	0.0
Brazil	—	1.0	—	0.5	0.5	—	0.5	—	1.0	—	—	—	—	0.5	0.0	0.5
Burkina Faso	—	1.0	—	1.0	1.0	—	1.0	—	1.0	—	1.0	—	—	1.0	0.5	0.5
Burundi	—	0.0	—	1.0	1.0	—	0.0	—	0.0	—	0.5	—	0.0	0.0	0.0	0.0
Cambodia	—	0.0	—	0.5	1.0	—	1.0	—	0.5	—	1.0	—	0.5	0.0	0.5	0.0
Cameroon	—	0.5	—	1.0	0.5	—	0.5	—	1.0	—	0.5	—	0.0	0.0	0.5	0.5
Central African Republic	—	1.0	—	1.0	0.5	—	0.0	—	0.5	—	1.0	—	0.0	0.0	0.0	0.0
Chad	—	1.0	—	1.0	1.0	—	0.0	—	1.0	—	0.0	—	1.0	1.0	1.0	1.0
Colombia	—	0.5	—	0.5	—	—	—	—	—	—	—	—	—	—	0.5	—
Congo	—	1.0	—	0.5	1.0	—	0.5	—	0.0	—	1.0	—	0.0	0.0	0.5	0.0
Côte d'Ivoire	—	0.0	—	0.5	1.0	—	0.5	—	0.0	—	0.5	—	0.5	0.5	0.5	0.5
Democratic Republic of the Congo	—	0.5	—	0.0	0.0	—	0.5	—	1.0	—	0.5	—	0.0	0.0	0.0	0.0
Dominican Republic	—	—	—	—	0.0	—	0.0	—	0.0	—	0.5	—	1.0	1.0	0.5	0.5
Egypt	—	1.0	—	1.0	0.5	—	0.0	—	0.5	—	1.0	—	0.5	0.5	0.5	0.5
El Salvador	—	0.5	—	0.5	0.0	—	0.5	—	1.0	—	1.0	—	0.5	0.5	1.0	1.0
Equatorial Guinea	—	0.0	—	0.0	0.0	—	0.0	—	0.0	—	0.0	—	—	—	—	—
Ethiopia	—	1.0	—	0.5	0.5	—	1.0	—	0.5	—	1.0	—	0.5	0.5	0.5	0.5
Fiji	—	1.0	—	0.5	1.0	—	0.5	—	0.5	—	1.0	—	1.0	0.5	0.5	0.5
Gabon	—	0.5	—	0.0	0.5	—	0.5	—	1.0	—	—	—	—	—	1.0	1.0
Gambia	—	0.5	—	1.0	—	—	—	—	—	—	—	—	—	—	—	—
Ghana	—	1.0	—	1.0	0.0	—	1.0	—	1.0	—	1.0	—	0.0	1.0	1.0	1.0
Guinea	—	1.0	—	1.0	0.5	—	0.0	—	0.0	—	0.5	—	0.5	0.0	0.5	0.5
Guinea-Bissau	—	0.0	—	0.5	0.0	—	—	—	0.0	—	0.0	—	0.0	0.0	0.0	0.0
Haiti	—	0.0	—	—	0.0	—	0.0	—	0.5	—	—	—	0.5	0.0	0.5	0.0
Honduras	—	0.5	—	0.5	0.5	—	0.5	—	0.0	—	0.0	—	0.0	0.0	0.5	0.5
India	—	1.0	—	1.0	—	—	—	—	—	—	—	—	—	0.5	—	0.5
Indonesia	—	0.5	—	0.5	0.5	—	0.5	—	1.0	—	1.0	—	0.5	0.0	0.5	0.0
Iran (Islamic Republic of)	—	1.0	—	0.5	0.5	—	0.5	—	1.0	—	0.5	—	1.0	1.0	0.5	0.0
Jordan	—	0.0	—	0.5	0.5	—	1.0	—	0.5	—	0.5	—	0.5	0.5	0.5	0.5
Kenya	—	0.5	—	0.5	0.0	—	0.5	—	1.0	—	1.0	—	0.5	0.0	0.5	0.5
Kyrgyzstan	—	0.5	—	0.5	0.5	—	0.5	—	1.0	—	0.5	—	1.0	—	1.0	—
Lao People's Democratic Republic	—	0.5	—	1.0	0.5	—	0.5	—	1.0	—	0.5	—	0.0	0.0	1.0	0.5
Lebanon	—	—	—	—	0.5	—	0.5	—	0.5	—	1.0	—	0.0	—	0.0	—
Lesotho	—	1.0	—	0.5	0.5	—	0.5	—	1.0	—	0.5	—	1.0	0.0	0.5	0.0
Liberia	—	0.5	—	0.5	1.0	—	0.0	—	0.0	—	1.0	—	—	—	0.5	0.5
Madagascar	—	0.5	—	0.5	1.0	—	0.0	—	0.0	—	1.0	—	0.5	0.5	1.0	1.0
Malawi	—	0.5	—	0.5	0.5	—	—	—	1.0	—	0.5	—	0.5	0.0	0.0	0.0
Maldives	—	—	—	0.5	1.0	—	1.0	—	—	—	1.0	—	—	—	—	—
Mali	—	1.0	—	1.0	1.0	—	0.5	—	1.0	—	0.5	—	1.0	1.0	1.0	1.0
Mauritania	—	0.5	—	0.5	1.0	—	0.0	—	0.0	—	1.0	—	0.5	0.5	0.5	0.5
Mongolia	—	0.5	—	0.0	1.0	—	0.0	—	1.0	—	0.5	—	1.0	0.0	0.5	0.0
Morocco	—	1.0	—	1.0	1.0	—	1.0	—	1.0	—	1.0	—	1.0	1.0	0.5	0.5
Mozambique	—	0.5	—	0.5	0.5	—	0.5	—	0.5	—	0.5	—	0.5	1.0	0.0	0.5
Myanmar	—	1.0	—	0.5	0.5	—	—	—	1.0	—	0.5	—	0.5	0.5	0.5	0.5
Nepal	—	0.5	—	0.5	0.5	—	0.5	—	0.5	—	0.5	—	0.0	0.0	0.5	0.5
Niger	—	1.0	—	1.0	1.0	—	0.5	—	1.0	—	1.0	—	0.0	0.0	0.0	0.0
Nigeria	—	—	—	—	0.5	—	0.0	—	0.5	—	0.5	—	0.0	—	0.5	—
Oman	—	1.0	—	0.5	0.5	—	1.0	—	0.5	—	0.5	—	0.5	0.0	1.0	0.0
Pakistan	—	0.5	—	0.5	—	0.5	—	1.0	—	0.5	—	0.0	—	—	—	—
Panama	—	1.0	—	0.5	0.0	—	0.0	—	0.0	—	1.0	—	0.0	—	0.5	—
Paraguay	—	0.0	—	0.0	0.5	—	0.5	—	0.5	—	1.0	—	0.5	0.5	0.5	0.5
Philippines	—	1.0	—	0.5	0.5	—	1.0	—	1.0	—	1.0	—	0.5	0.0	0.5	0.5
Rwanda	—	1.0	—	0.5	0.5	—	1.0	—	1.0	—	1.0	—	—	—	0.5	0.5
Samoa	—	1.0	—	1.0	0.0	—	0.0	—	1.0	—	1.0	—	0.5	0.5	1.0	1.0
Senegal	—	0.0	—	0.5	0.5	—	0.5	—	0.5	—	0.5	—	1.0	0.5	1.0	0.0
Sierra Leone	—	0.5	—	0.5	0.0	—	0.0	—	0.5	—	0.5	—	0.0	0.0	0.5	0.5
South Africa	—	1.0	—	0.5	0.5	—	0.5	—	1.0	—	1.0	—	0.5	0.5	0.5	0.5
South Sudan	—	0.0	—	0.5	0.0	—	0.0	—	0.0	—	0.0	—	0.0	0.0	0.0	0.0
Sri Lanka	—	0.5	—	0.5	0.5	—	0.5	—	0.5	—	0.5	—	0.5	0.5	0.5	0.5
Tajikistan	—	0.5	—	0.5	1.0	—	0.5	—	1.0	—	0.5	—	1.0	1.0	1.0	1.0
Thailand	—	1.0	—	1.0	1.0	—	1.0	—	1.0	—	1.0	—	1.0	—	1.0	—
Timor-Leste	—	0.5	—	0.5	0.0	—	0.0	—	0.0	—	0.0	—	0.5	0.5	0.0	0.0
Togo	—	1.0	—	1.0	0.5	—	1.0	—	0.5	—	0.5	—	0.0	0.0	0.0	0.0
Uganda	—	1.0	—	0.5	0.5	—	0.0	—	1.0	—	1.0	—	—	0.0	—	0.5
Uzbekistan	—	0.5	—	1.0	0.5	—	0.0	—	1.0	—	0.5	—	1.0	1.0	1.0	1.0
Viet Nam	—	1.0	—	1.0	0.5	—	0.5	—	1.0	—	0.5	—	0.5	0.5	1.0	0.5
Yemen	—	0.0	—	0.5	1.0	—	1.0	—	1.0	—	0.5	—	0.5	0.0	0.5	0.0
Zimbabwe	—	1.0	—	0.5	0.0	—	0.0	—	1.0	—	1.0	—	0.5	0.0	1.0	0.0

O&amp;M, operation and maintenance; WSPs, water safety plans

Question 10: Human resources capacity

Country	Question 10a – Do national strategies or reviews address human resources?				Question 10c – Are there performance appraisal and incentive policies?				Question 10d - Is continuing education provided for personnel?				Question 10f – Is extension staff in place (sanitation); Is there staff for O&M (drinking-water)?			
	Sanitation		Drinking-water		Sanitation		Drinking-water		Sanitation		Drinking-water		Sanitation		Drinking-water	
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
Afghanistan	0.5	0.5	0.0	1.0	0.0	0.5	0.0	0.0	0.5	1.0	0.5	0.5	0.5	0.5	0.5	1.0
Angola	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Azerbaijan	1.0	0.5	1.0	1.0	1.0	0.5	1.0	1.0	1.0	0.5	1.0	1.0	1.0	0.5	0.0	0.0
Bangladesh	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Benin	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	1.0	1.0	0.5	0.5
Bhutan	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Bolivia (Plurinational State of)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Brazil	0.5	0.5	0.5	0.0	—	0.0	—	0.0	0.5	0.5	0.5	0.5	0.5	0.5	—	0.5
Burkina Faso	1.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0	0.5	0.5	1.0	0.5	1.0	0.5	1.0	0.5
Burundi	0.0	0.0	—	—	0.0	0.0	—	—	0.0	0.0	—	—	0.5	0.5	—	—
Cambodia	0.5	1.0	0.5	—	0.0	0.0	1.0	—	0.0	0.5	0.5	—	0.5	0.0	1.0	—
Cameroon	0.5	0.5	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.5	0.0	0.5	0.5	1.0	0.5
Central African Republic	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Chad	—	—	1.0	1.0	—	—	0.0	0.0	—	—	0.0	0.0	—	—	1.0	1.0
Colombia	1.0	—	1.0	—	—	—	—	—	—	—	—	—	0.0	—	—	—
Congo	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.0	0.0	0.5	0.5
Côte d'Ivoire	0.5	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.0	0.0	1.0	0.5
Democratic Republic of the Congo	0.0	0.5	1.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0
Dominican Republic	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	1.0	0.5
Egypt	1.0	1.0	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	1.0	0.5
El Salvador	0.5	0.5	0.5	0.5	0.0	0.0	0.5	0.0	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.0
Equatorial Guinea	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5
Ethiopia	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.5	0.5	0.5	0.5	1.0	1.0	0.5	0.5
Fiji	0.0	0.0	0.5	0.5	0.0	0.0	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0
Gabon	0.5	0.5	0.5	0.0	0.0	0.0	0.0	—	0.5	0.5	0.5	—	0.5	0.5	1.0	0.0
Gambia	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	—	—	1.0	1.0
Ghana	1.0	1.0	1.0	1.0	0.5	0.5	1.0	1.0	0.0	0.0	1.0	1.0	0.5	0.5	0.5	0.5
Guinea	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	0.5	0.5	0.5	0.5	1.0	1.0
Guinea-Bissau	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.0	0.0
Haiti	—	—	1.0	1.0	—	—	—	—	—	—	0.5	0.5	—	—	0.5	0.5
Honduras	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5
India	—	0.5	—	1.0	—	0.0	—	0.0	—	0.5	—	0.5	—	1.0	—	0.5
Indonesia	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.0	0.0	1.0	0.0
Iran (Islamic Republic of)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5
Jordan	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	—	—	1.0	1.0
Kenya	1.0	1.0	0.5	0.5	1.0	1.0	—	—	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5
Kyrgyzstan	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.5	0.5	0.5	0.5	1.0	0.5
Lao People's Democratic Republic	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lebanon	1.0	—	1.0	—	0.0	—	0.5	—	0.5	—	0.5	—	0.5	—	0.5	—
Lesotho	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	0.5
Liberia	0.5	0.5	0.5	0.5	0.0	0.0	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Madagascar	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Malawi	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5	—	0.5
Maldives	1.0	1.0	—	—	—	—	0.0	0.0	0.5	0.5	0.5	0.5	0.0	0.0	0.5	0.5
Mali	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0
Mauritania	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.5	0.5	0.0	0.0	0.5	0.5	0.5	0.5
Mongolia	1.0	1.0	1.0	1.0	0.0	0.0	1.0	1.0	0.5	0.0	0.5	0.0	0.0	0.0	0.5	0.5
Morocco	1.0	—	1.0	1.0	1.0	—	1.0	1.0	0.5	—	0.5	0.5	0.5	—	0.5	0.5
Mozambique	0.5	0.5	0.5	1.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	0.5
Myanmar	1.0	1.0	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	1.0	1.0	0.5	0.5
Nepal	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Niger	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0
Nigeria	0.5	0.5	0.5	—	0.0	0.0	0.0	—	0.5	0.5	0.5	—	0.5	0.5	0.5	—
Oman	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0	1.0	0.5
Pakistan	0.0	0.0	0.0	0.0	0.0	0.0	—	—	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5
Panama	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.0	0.0	0.5	0.5
Paraguay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.5	0.5
Philippines	0.5	0.5	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	1.0	0.0	0.5	0.5	1.0	0.5
Rwanda	1.0	1.0	0.5	0.5	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5
Samoa	1.0	0.5	0.5	0.5	1.0	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.5
Senegal	1.0	0.5	0.5	0.5	1.0	1.0	1.0	0.0	0.5	0.5	1.0	0.5	0.5	0.5	1.0	0.5
Sierra Leone	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
South Africa	0.5	0.5	1.0	1.0	1.0	1.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
South Sudan	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Sri Lanka	1.0	0.5	0.5	0.5	0.0	0.0	0.0	0.0	1.0	0.5	0.5	0.0	0.5	0.5	1.0	1.0
Tajikistan	0.0	0.0	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.0	1.0	0.5
Thailand	1.0	1.0	1.0	1.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	1.0	0.5
Timor-Leste	—	—	0.5	0.5	—	—	1.0	1.0	—	—	0.5	0.5	—	—	0.5	0.5
Togo	0.5	0.5	0.5	0.5	0.0	0.0	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.5	1.0	0.5
Uganda	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5
Uzbekistan	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Viet Nam	0.5	0.5	0.5	1.0	0.0	0.0	0.0	1.0	1.0	0.5	0.5	0.5	0.5	0.5	1.0	1.0
Yemen	0.5	0.5	1.0	0.0	0.5	0.5	1.0	0.0	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.0
Zimbabwe	1.0	0.5	0.5	0.0	0.5	0.0	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5

O&M, operation and maintenance

## SECTION C: HYGIENE PROMOTION

Country	Question 1a – Are national behaviour change programmes based on research?		Question 1b – Is hygiene promotion included in national health strategy?		Question 2 – Are hygiene programmes implemented in:										Target (%)
					Primary schools?		Secondary schools?		Primary health-care clinics?		Secondary health-care centres?		Tertiary health services?		
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	
Afghanistan	Yes	Yes	Yes	Yes	0.5	0.5	0.5	0.5	0.0	0.0	0.5	0.5	0.0	0.0	—
Angola	Yes	Yes	Yes	Yes	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	70
Azerbaijan	Yes	Yes	Yes	Yes	—	—	—	—	—	—	—	—	—	—	—
Bangladesh	No	No	Yes	Yes	0.5	0.5	0.5	0.5	—	0.5	1.0	0.5	1.0	1.0	—
Benin	Yes	Yes	Yes	Yes	0.5	0.5	0.5	0.5	0.5	0.5	0.5	—	0.0	—	69
Bhutan	No	Yes	No	No	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	—
Bolivia (Plurinational State of)	No	No	Yes	Yes	0.5	0.5	0.5	0.5	—	—	—	—	—	—	—
Brazil	No	No	Yes	Yes	0.5	1.0	0.5	1.0	0.5	1.0	—	—	—	—	57
Burkina Faso	Yes	Yes	Yes	Yes	1.0	1.0	0.0	0.0	1.0	1.0	—	—	—	—	—
Burundi	No	No	Yes	Yes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	—
Cambodia	Yes	Yes	Yes	Yes	0.5	0.5	0.5	0.5	0.5	1.0	0.5	1.0	0.5	1.0	—
Cameroon	Yes	Yes	Yes	Yes	0.5	0.0	0.5	0.0	0.5	0.5	0.5	0.5	1.0	1.0	—
Central African Republic	No	No	No	No	0.5	1.0	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	—
Chad	Yes	Yes	Yes	Yes	0.5	0.0	0.0	0.0	0.5	0.0	1.0	1.0	—	—	—
Colombia	Yes	—	Yes	—	—	—	—	—	—	—	—	—	—	—	—
Congo	Yes	Yes	Yes	Yes	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	100
Côte d'Ivoire	Yes	Yes	Yes	Yes	0.0	—	—	—	0.5	0.5	0.5	0.5	—	—	—
Democratic Republic of the Congo	No	No	No	Yes	—	0.0	—	—	—	—	—	—	—	—	—
Dominican Republic	Yes	—	Yes	—	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	—
Egypt	No	—	Yes	—	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	—
El Salvador	No	No	Yes	Yes	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	—
Equatorial Guinea	Yes	Yes	Yes	Yes	0.5	0.5	0.5	0.5	0.5	0.5	0.5	—	1.0	—	80
Ethiopia	Yes	Yes	Yes	Yes	1.0	0.5	0.5	0.5	1.0	1.0	0.5	0.5	0.5	0.5	100
Fiji	—	—	Yes	Yes	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	—
Gabon	No	No	Yes	Yes	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	—
Gambia	Yes	Yes	Yes	Yes	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	60
Ghana	Yes	Yes	Yes	Yes	1.0	1.0	0.5	0.5	0.5	1.0	0.5	0.5	0.0	0.0	—
Guinea	No	No	Yes	Yes	0.5	0.5	0.0	0.0	1.0	1.0	0.5	0.5	—	—	—
Guinea-Bissau	Yes	Yes	Yes	Yes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	—	—	—
Haiti	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Honduras	No	No	Yes	Yes	0.5	0.5	0.0	0.0	0.5	0.5	0.0	—	0.0	—	—
India	—	Yes	—	Yes	—	1.0	—	1.0	—	—	—	—	—	—	—
Indonesia	Yes	Yes	Yes	Yes	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	70
Iran (Islamic Republic of)	No	No	Yes	Yes	1.0	0.5	1.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	—
Jordan	No	No	Yes	Yes	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	—
Kenya	No	No	Yes	Yes	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	—
Kyrgyzstan	Yes	Yes	No	Yes	0.5	1.0	0.5	1.0	0.5	1.0	0.0	0.0	0.0	0.0	—
Lao People's Democratic Republic	Yes	Yes	Yes	Yes	0.0	1.0	0.0	0.5	0.0	0.0	1.0	1.0	1.0	1.0	—
Lebanon	No	—	—	—	—	—	—	—	—	—	0.5	—	0.5	—	—
Lesotho	No	No	Yes	Yes	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	—
Liberia	Yes	Yes	Yes	Yes	0.5	0.5	0.5	0.5	0.0	0.0	0.5	0.5	0.5	0.5	35
Madagascar	Yes	Yes	Yes	Yes	0.5	0.5	0.5	0.0	0.0	0.0	0.5	—	1.0	—	60
Malawi	Yes	Yes	Yes	Yes	1.0	1.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	—
Maldives	No	No	—	—	—	—	—	—	—	—	—	—	—	—	—
Mali	Yes	Yes	Yes	Yes	0.5	0.0	0.5	0.0	1.0	1.0	1.0	1.0	1.0	1.0	80
Mauritania	No	No	Yes	Yes	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5	0.0	—
Mongolia	No	No	Yes	Yes	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.5	—	—
Morocco	Yes	Yes	Yes	Yes	0.5	0.0	0.5	0.0	1.0	0.5	0.5	—	0.5	—	—
Mozambique	Yes	Yes	Yes	Yes	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	65
Myanmar	No	No	Yes	Yes	0.5	0.5	0.5	0.5	0.0	—	0.0	—	0.0	—	8
Nepal	Yes	Yes	Yes	Yes	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	100
Niger	Yes	Yes	Yes	Yes	0.5	0.0	0.5	0.0	0.5	0.0	1.0	0.5	1.0	0.5	—
Nigeria	No	—	Yes	—	0.0	0.0	0.0	0.0	0.5	—	1.0	—	1.0	—	—
Oman	No	No	Yes	Yes	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	100
Pakistan	Yes	Yes	Yes	Yes	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	—
Panama	No	No	No	Yes	0.5	0.0	0.0	0.0	—	—	—	—	—	—	—
Paraguay	No	No	Yes	Yes	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	—
Philippines	No	No	Yes	Yes	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	—
Rwanda	Yes	Yes	Yes	Yes	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	90
Samoa	—	—	Yes	Yes	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	—
Senegal	No	No	Yes	Yes	0.5	0.5	0.5	0.5	0.5	0.0	0.5	—	0.5	—	100
Sierra Leone	Yes	Yes	Yes	Yes	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	—
South Africa	—	—	Yes	Yes	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	—
South Sudan	Yes	Yes	Yes	Yes	0.0	0.0	—	0.0	0.5	0.5	0.5	0.5	—	0.0	18
Sri Lanka	No	No	Yes	Yes	1.0	0.5	1.0	0.5	1.0	1.0	1.0	1.0	1.0	1.0	—
Tajikistan	—	—	Yes	Yes	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	—
Thailand	No	No	Yes	Yes	—	—	—	—	—	—	—	—	—	—	—
Timor-Leste	Yes	No	Yes	Yes	0.5	0.5	—	—	—	—	—	—	1.0	1.0	—
Togo	No	No	Yes	Yes	0.0	0.5	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	—
Uganda	Yes	Yes	Yes	Yes	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50
Uzbekistan	Yes	Yes	Yes	Yes	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	—	—	—
Viet Nam	Yes	Yes	Yes	Yes	0.5	0.5	0.5	0.0	1.0	1.0	1.0	1.0	1.0	0.5	—
Yemen	No	No	Yes	No	0.5	0.0	0.5	0.0	0.5	0.0	0.5	0.0	0.5	0.0	—
Zimbabwe	No	No	Yes	Yes	1.0	1.0	0.0	0.0	0.0	0.0	0.5	1.0	0.0	0.0	—



# Annex E: Summary of responses to 2011 GLAAS external support agency survey

## a) African Development Bank to Islamic Relief<sup>1</sup>

	African Development Bank*	Asian Development Bank <sup>12</sup>	Australia*	Bill & Melinda Gates Foundation	EBRD	European Commission*	France*	Germany*	IFRC	Inter-American Development Bank	Ireland*	Islamic Relief
<b>Aid policies</b>												
Was sanitation in the top three priorities? (Y/N)	Yes	No	No	No		No	No	No	No	No	No	Yes
Was drinking-water in the top three priorities? (Y/N)	Yes	No	No	No		No	No	No	No	No	No	Yes
Used criteria to select priority recipient countries? (Y/N)	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No	Yes	Yes
No. of priority countries for drinking-water 2010–2011	9	12	3		7	13	9	27		11	6	14
No. of priority countries for sanitation and hygiene 2010–2011	9	13	3		7	6	3	27		9	5	17
Specific targets for increasing access to water and sanitation	Yes	Yes	No	No		No		Yes		Yes	No	
<b>Aid flow amounts (Source: OECD, 2012) (OECD countries with *, non-OECD reporting uses 2010 GLAAS data)</b>												
Commitments, 2010, total (US\$ M)	205	1547	218	32			501	714		725	10	17
- Commitments, 2010, grants (US\$ M)	65	225	218	32			88	324		25	10	17
- Commitments, 2010, loans (US\$ M)	139	1322					413	390		700		
Disbursements, 2010, total (US\$ M)	177	155	176	44		502	277	595		459	10	
<b>2010 disbursement funding channels (grants and loans)</b>												
Sector budget support to governments (%)		3						6			77	
Programmes and projects via multilaterals (%)		94		18		7				100		14
Programmes and projects via NGOs (%)		0		43		7	0				23	39
Academic and training institutes (%)				34								
Direct implementation (%)		2			0			94	100			46
Other (%)	100			5	100	86	100					2
<b>2010 disbursements by output type (grants and loans)</b>												
New services, sanitation (%)	60	21		41	22		53		100			78
Maintaining existing services, sanitation (%)	20	30			38							17
Improving service levels, sanitation (%)	20	49		59	40		47					5
New services, drinking-water (%)	60	19		12	25		35		100			81
Maintaining existing services, drinking-water (%)	20	26			39							15
Improving service levels, drinking-water (%)	20	54		88	36		64					4
<b>Length of 2010 commitments</b>												
Sanitation, <3 years (%)			35	14				1			100	100
Sanitation, 3–5 years (%)	20	11	65	86			70	14				
Sanitation, >5 years (%)	80	89			100		30	85	100	100		
Drinking-water, <3 years (%)		0.01	35	50				1			100	100
Drinking-water, 3–5 years (%)	20	23	65	50			70	14				
Drinking-water, >5 years (%)	80	77			100		30	85	100	100		
<b>Alignment, harmonization, coordination</b>												
WASH aid coordinated with country (%)	100	73	85				100	100		100	100	
Countries where procurement systems used	10	22	7			12	All	4		4		

ADB, Asian Development Bank; AFD, Agence Française de Développement; EBRD, European Bank for Reconstruction and Development; IFRC, International Federation of Red Cross and Red Crescent Societies

<sup>1</sup> OECD countries are indicated with an asterisk (\*).

<sup>2</sup> GLAAS survey values referenced. OECD (2012) data, ADB Special Funds: total commitment US\$ 194 M, commitment grants US\$ 9 M, commitment loans US\$ 185 M.

b) Japan to World Bank (IDA)<sup>1</sup>

	Japan*	Netherlands*	Norway*	Portugal*	Sweden*	Switzerland*	UNDP*	UNICEF*	United Kingdom*	USA*	WaterAid (NGO)	World Bank (IDA)*
<b>Aid policies</b>												
Was sanitation in the top three priorities? (Y/N)		No	No	No		No	No	No	No		Yes	
Was drinking-water in the top three priorities? (Y/N)		Yes	No	No		No	No	No	No		Yes	
Used criteria to select priority recipient countries? (Y/N)	No	Yes	No	No	No	Yes	Yes	Yes	Yes		Yes	No
No. of priority countries for drinking-water 2010–2011		13	2	5			3	60	14		26	8
No. of priority countries for sanitation and hygiene 2010–2011		13	2	1			3	60	14		26	
Specific targets for increasing access to water and sanitation	Yes	Yes		Yes	No				Yes		Yes	Yes
<b>Aid flow amounts (Source: OECD, 2012) (OECD countries with *, non-OECD reporting uses 2010 GLAAS data)</b>												
Commitments, 2010, total (US\$ M)	1933	123	47	1	55	50	3	49	56	431	61	1035
- Commitments, 2010, grants (US\$ M)	465	123	47	1	55	50	3	49	56	431	61	81
- Commitments, 2010, loans (US\$ M)	1468									-		953
Disbursements, 2010, total (US\$ M)	1649	195	51	1	45	48	3	49	157	397	87	717
<b>2010 disbursement funding channels (grants and loans)</b>												
Sector budget support to governments (%)		64							8			
Programmes and projects via multilaterals (%)		20	56			45			77			
Programmes and projects via NGOs (%)		15	23	35		9			3			
Academic and training institutes (%)		2	6									
Direct implementation (%)			15	7		46			5		100	100
Other (%)				58			100	7				
<b>2010 disbursements by output type (grants and loans)</b>												
New services, sanitation (%)		80		100		70		75			100	
Maintaining existing services, sanitation (%)						15		25				
Improving service levels, sanitation (%)		20				15						
New services, drinking-water (%)		80		94		60		80			100	
Maintaining existing services, drinking-water (%)				6		20		20				
Improving service levels, drinking-water (%)		20				20						
<b>Length of 2010 commitments</b>												
Sanitation, <3 years (%)				100	40	15	34	30			100	
Sanitation, 3–5 years (%)		100			60	25	28	70	100			100
Sanitation, >5 years (%)						60						
Drinking-water, <3 years (%)				100	40	15		30			100	
Drinking-water, 3–5 years (%)		100			60	25		70	100			100
Drinking-water, >5 years (%)						60						
<b>Alignment, harmonization, coordination</b>												
WASH aid coordinated with country (%)		90		100	100	100	100	100			100	100
Countries where procurement systems used	6								14			

IDA, International Development Association; NGO, nongovernmental organization; UNDP, United Nations Development Programme; UNICEF, United Nations Children's Fund; USA, United States of America

<sup>1</sup> OECD countries are indicated with an asterisk (\*).

# Annex F: Supplementary information on donor/country coordination

Recipient country	Number of donors	Donors with leading roles	Donors active in national coordination or harmonization platforms	Other donors that provided over US\$ 1 million in aid <sup>1</sup>
Afghanistan	15	—	Germany, IFRC	USA (21), Germany (17), EU institutions (4), UNICEF (4), Canada (2), IDA (2), Norway (2), ADB Special Funds (1), Japan (1), Netherlands (1), United Kingdom (1)
Angola	7	UNDP	IFRC, WaterAid	EU institutions (3), IDA (2), USA (1)
Azerbaijan	9	ADB	ADB	ADB Special Funds (4), IDA (4), Japan (1), Republic of Korea (1)
Bangladesh	15	ADB, Netherlands	ADB, Australia, IFRC, Netherlands, WaterAid	Denmark (50), ADB Special Funds (39), Netherlands (30), Japan (24), IDA (11), United Kingdom (10), Australia (3), UNICEF (2), OFID (1), Switzerland (1)
Benin	13	Netherlands	AfDB, Germany, Netherlands	IDA (18), Germany (11), Netherlands (9), EU institutions (8), Denmark (6), Japan (5), AfDF (3), France (3), Belgium (1)
Bhutan	2	ADB	ADB	
Bolivia (Plurinational State of)	13	—	Germany	Japan (13), EU institutions (8), Germany (6), IDB Special Fund (4), Spain (4), IDA (3), Netherlands (3), Canada (1), Sweden (1)
Brazil	6	—	—	Germany (5), Japan (5)
Burkina Faso	17	—	AfDB, EU institutions, Germany, IFRC, Japan, Sweden, WaterAid	EU institutions (10), Denmark (9), AfDF (8), France (7), Germany (7), Japan (6), Belgium (3), IDA (3), Sweden (2), Luxembourg (1), UNICEF (1), United Arab Emirates (1)
Burundi	9	Germany	AfDB, Germany	Germany (17), AfDF (6), IDA (5)
Cambodia	11	—	IFRC	Japan (10), Republic of Korea (8), France (4), Australia (1)
Cameroon	10	—	AfDB	AfDF (6), IDA (6), Belgium (1)
Central African Republic	4	—	AfDB, IFRC	EU institutions (3), IDA (1)
Chad	8	—	AfDB, IFRC	EU institutions (16), France (11), AfDF (4)
Colombia	7	—	—	—
Congo	3	—	IFRC	IDA (7)
Côte d'Ivoire	4	—	IFRC	IDA (24), EU institutions (8), Germany (2)
Democratic Republic of the Congo	13	Germany	—	AfDF (24), EU institutions (24), United Kingdom (19), IDA (12), Germany (5), USA (4), Belgium (3), Japan (2), UNICEF (2)
Dominican Republic	6	—	IFRC	Spain (13), Japan (2), EU institutions (1)
Egypt	11	EU institutions, Germany	EU institutions, Germany	Germany (25), AFESD (15), USA (10), Kuwait (8), Netherlands (4), Denmark (3), Switzerland (2), Japan (1)
El Salvador	8	UNDP	—	Spain (25), Japan (2), USA (2), Luxembourg (1)
Ethiopia	20	—	AfDB, EU institutions, IFRC, Netherlands, United Kingdom, WaterAid	IDA (21), United Kingdom (20), AfDF (19), Japan (13), Finland (11), Italy (5), EU institutions (4), UNICEF (4), USA (4), Spain (3), France (1), Germany (1), Norway (1)
Fiji	4	—	—	Japan (1)
Gabon	2	—	—	France (6), EU institutions (2)
Gambia	3	—	IFRC	EU institutions (1), Japan (1)
Ghana	14	France	AfDB, WaterAid	IDA (28), Belgium (26), EU institutions (9), Canada (7), AfDF (6), France (3), Netherlands (2), Germany (1), USA (1)
Guinea	5	—	—	EU institutions (4), Germany (3)
Guinea-Bissau	4	—	IFRC	—
Haiti	11	—	IFRC	IDB Special Fund (13), Canada (3), Denmark (3), EU institutions (2), France (2), IDA (1), Spain (1), Switzerland (1)
Honduras	9	Switzerland	EU institutions, Switzerland	Spain (41), IDB Special Fund (6), IDA (5), Japan (4), Canada (1), Switzerland (1)
India	13	ADB	ADB, Bill & Melinda Gates Foundation, Germany, WaterAid	Japan (311), IDA (64), United Kingdom (9), Germany (4), USA (4), UNICEF (3), Australia (2), EU institutions (2)
Indonesia	12	Netherlands	Bill & Melinda Gates Foundation, Germany, IFRC, Netherlands	Japan (54), Australia (47), IDA (39), France (15), Netherlands (15), ADB Special Funds (4), EU institutions (3), Germany (3), USA (3), Republic of Korea (1), Sweden (1)
Iran (Islamic Republic of)	1	—	—	Japan (1)
Jordan	8	Germany	EU institutions, Germany	Germany (41), USA (35), Japan (18), Italy (2), Republic of Korea (2)

Recipient country	Number of donors	Donors with leading roles	Donors active in national coordination or harmonization platforms <sup>1</sup>	Other donors that provided over US\$ 1 million in aid <sup>1, 2</sup>
Kenya	20	France, Germany	Germany, IFRC, Netherlands, Sweden, WaterAid	IDA (42), France (33), Germany (20), Japan (13), EU institutions (7), AfDF (6), Netherlands (5), Finland (4), Sweden (2), Australia (1), UNICEF (1), USA (1)
Kyrgyzstan	6	ADB, Switzerland	ADB, Switzerland	Switzerland (3), ADB Special Funds (1), IDA (1), United Kingdom (1)
Lao People's Democratic Republic	7	—	IFRC, WaterAid	Republic of Korea (9), ADB Special Funds (3), Australia (2), OFID (2), France (1), Japan (1)
Lebanon	10	Germany	Germany	Japan (10), France (9), EU institutions (6), Italy (5), USA (5), Germany (4), Kuwait (4), United Arab Emirates (4), Spain (1)
Lesotho	7	—	WaterAid	USA (14), EU institutions (12), IDA (4), Ireland (2), Kuwait (1)
Liberia	4	UNDP	AfDB, IFRC, WaterAid	United Kingdom (3), USA (2)
Madagascar	7	UNDP	AfDB, IFRC, WaterAid	AfDF (4), France (1), USA (1)
Malawi	11	AfDB, United Kingdom	AfDB, Australia, Netherlands, United Kingdom, WaterAid	IDA (11), AfDF (3), OFID (2), Belgium (1), Japan (1)
Maldives	3	ADB		ADB (20), IFRC (26), UNICEF (8), USAID (9)
Mali	15	France, Germany, UNDP	AfDB, Germany, IFRC, Sweden, Switzerland, WaterAid	EU institutions (12), Denmark (6), Japan (6), France (5), Germany (5), IDA (3), AfDF (2), Luxembourg (1), Netherlands (1)
Mauritania	8	—	AfDB	AFESD (35), Kuwait (17), AfDF (9), OFID (7), France (3), IDA (3), EU institutions (1)
Mongolia	7	UNDP	IFRC	Japan (10), Germany (3), IDA (3), Republic of Korea (3), France (2), Netherlands (2)
Morocco	10	France	AfDB, Germany	France (35), Germany (34), EU institutions (30), Japan (16), AFESD (15), Belgium (8), Italy (1), OFID (1), Spain (1)
Mozambique	18	AfDB, Netherlands, Switzerland	AfDB, Bill & Melinda Gates Foundation, IFRC, Netherlands, Switzerland, United Kingdom, WaterAid	EU institutions (25), Netherlands (21), Australia (17), AfDF (8), USA (6), France (4), Switzerland (2), Denmark (1), IDA (1), Japan (1), Spain (1), UNICEF (1)
Myanmar	6	—	IFRC	Australia (9), Japan (1), UNICEF (1)
Nepal	9	ADB	ADB, IFRC, WaterAid	ADB Special Funds (20), IDA (11), Finland (5), Australia (3), Japan (1), United Kingdom (1)
Niger	12	France, Switzerland	AfDB, IFRC, Switzerland, WaterAid	Belgium (14), France (8), EU institutions (3), IDA (3), Japan (3), Denmark (1)
Nigeria	7	EU institutions	EU institutions, IFRC, United Kingdom, WaterAid	IDA (77), EU institutions (18), United Kingdom (8), UNICEF (2), Japan (1)
Oman	1	—	—	United Arab Emirates (<1)
Pakistan	14	ADB	ADB, IFRC, WaterAid	Japan (22), Norway (12), IDA (7), Germany (6), UNICEF (3), USA (3), Netherlands (2), OFID (2), Belgium (1), EU institutions (1)
Panama	1	—	—	Japan (104)
Paraguay	3	UNDP	—	Japan (1)
Philippines	11	UNDP	IFRC	Japan (14), Spain (3), Australia (2), Belgium (1), Germany (1), USA (1)
Rwanda	11	EU institutions	AfDB, EU institutions, Netherlands, WaterAid	IDA (21), AfDF (4), Belgium (3), EU institutions (2), Japan (1)
Samoa	3	ADB	ADB	EU institutions (10), ADB Special Funds (4)
Senegal	15	EU institutions, France	AfDB, EU institutions, IFRC, Japan	IDA (9), Netherlands (6), AfDF (5), France (5), Luxembourg (5), EU institutions (4), Belgium (3), USA (3), Japan (2), Germany (1)
Sierra Leone	7	United Kingdom	EU institutions, IFRC, United Kingdom, WaterAid	United Kingdom (5), IDA (2), UNICEF (1)
South Africa	8	—	EU institutions	EU institutions (45), Ireland (1)
Tajikistan	7	EBRD, Switzerland, UNDP	EBRD, IFRC, Switzerland	IDA (3), Switzerland (2)
Thailand	3	—	IFRC	Japan (7)
Timor-Leste	5	Australia	Australia, IFRC, WaterAid	Australia (10), Japan (4), USA (2)
Togo	5	France	IFRC	France (3)
Uganda	17	—	AfDB, Germany, IFRC, WaterAid	Denmark (20), IDA (10), Austria (7), Germany (6), EU institutions (5), UNICEF (2), Ireland (1), Japan (1), USA (1)
Uzbekistan	7	ADB	ADB	ADB Special Funds (14), IDA (3), OFID (1), Republic of Korea (1)
Viet Nam	16	Australia, Germany	Australia, Germany, IFRC, Norway, United Kingdom	IDA (86), Japan (64), ADB Special Funds (30), Germany (21), United Kingdom (17), Australia (13), Denmark (12), Netherlands (10), Republic of Korea (7), France (6), Norway (6), Belgium (5), Finland (3)
Yemen	8	Netherlands	Germany, IFRC, Netherlands	IDA (17), Germany (14), AFESD (4), Netherlands (4), Japan (1), United Arab Emirates (1)
Zimbabwe	8	—	Germany, IFRC	Australia (9), Germany (2), Denmark (1)

ADB, Asian Development Bank; AfDB, African Development Bank; AFESD, Arab Fund for Economic and Social Development; EBRD, European Bank for Reconstruction and Development; EU, European Union; IDA, International Development Association; World Bank; IDB, Inter-American Development Bank; IFRC, International Federation of Red Cross and Red Crescent Societies; OFID, OPEC Fund for International Development; OPEC, Organization of the Petroleum Exporting Countries

<sup>1</sup> Data derived from OECD with the exception of Maldives.

<sup>2</sup> Number in parentheses is the amount of disbursement in 2010 in \$US millions.

Sources: 2011 GLAAS country survey; OECD (2012)



# Annex G: List of contributors

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# “What works to effectively extend and sustain water, sanitation and hygiene (WASH) service provision?”

This question becomes increasingly difficult to answer in a rapidly changing global environment. Informed decision-making is impeded by limited or no information on WASH-related national policies, institutional frameworks, domestic investments, human resources and targeting of external assistance.

The 2012 report of the UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water contributes to filling this information gap by summarizing the efforts and approaches of 74 low- and middle-income countries and 24 external support agencies. Through text, graphics, maps and full country annexes, the report illustrates the status of key WASH efforts and highlights global trends.

Against the backdrop of remarkable global gains in extending drinking-water and sanitation services, this report:

- builds the case for a significant risk of slippage on the gains made in extending WASH services unless more attention is given to maintaining those services and assets;
- acknowledges that despite the severe financial crisis faced by many high-income countries, aid for sanitation and drinking-water continues to rise, while targeting to basic Millennium Development Goal-type services is improving;
- shows that some countries are reporting good progress towards national WASH targets and argues that, for the majority of countries, human and financial resource constraints, especially for sanitation, are significantly impeding progress.

This report will be a key resource for all stakeholders concerned with improving WASH service provision around the world.

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