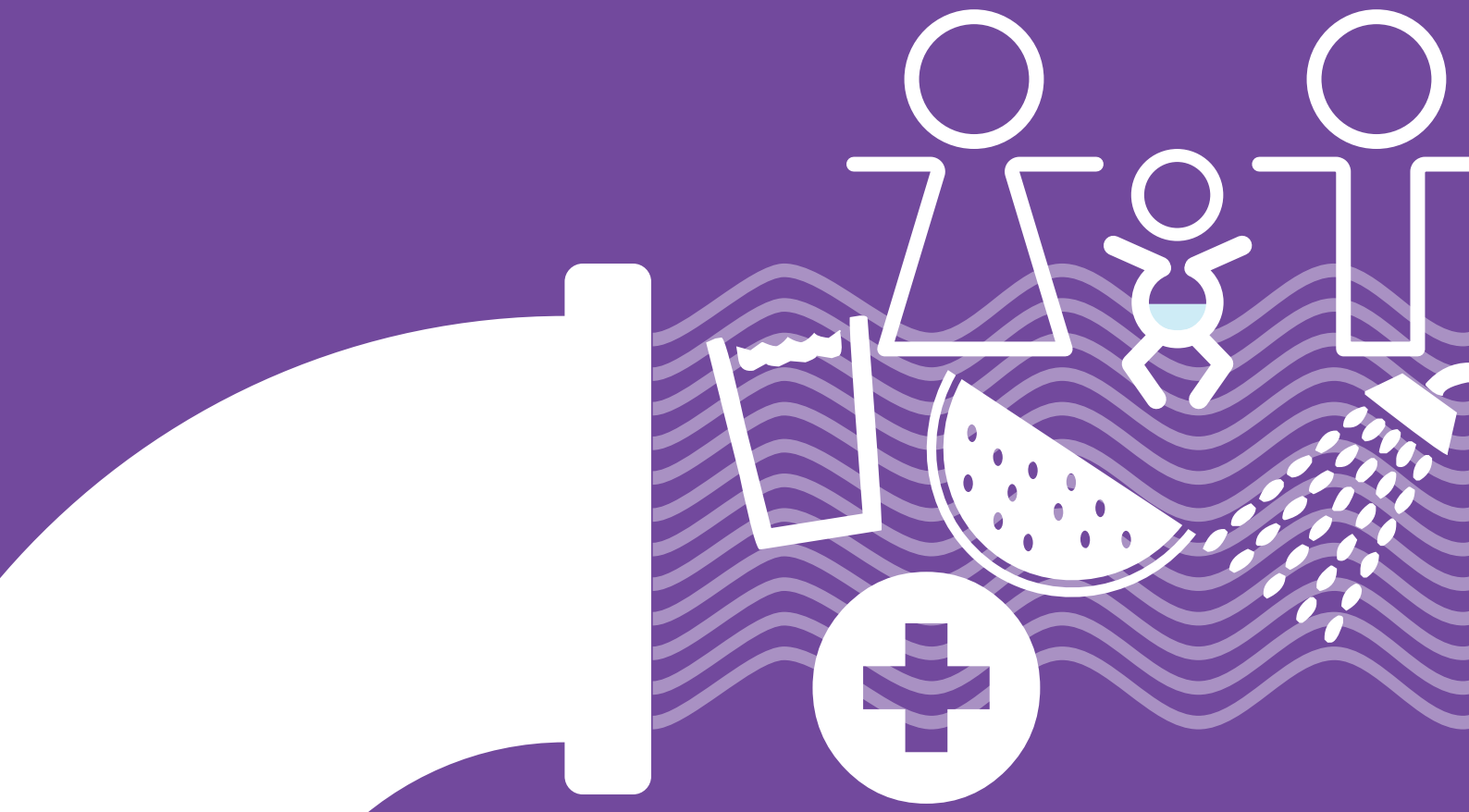
UN WATER

World Health Organization

INVESTING IN WATER AND SANITATION: INCREASING ACCESS, REDUCING INEQUALITIES

GLAAS 2014 findings — Highlights for the Region of the Americas



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

WHO/FWC/WSH/16.41

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Drinking-water, sanitation and hygiene overview

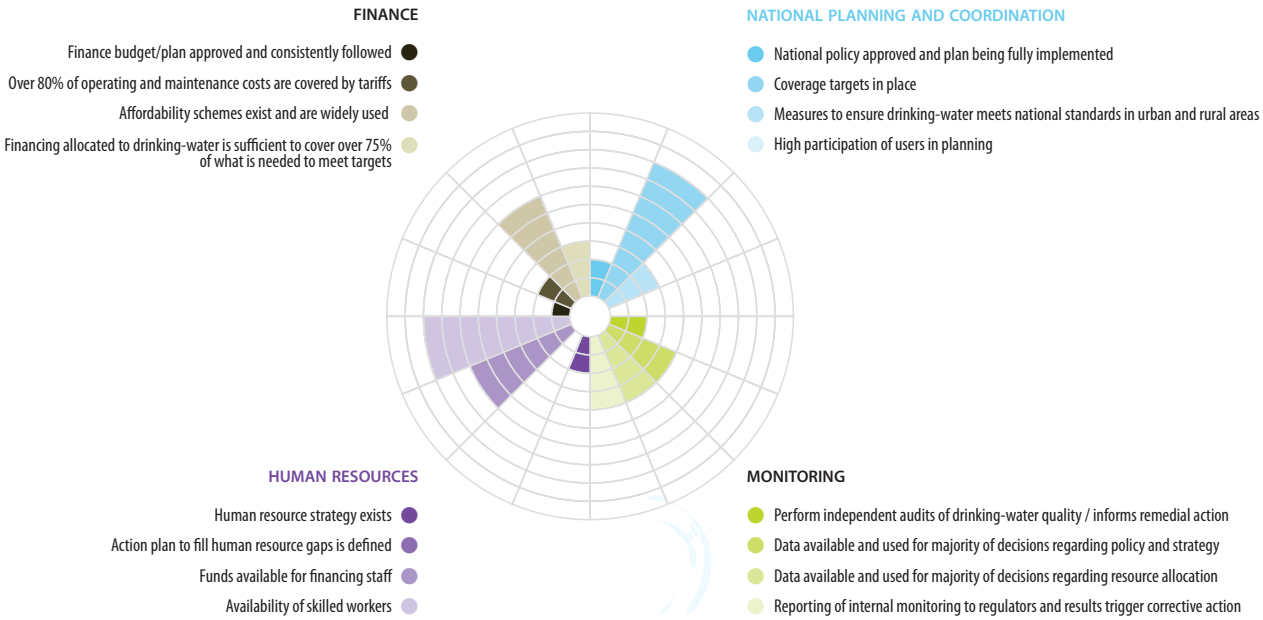
The UN-Water Global Analysis and Assessment of Sanitation and Drinking-water (GLAAS), implemented by WHO, monitors the efforts and approaches to extend and sustain water, sanitation and hygiene (WASH) systems and services. It provides a global update on four key areas: policy framework, monitoring, human resources base, and international and national finance streams in support of drinking-water and sanitation.

Sixteen countries[1] out of 35 in the WHO Region of the Americas, with a total population of 550 million, participated in the GLAAS 2013/2014 reporting cycle. Overall, access to improved drinking-water and sanitation services in the Region of the Americas is 96 and 87 per cent (in 2015), respectively. More than 110 million people gained access to an improved drinking-water source and over 400 million gained access to improved sanitation in the 2005 to 2015 time period.[2] However in 2015, there were still over 100 million people without improved sanitation and over 35 million without access to an improved drinking-water source in the Region of the Americas.

Much progress has been made on water and sanitation in the region. However, there is still a substantial need to further strengthen government commitments and actions to approve and implement national policies and plans for the provision of safe and sustainable water and sanitation services. As shown in Figure 1 and Figure 2, there are a number of challenges that need to be addressed, including:

- Reducing inequalities in access to water and sanitation,
- Applying the human right to water and sanitation to ensure access of services to all,
- Building capacity for surveillance of water supplies,
- Creating action plans to fill the gap in human resources, and
- Establishing a comprehensive national system for planning and implementing WASH sector financing.

Figure 1 **Overview of policy, monitoring, human resources and financing results in drinking-water (percentage of countries with the given indicator in place for both urban and rural areas)**



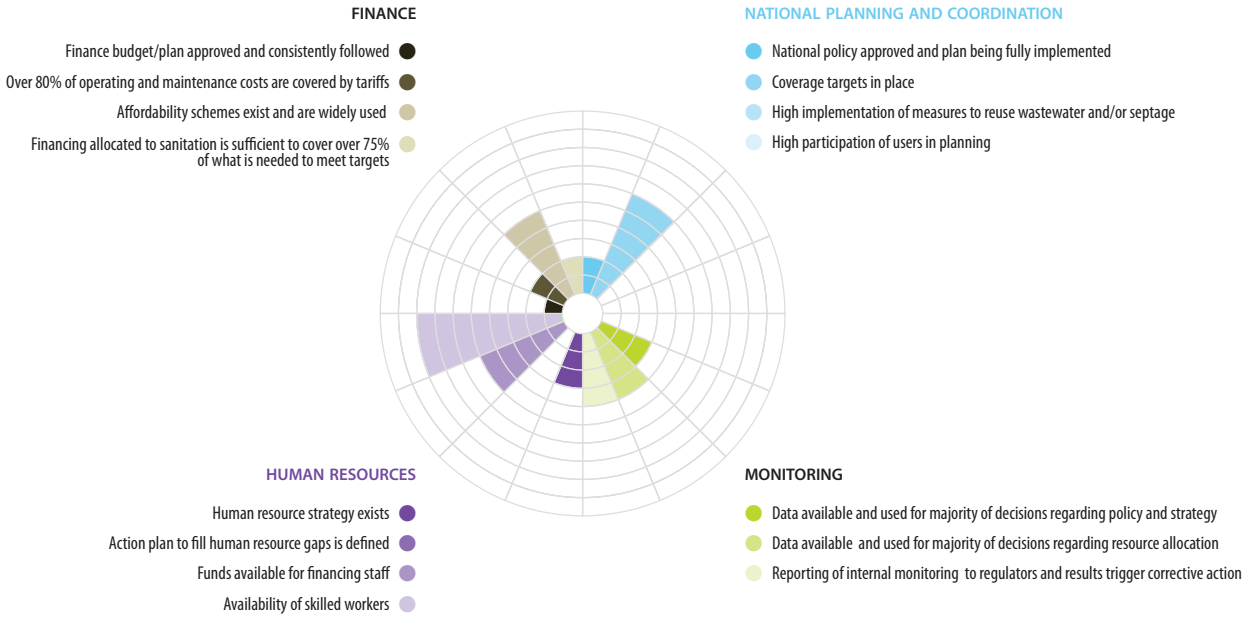
Source: GLAAS 2013/2014 country survey.

1 Argentina, Bolivia (Plurinational State of), Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, El Salvador, Haiti, Honduras, Mexico, Panama, Paraguay, Peru, Uruguay.

2 WHO/UNICEF (2015) Progress on sanitation and drinking-water–2015 update and MDG assessment. Geneva, World Health Organization.

Figure 2

Overview of policy, monitoring, human resources and financing results in sanitation (percentage of countries with the given indicator in place for both urban and rural areas)



Source: GLAAS 2013/2014 country survey.

National policy and implementation

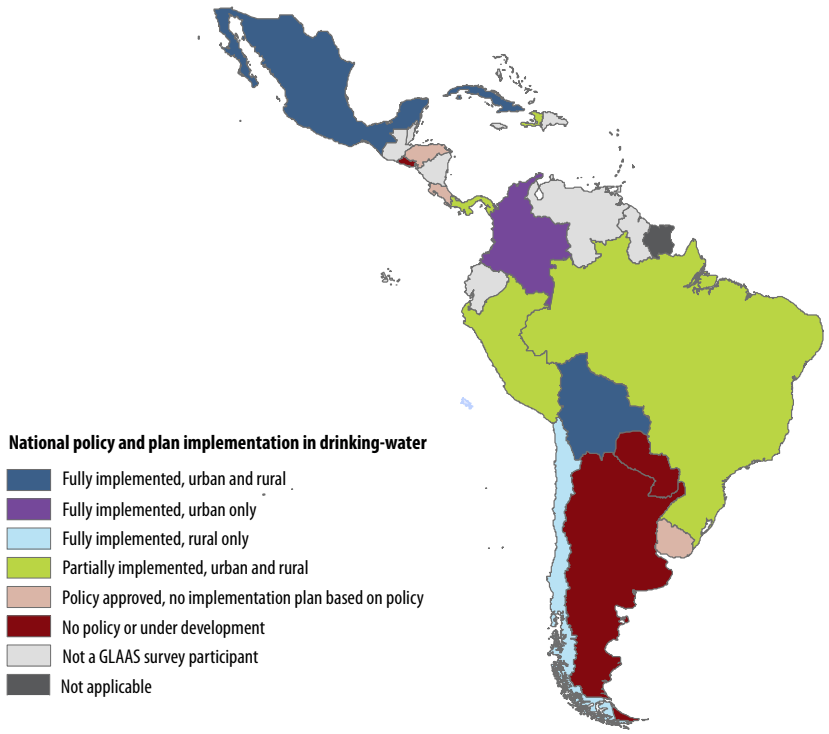
Twelve out of 16 respondent countries in the Region of the Americas reported that national plans/policies for drinking-water are in place, while ten countries indicated the adoption of similar sanitation plans/policies. Full implementation (with funding and regular review) of both drinking-water and sanitation plans/policies was reported by only three countries (Bolivia (Plurinational State of), Cuba and Mexico), while two countries reported partial policy implementation (Colombia and Chile) (Figure 3).

Two countries (Mexico and Cuba) report full implementation of sanitation and drinking-water plans/policies in schools and in healthcare facilities. Five countries report full implementation of hygiene promotion plans nationally and in schools.

While some countries report low implementation of national policies, activities in water and sanitation may be guided through different approaches. For example, in Uruguay, the National Water Policy, which includes drinking-water and sanitation was approved and released in 2009. The policy states that the goal of politics in drinking-water and sanitation is to ensure universal access with social factors taking precedence over economic factors, as well as to meet the MDGs. The country reports that although implementation plans based on the approved national policy do not exist, there are other important plans and activities aimed at improving quality of services and access.

Three respondent countries (Bolivia (Plurinational State of), Cuba, and Mexico) in the Region of the Americas report having fully implemented urban and rural drinking-water and sanitation policies/plans with funding that are regularly reviewed.

Figure 3 **National policy and plan implementation in drinking-water in drinking-water**



Source: GLAAS 2013/2014 country survey.

Note: National policy implementation for sanitation in the Region of Americas differs from drinking-water only for Chile where no data is reported for sanitation, and in Costa Rica, which reports that no national sanitation policy has been adopted.

Improving water quality, reliability, and reuse

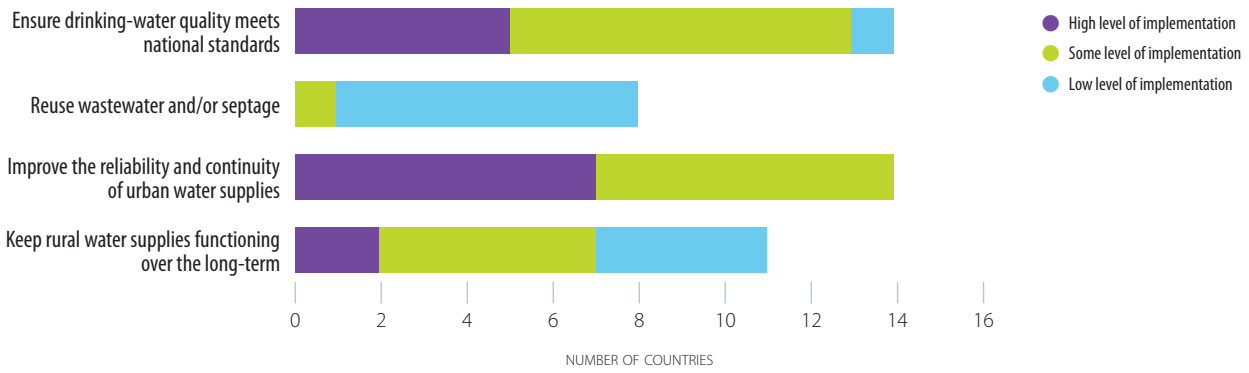
Sustainable Development Goal 6 aims to "Ensure availability and sustainable management of water and sanitation for all" and places new emphasis on countries to improve services beyond basic access, which includes measures to improve quality and availability of drinking-water, and to ensure safe management of faecal waste.

DRINKING-WATER QUALITY – A moderate to high level of monitoring and enforcement measures to ensure drinking-water quality are reported to be in place in 13 out of 16 countries[1] (Figure 4).

SUSTAINABILITY – Fourteen out of 16 countries report implementing measures to improve the reliability and continuity of urban water supplies. Measures to ensure the functioning of rural water supplies appear to be less robust. Seven out of 16 countries indicate a moderate to high level of implementation to ensure the sustainability of rural water services over the long-term (Figure 4).

WASTEWATER REUSE – Half of countries reported low or moderate reuse of treated wastewater or septage waste.

Figure 4 **Number of countries with specific measures to improve and sustain services and the level of implementation of these measures (16 countries)**



Source: GLAAS 2013/2014 country survey.

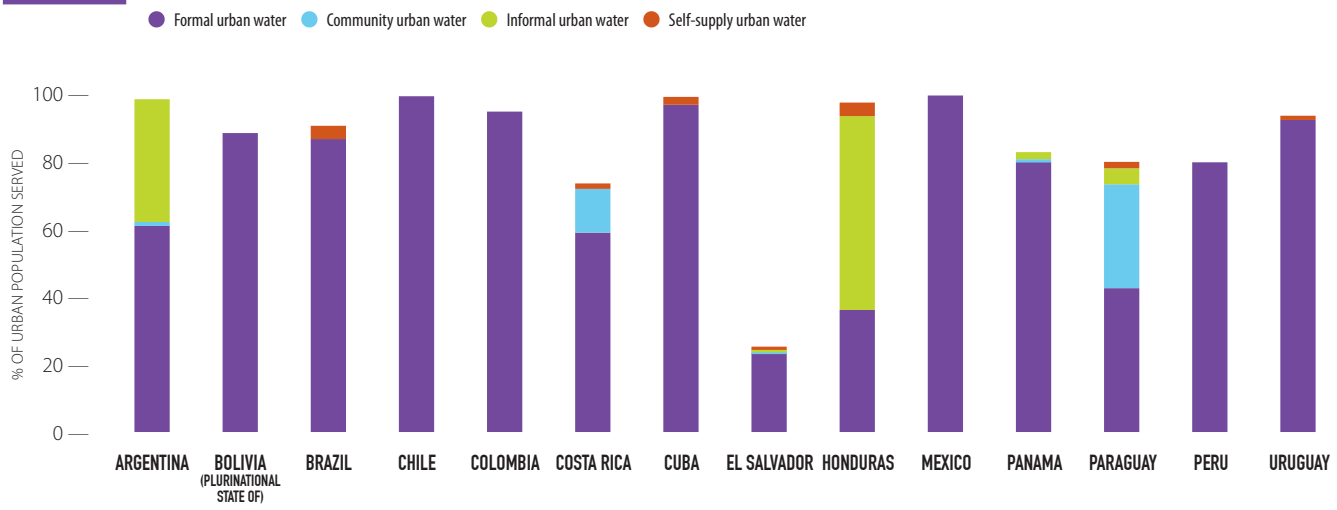
1 Argentina, Bolivia (Plurinational State of), Brazil, Chile, Colombia, Costa Rica, Cuba, El Salvador, Haiti, Mexico, Panama, Peru, and Uruguay.

TYPES OF SERVICE PROVIDERS

Twelve out of 14 countries report that a majority of the urban population is served by a formal drinking-water service provider (Figures 5 and 6). However, Argentina, Honduras, and Paraguay indicated that a significant portion of urban populations (nearly 18 million people) obtain drinking-water through informal and community service providers. These can include point sources such as pumps, water kiosks and protected springs or wells owned or operated by communities.

Figure 5

Breakdown of urban drinking-water service by provider type (data available for 14 countries)[1]

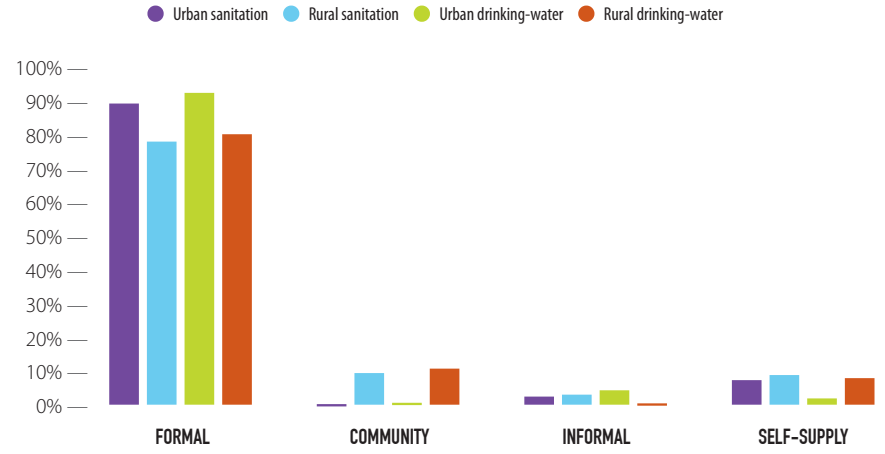


Source: GLAAS 2013/2014 country survey.

Formal service providers serve a majority of the population in all WASH subsectors (Figure 6)

Figure 6

Breakdown of service provider types (14 countries)



Source: GLAAS 2013/2014 country survey.

1 Several countries reported population breakdowns by service provision that were less than total UN population estimates (for urban areas), thus individual country percentages may not sum to 100%.

HUMAN RIGHTS AND EQUITY MEASURES

Eleven out of 16 countries recognize the human right to water and sanitation, and all countries have established one or more equity measures to reach disadvantaged populations, such as those living in informal settlements and in hard to reach areas (e.g. 14 out of 16 countries have established policies for informal settlements and slums, and 10 out of 16 countries have established policies for remote or hard to reach areas). For example, the Mexican Government, through Conagua, implements the Program for Sustainable Potable Water and Sanitation in Rural Communities, which references indigenous groups in its operating rules.

A majority of the respondent countries have legislation in place that outlines user participation in WASH planning. The extent of Rural drinking-water remains limited, although a minority of countries report having a high level of user-involvement in WASH planning (Table 1).

Table 1 **Indicators of policies and measures to ensure equity in WASH services by country**

	Human right recognized in law		Specific measures are included in national plan to reach disadvantaged groups		Participation procedures are defined in law or policy*		Extent to which service users participate in planning				Existence of a public complaint mechanism for population served			
	Drinking-water	Sanitation	Drinking-water and sanitation	Drinking-water and sanitation	Drinking-water	Sanitation	Drinking-water		Sanitation		Drinking-water		Sanitation	
	National	National	National	National	National	National	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
COUNTRY			Populations living in slums or informal settlements	Populations living in remote or hard to reach areas										
Argentina	Yes	Yes	Yes	Yes	Yes	Yes	Low	Low	Low	Low	●	—	●	—
Bolivia (Plurinational State of)	Yes	Yes	Yes	Yes	Yes	Yes	Moderate	High	Moderate	High	●	—	●	—
Brazil	Yes	Yes	Yes	Yes	Yes	Yes	Moderate	Moderate	Moderate	Moderate	●	●	●	●
Chile	No	No	No	Yes	No/Yes*	No	—	Moderate	—	—	●	●	●	●
Colombia	Yes	Yes	Yes	No	Yes	Yes	Moderate	Low	Moderate	Low	●	●	●	●
Costa Rica	Yes	Yes	Yes	No	Yes	No	Low	Low	Low	Low	●	●	●	●
Cuba	Yes	Yes	Yes	Yes	Yes	Yes	Moderate	Moderate	Moderate	Moderate	●	●	●	●
Dominican Republic	Yes	Yes	Yes	Yes	No	No	—	—	—	—	—	—	—	—
El Salvador	No	No	Yes	Yes	Yes	No/Yes*	Low	High	—	Moderate	●	●	●	●
Haiti	Yes	Yes	Yes	No	Yes	Yes	Moderate	Low	Moderate	Low	—	—	—	—
Honduras	Yes	Yes	Yes	No	Yes	Yes	Low	High	Low	Low	●	●	●	●
Mexico	Yes	Yes	No	Yes	Yes	Yes	Moderate	Moderate	Moderate	Moderate	●	●	●	●
Panama	No	No	Yes	Yes	Yes	Yes	Low	Moderate	Low	Moderate	●	—	●	—
Paraguay	Yes	No	Yes	Yes	Yes	Yes	Moderate	Moderate	Moderate	Low	●	●	●	●
Peru	No	No	Yes	No	Yes	Yes	Moderate	Moderate	Moderate	Moderate	●	—	●	—
Uruguay	Yes	Yes	Yes	No	Yes	Yes	Low	Low	Low	Low	●	●	●	—

* No difference between urban and rural, except as noted with an asterisk(*) where response is for urban/rural..

● Effective complaint mechanisms exist for most (more than 50% of population served).

● Effective complaint mechanisms exist for some (between 25–50% of population served).

● Effective complaint mechanisms exist for few (less than 25% of population served).

Source: GLAAS 2013/2014 country survey.

Monitoring of drinking-water and sanitation

Oversight and operational monitoring of drinking-water and sanitation services (e.g. quality, cost recovery, line breaks, affordability, costs) are conducted to ensure the continuity of service, inform decision-making for implementing improvements, provide accountability to the public, and ensure services meet expected standards.

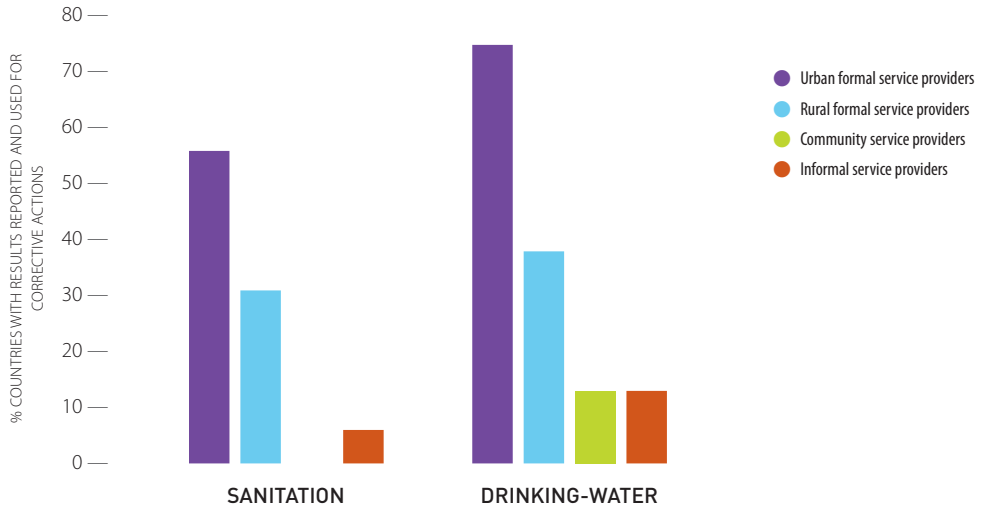
In 75% of responding countries in the Region of the Americas (12 out of 16), formal drinking-water service providers in urban areas share the results of their internal (operational) monitoring to regulatory authorities for comparison against required service standards and are subject to corrective action as needed. However, there is no well-established mechanism of reporting for community and informal service providers (Figure 7).

Service standards for drinking-water monitored by service providers in the Region of the Americas include quality (e.g. conforming to National Drinking-Water Quality Standards) and continuity of service; however, the exact requirements can vary between countries. For sanitation, service quality indicators include percentage of wastewater collected and treated.

Overall, more countries in Region of the Americas have developed a full cycle of monitoring, reporting and corrective action for drinking-water than for sanitation (Figure 7).

Figure 7

Percentage of countries in which service providers report monitoring against service standard (16 countries)[1]



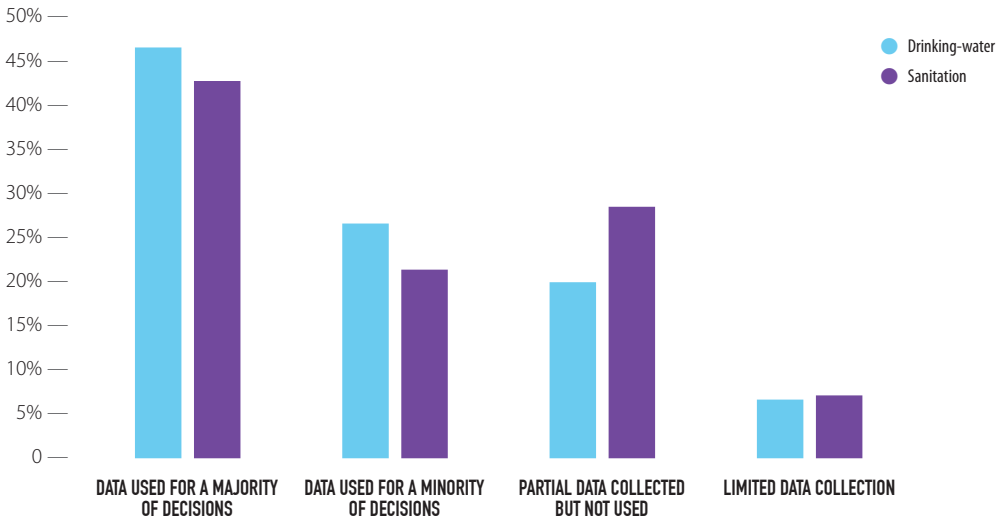
Source: GLAAS 2013/2014 country survey.

1 Examples of service provision types can be found in the country survey guidance note at the following link http://www.who.int/water_sanitation_health/glaas/2014/en/

USE OF MONITORING DATA FOR RESOURCE ALLOCATION

Six out of 15 countries report that they collect and analyse data through a management information system and regularly use the results for resource allocation in both sanitation and drinking-water (Figure 8).

Figure 8 **Data availability for decision-making in resource allocation (15 countries, drinking-water; 14 countries, sanitation)**



Source: GLAAS 2013/2014 country survey.

COMMUNICATING PERFORMANCE DATA TO THE PUBLIC

Performance reviews of formal service providers in urban areas are made publicly available in most respondent countries (e.g. 11 out of 16 countries for drinking-water, and 8 out of 16 countries for sanitation). Only two countries indicate that performance reviews of rural service providers are publicly available (Costa Rica and Cuba).

Most countries in the Region of the Americas have established some performance indicators for water and sanitation.

Though 70% of countries reporting from the Region of the Americas have established performance indicators for water and sanitation, less than one-third report to be using a comprehensive set of performance indicators for either drinking-water supply or sanitation services (Table 2).

Several countries have developed performance indicators for hygiene promotion, however, only two are tracking indicators with established data (Colombia and Cuba). The most common indicators for hygiene promotion coverage include 1) the number of municipalities with hygiene promotion programs and 2) the percentage of schools and health facilities promoting hygiene practices.

Table 2 **Performance indicators used to track progress (16 countries)**

CATEGORY TYPE		PERCENTAGE OF COUNTRIES TRACKING INDICATORS AGAINST ESTABLISHED BASELINE		MOST COMMONLY CITED INDICATORS
		Drinking-water	Sanitation	
FINANCIAL	Expenditure	50%	25%	Budget execution rate (% of ratio spent vs. allocated), % GDP
	Cost-recovery	31%	38%	Operating ratio (revenue vs. costs), collection of costs (recovery of billing)
	Cost-effectiveness	44%	19%	Cost/unit volume produced, operation and maintenance costs
EQUITY	Equitable service coverage	44%	38%	Urban/rural access coverage, access coverage by geographical area
	Affordability	19%	25%	Delinquency (months)
SERVICE PROVIDER INDICATORS	Service quality	44%	44%	Response time in requesting service (connections, correction of blockages), etc. quality of water
	Functionality of systems	25%	19%	Pumping capacity (sanitation)
	Institutional effectiveness	19%	38%	Non-revenue water, total staff per 1000 connections and/or per billed volume, proportion of wastewater treated
	Wastewater reuse	Not applicable	25%	% of treated wastewater reused

Source: GLAAS 2013/2014 country survey.

Human resources

Even where national strategies are well developed, government institutions are well coordinated and sufficient financing is available, progress on sanitation and drinking-water relies on adequately trained, capable staff and a work environment conducive to effective outputs.

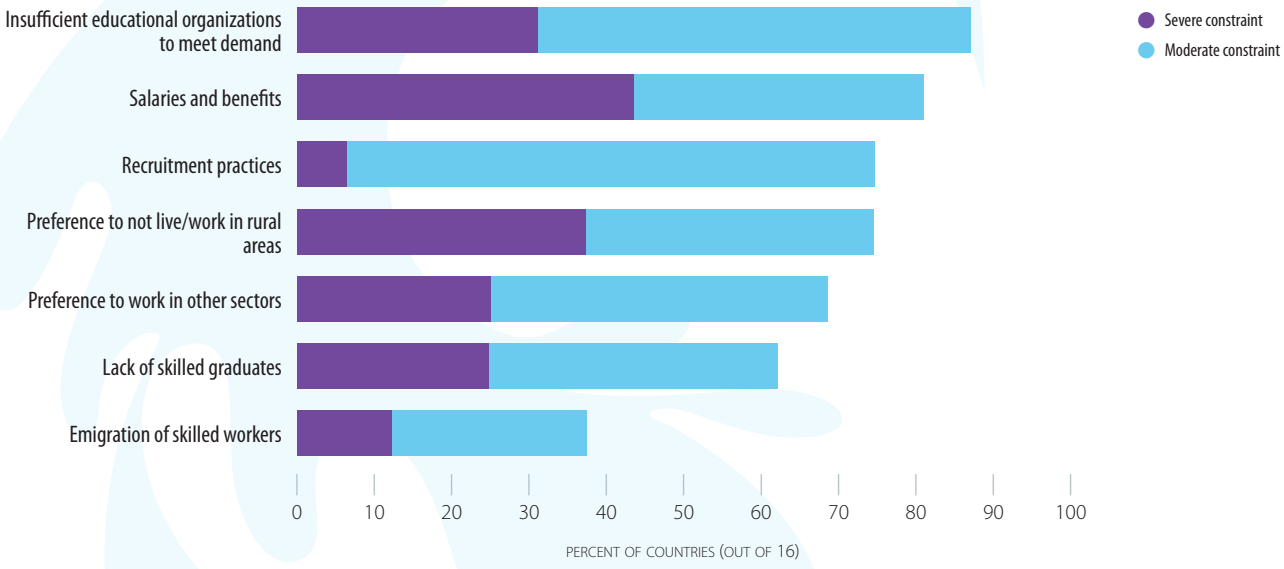
Several countries in the Region of the Americas report a shortage of skilled workers (e.g. engineers, chemists, mechanics, hygienists, etc.) impacting a range of WASH activities including planning, design, quality of construction, and operations and maintenance. Countries surveyed cited several problem areas in human resource development, including:

1) Insufficient educational training specializing in water and sanitation,
2) Low wages limiting ability to obtain qualified staff,
3) Regional imbalances in the location of labor and training institutions, and
4) Public and state service provider leadership turnover due to changing political influences.

As a result of these constraints, the sector's ability to recruit and retain skilled workers is limited.

Most surveyed countries in the Region of the Americas cited moderate to severe WASH human resource constraints, especially due to insufficient education and training opportunities (Figure 9).

Figure 9 **Constraints to WASH human resources for sanitation**



Source: GLAAS 2013/2014 country survey.

Despite staff shortages, only one-third of countries surveyed in the Region of the Americas have an overall strategy to develop and manage human resources for drinking-water and sanitation, and only three of 16 respondent countries have a human resources strategy for hygiene promotion.

Financing

Extending and sustaining water and sanitation programmes, and infrastructure, especially in the context of reducing inequalities, requires adequate funds and effective financial management.

Half of respondent countries indicated they have an approved financing plan/budget for the WASH sector. However, only three of 16 respondent countries reported that it is consistently followed for urban drinking-water and sanitation (and only two for rural drinking-water and sanitation). Limited data were available from the region on WASH budgets and expenditure, with eight countries providing data on national WASH budgets and six countries providing data on WASH expenditure (Table 3).

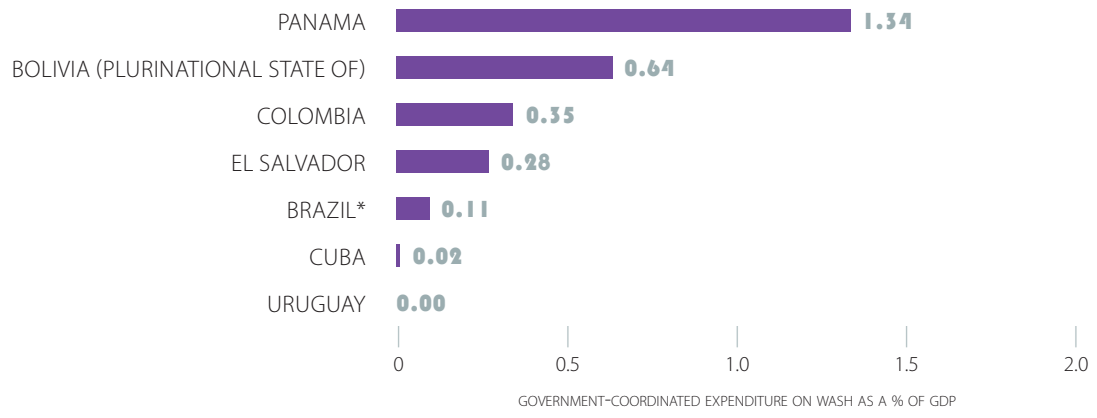
Table 3 **WASH expenditure data for ten countries**

COUNTRY	REPORTED NATIONAL WASH BUDGET (US$ MILLION)	REPORTED TOTAL WASH EXPENDITURE (US$ MILLION)
Bolivia (Plurinational State of)		163
Brazil*	11 700	19 605
Chile	132	
Colombia	393	6205
Costa Rica	275	
El Salvador		295
Honduras	46	
Panama	11	556
Peru	554	
Uruguay	598	557

Source: GLAAS 2013/2014 country survey; 2014 TrackFin pilot assessment (indicated by asterisk*).

The proportion of WASH expenditure as a percentage of GDP could be estimated for the seven countries providing total WASH expenditure (Figure 10).

Figure 10 **Proportion of government-coordinated expenditure on WASH as percentage of GDP (7 countries)[1]**



Source: GLAAS 2013/2014 country survey; 2014 TrackFin pilot assessment (indicated by asterisk*).

1 In Uruguay, government-coordinated expenditure is low as more than 80% of expenditure is from household contributions.

Data on expenditure allocations are largely unavailable.

A review of expenditure breakdowns can indicate potential issues with targeting of financial resources. However, only limited data were available for countries in the Region of the Americas.

WATER VERSUS SANITATION – The disaggregation of expenditure data for water and sanitation was available for five countries. The percentage of expenditure for sanitation of the total WASH expenditure ranged from 6% (Panama) to 41% (the Plurinational State of Bolivia), with a median value of 25%.

URBAN VERSUS RURAL – The disaggregation of expenditure data for urban and rural areas was available for two countries. The estimated expenditure for rural areas of the total WASH expenditure was obtained for the Plurinational State of Bolivia (34%) and for Brazil (5%).

The lack of data on financing highlights the substantial need in many countries to establish a comprehensive system for planning, fund allocation and tracking WASH sector financing.

Overall financing is reported to be insufficient to meet targets, especially in rural areas.

From the information available, eight of 12 country respondents indicated that sufficient financing is available to meet urban drinking-water targets, and only five countries indicated that sufficient finance is available for urban sanitation targets. Insufficient financing is a more significant issue in rural areas, with fewer than five countries indicating sufficient finance for rural drinking-water and sanitation targets.

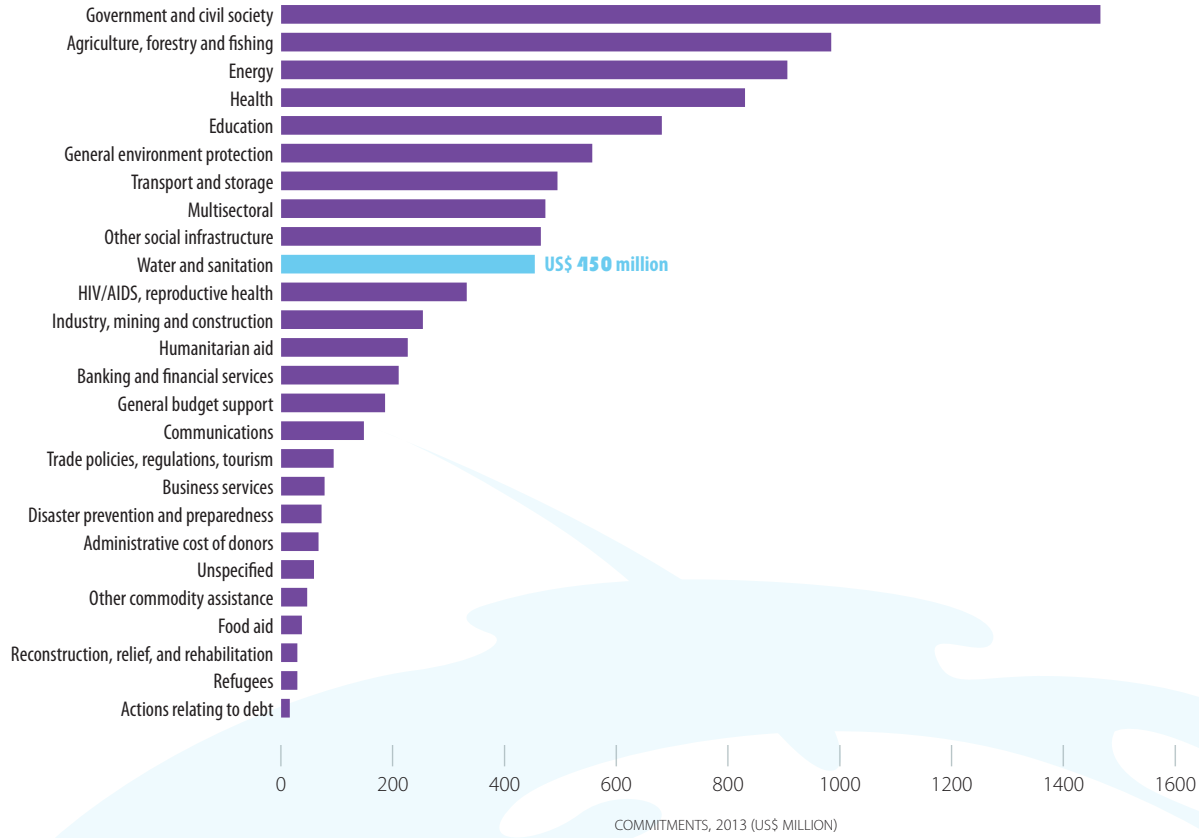
There is also an indication that basic costs for sustaining and maintaining services are not being fully met by tariffs. While many respondent countries indicated that users are expected to bear the costs of investment, operation and maintenance, only seven of 15 respondent countries reported that tariffs cover over 80% of operating and maintenance costs for urban drinking-water. Government subsidies are most often cited as the means for covering the operational finance gap. In Colombia, it is also noted that high-income users pay higher tariffs in order to subsidize low-income users.

External support

Supporting the achievement of country objectives in water and sanitation, external support agencies (ESAs) play a vital role in WASH programmes in many countries providing both financing and technical support (Figure 11).

Official development assistance (ODA) commitments to water and sanitation (US$ 450 billion) comprised 5.0% of total reported ODA (US$ 9.1 billion) to the Region of the Americas in 2013.

Figure 11 **Comparison of development aid for water and sanitation in 2013 relative to other sectors, Region of the Americas**



Source: OECD-CRS 2015.

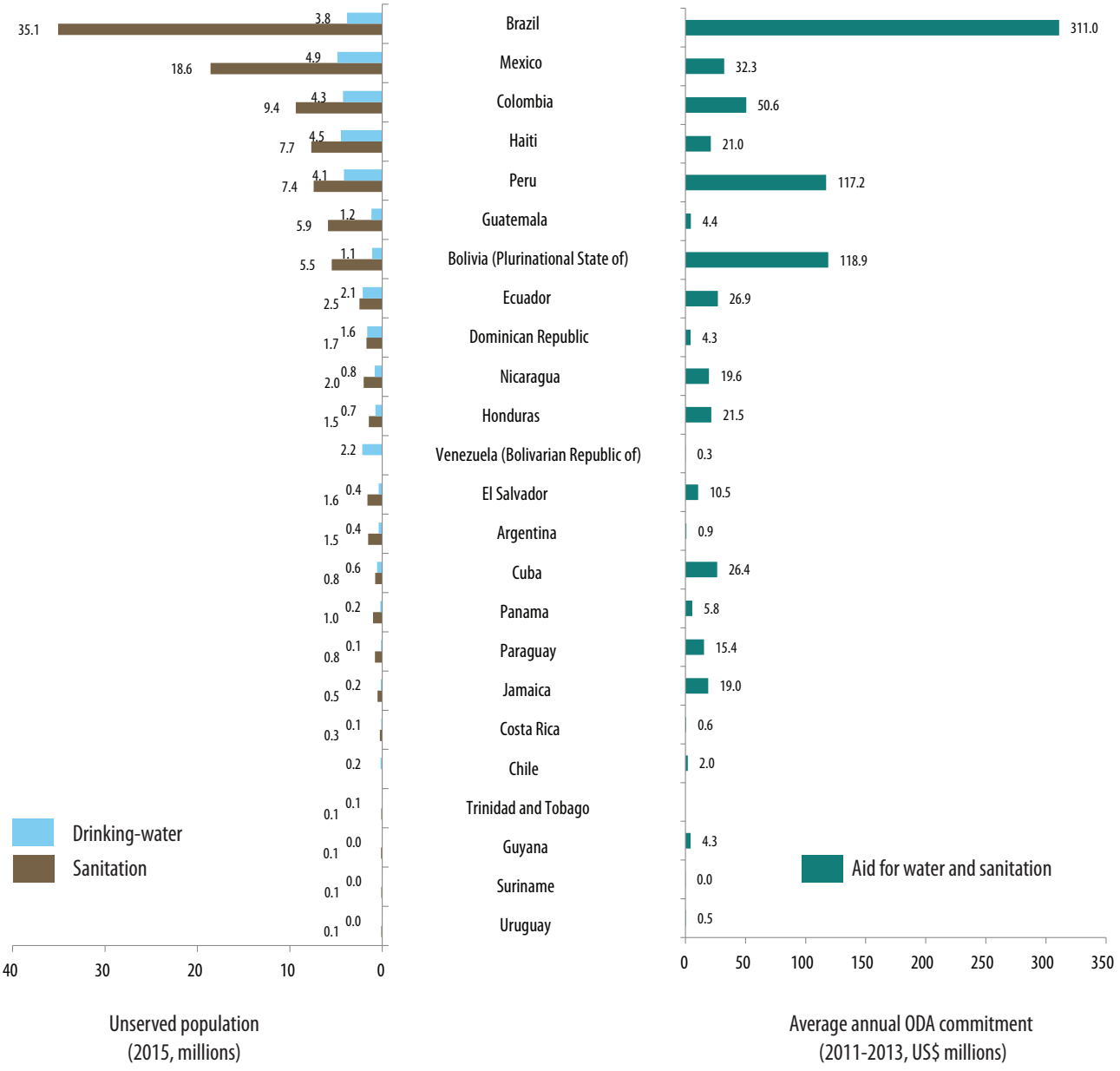
External finance not classified as ODA[1] comprises a majority of financing in the Region of the Americas. In comparison to the US$ 9.1 billion in ODA, there was over US$ 21 billion in "non-ODA" flows into the region in 2013, including over US$ 820 million in non-concessional loans for water and sanitation. The Inter-American Development Bank, the World Bank, and the OPEC Fund for International Development are the primary non-concessional lenders in the region.

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

WASH coverage is a major factor in prioritizing/targeting of WASH aid.

External support agencies use a number of criteria to select countries in which to allocate development aid for sanitation and drinking-water. Needs based on poverty or coverage levels, established in-country presence, and relevance of contributions are the most frequently cited criteria used by donors. Other targeting criteria used include existence of strategic dialogue, strength of sector plans/budgets, and quality of governance, among others. Figure 12 shows how coverage levels relate to aid levels in the Region of the Americas.

Figure 12 **Comparison of unserved populations and WASH aid to the Region of the Americas, by country**

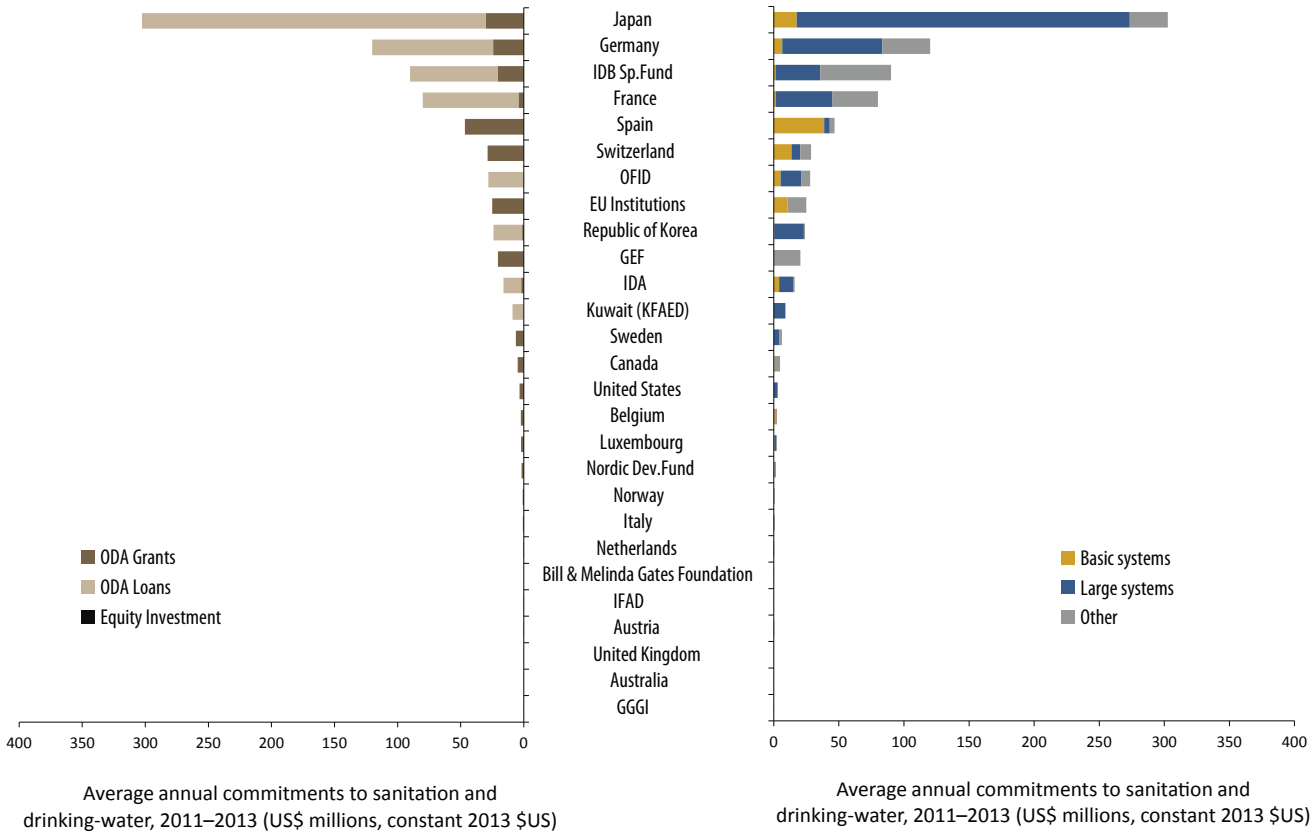


Source: OECD-CRS 2015; WHO/UNICEF, 2015.

Important contributors to the Region of the Americas, in terms of ODA aid amounts include Japan, Germany, France, Spain, and the Inter-American Development Bank (IDB).

There were eleven ESAs with water and sanitation ODA commitments that each exceeded an average of US$10 million per year from 2011 to 2013. The majority of aid for water and sanitation (60%) is targeted towards large systems, while 13% of development aid is targeted towards basic systems. Aid for water resources, water policy and administration comprised the remaining 27% of aid for water and sanitation. Seventy-two per cent of aid is in the form of concessional loans[1] and 28% of aid is in the form of grants (Figure 13).

Figure 13 **Breakdown of aid commitments for sanitation and drinking-water to the Region of the Americas by ESA, among grants and loans, and purpose types, 2011–2013 annual average**



Note: Chart represents ESAs with annual contributions averaging over US$ 100,000.
GEF, Global Environment Facility; GGGI, Global Green Growth Institute; IDA, International Development Association, World Bank; IDB, Inter-American Development Bank; IFAD, International Fund for Agricultural Development; OFID, OPEC Fund for International Development; OPEC, Organization of the Petroleum Exporting Countries.

Source: OECD-CRS, 2015.

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

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

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