UN WATER

World Health Organization

INVESTING IN WATER AND SANITATION: INCREASING ACCESS, REDUCING INEQUALITIES

GLAAS 2014 findings — Highlights for the South-East Asia Region

glaas

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

WHO/FWC/WSH/15.09

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The preparation of this special report for the South-East Asia Region involved contributions from the GLAAS team at WHO Headquarters: Nathalie André, Betsy Engebretson, Mark Hoeke, Cathy Jung, Francesco Mitis, Tara Neville, Peregrine Swann, Marina Takane, Bruce Gordon, Maria Neira and Fiona Gore; WHO Regional Office for South-East Asia: Payden.

Drinking-water, sanitation and hygiene overview

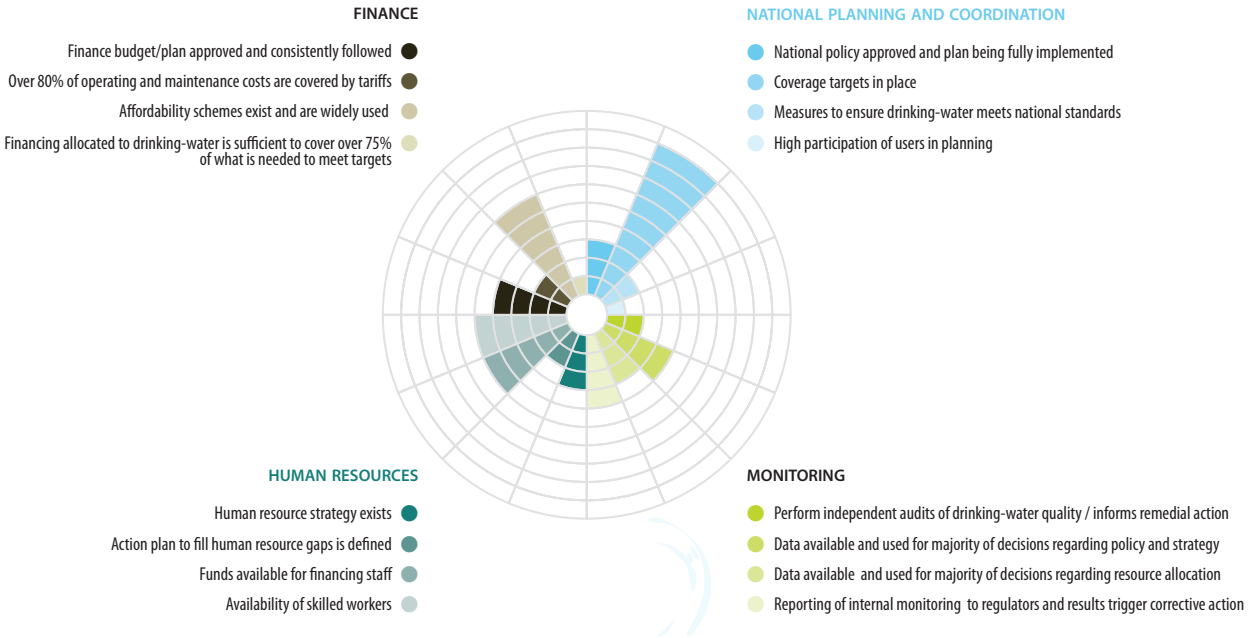
The UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS), implemented by WHO, monitors the efforts and approaches to extend and sustain water, sanitation and hygiene (WASH) systems and services. It provides a global update on four key areas: policy framework, monitoring, human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

Ten countries[1] out of 11 in the WHO South-East Asia Region, with a total population of 1.8 billion, participated in the GLAAS 2013/2014 reporting cycle. Overall, access to improved drinking-water and sanitation services in the South-East Asia Region are 92 and 49 per cent (in 2015), respectively. More than 330 million people gained access to an improved drinking-water source and nearly 250 million people gained access to improved sanitation in the 2005 to 2015 time period.[2] However, in 2015, there are still nearly one billion people without improved sanitation, and over 140 million without access to an improved drinking-water source in the South-East Asia Region.

Despite all countries in the region making service improvements, there is a substantial need to further strengthen government actions to implement the national policies and plans for provision of safe and sustainable water and sanitation services, with particular focus on rural areas. As shown by Figure 1 and Figure 2, there are a number of challenges that need to be addressed, including:

- Geographic and economic inequalities in access to water and sanitation,
- Building capacity for surveillance of water supplies,
- Participation of users in planning processes,
- A need to establish a comprehensive national system for planning and implementing WASH sector financing, and
- Reducing open defecation in several South-East Asia countries where open defection rates are high.

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



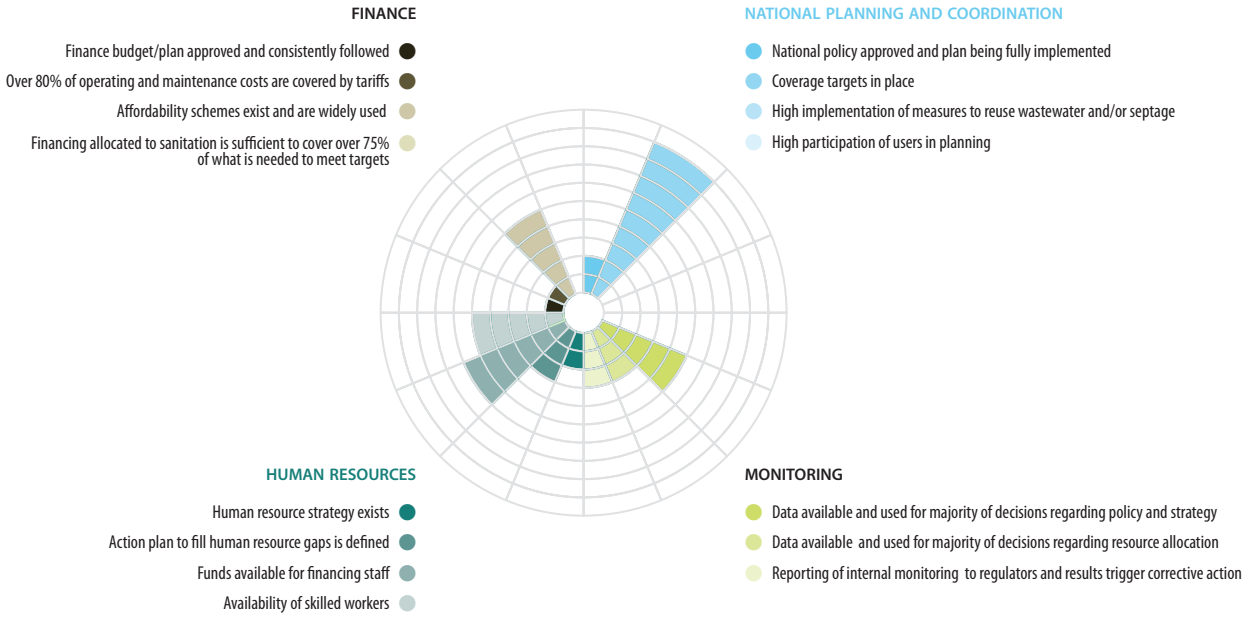
Source: GLAAS 2013/2014 country survey.

1 Bangladesh, Bhutan, India (rural areas only), Indonesia, Maldives, Myanmar, Nepal, Sri Lanka, Thailand, and Timor-Leste.

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 both for urban and rural areas)



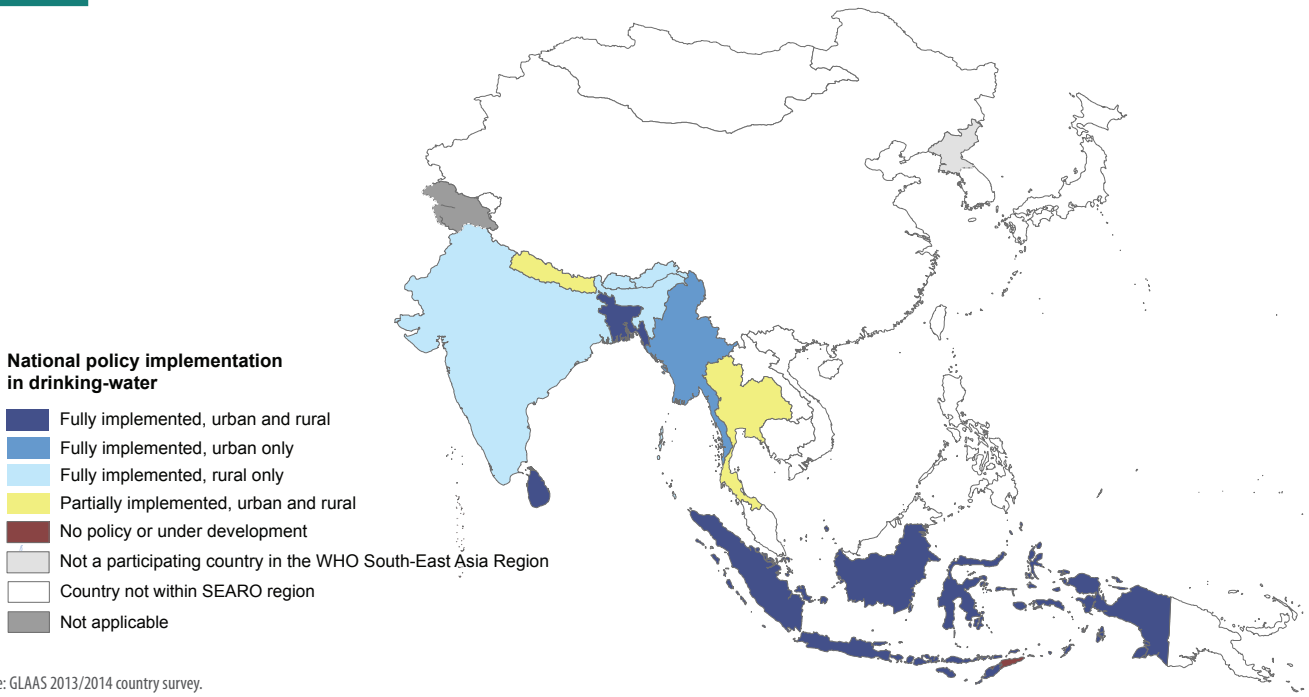
Source: GLAAS 2013/2014 country survey.

National policy and implementation

Seven countries out of ten (70%) in the WHO South-East Asia Region reported that national policies for sanitation and drinking-water are in place. Within countries that have national policies/plans, rural drinking-water plans are reported to be fully implemented with funding and regular review in five countries – a higher rate of policy/plan implementation than urban drinking-water and urban/rural sanitation within the region.

One-half of countries in the South-East Asia Region report having fully implemented rural drinking-water policies/plans with funding, which are regularly reviewed (Figure 3).

Figure 3 **National policy implementation in drinking-water (10 country respondents)[1]**



Source: GLAAS 2013/2014 country survey.

1 India only responded for rural areas, thus data are not available for urban areas in India. Maldives indicates no formal policy exists for urban and rural drinking-water, but has informal policy or policy under development for health care facilities and schools.

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.

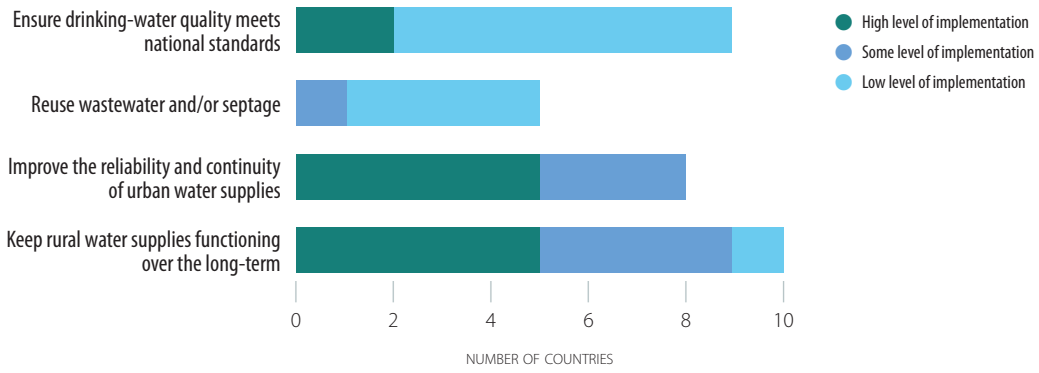
Countries in the South-East Asia Region report a moderate to high level of oversight to ensure drinking-water quality and sustainability of services (Figure 4).

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 9 out of 10 countries (Figure 4).

SUSTAINABILITY – Eight out of 10 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 more robust. Nine out of 10 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 – One-half of countries reported low or moderate reuse of 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 (10 countries)**

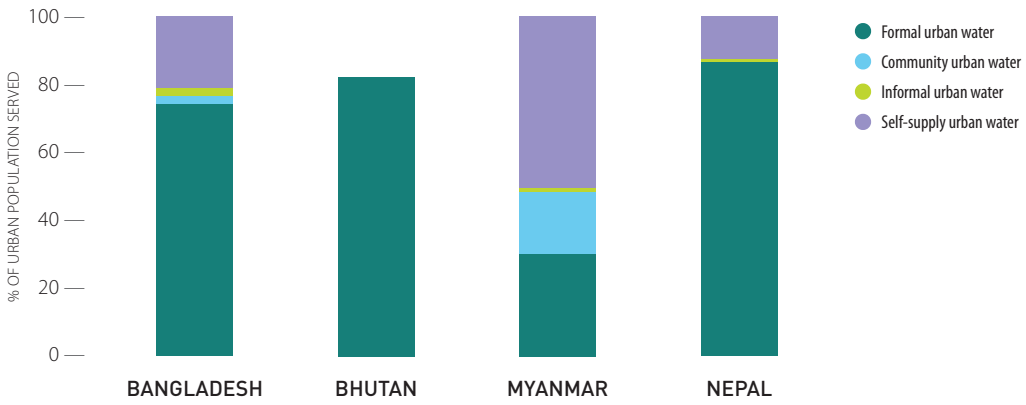


Source: GLAAS 2013/2014 country survey.

TYPES OF SERVICE PROVIDERS

Three of the four countries responding to this section report that a majority of the urban population is served by a formal drinking-water service provider. However, there are still a considerable number of people obtaining drinking-water through household self-supply (i.e. sources funded and managed by households, including wells, collection from protected springs, rainwater harvesting, etc.). Wells were the most common example of self-supply sources provided by Myanmar and Bangladesh. There is also a small proportion of the population served by community-based service providers, which can include point sources such as pumps, water kiosks and protected springs or wells owned or operated by communities (Figure 5).

Figure 5 **Percentage of population in urban areas being served by service providers (four countries)**



Source: GLAAS 2013/2014 country survey.

HUMAN RIGHTS AND EQUITY MEASURES

Although three quarters of respondent countries recognize the human right to water and sanitation, gaps remain in establishing equity measures to reach disadvantaged populations, especially in informal settlements.

A majority of respondent countries have a legislation in place that outlines user participation in WASH planning. The extent of participation of users 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										
Bangladesh	Yes	Yes	Yes	Yes	Yes	Yes	Low	High	Low	High	●	●	●	●
Bhutan	Yes	Yes	No	Yes	Yes	Yes	Moderate	High	Moderate	High	●	●	●	●
India	No	No	No	Yes	No	Yes	—	Low	—	Moderate	—	●	—	●
Indonesia	Yes	Yes	Yes	Yes	Yes	Yes	High	High	Low	High	●	●	●	●
Maldives	Yes	Yes	No	No	No	No	Low	Low	Low	Low	—	●	●	—
Myanmar	No	No	Yes	Yes	No	No	High	Moderate	High	High	●	●	●	●
Nepal	Yes	Yes	No	No	Yes	Yes	Moderate	Moderate	Moderate	Moderate	●	●	●	●
Sri Lanka	Yes	Yes	Yes	Yes	No/Yes*	Yes	Low	High	Moderate	High	●	●	●	●
Thailand	Yes	Yes	No	No	Yes	Yes	Moderate	Moderate	Moderate	Moderate	●	●	●	●
Timor-Leste	No	Yes	No	No	Yes	Yes	Low	Moderate	Low	Low	●	●	●	●

* No difference between urban and rural, except as noted with 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 continuity of service, inform decision-making for implementing improvements, provide accountability to the public, and ensure services meet expected standards.

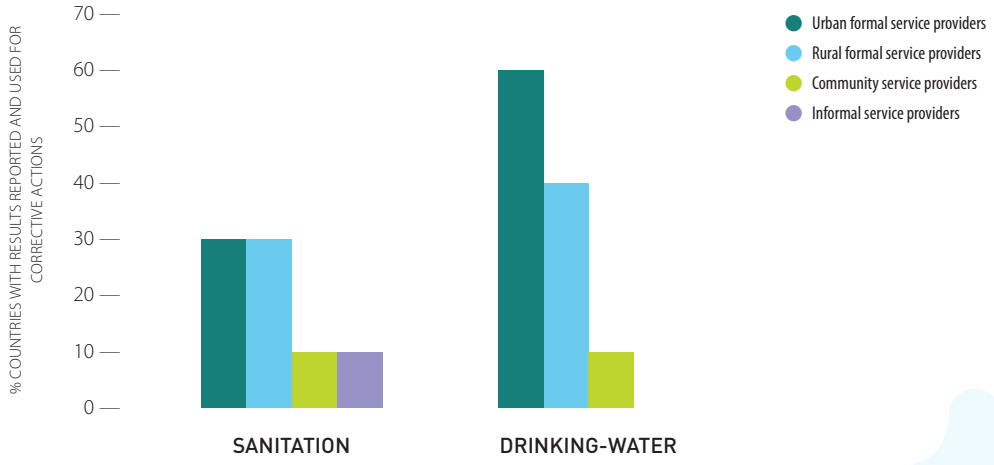
In 60% of responding countries in the South-East Asia Region (6 out of 10), formal drinking-water service providers in urban areas provide the results of their internal (operational) monitoring to regulatory authorities for comparison against required service standards and are subject to corrective action as needed. However, there is no well-established mechanism of reporting by informal service providers (Figure 6).

Service standards for drinking-water monitored by service providers in the South–East Asia Region include availability and quality (e.g. conforming to National Drinking-Water Quality Standards); however, the exact requirements can vary between countries. For sanitation, service quality indicators include treated effluent quality and indicators to measure per cent access.

Overall, more countries in the South-East Asia Region have developed a full cycle of monitoring, reporting and corrective action for drinking-water than for sanitation (Figure 6).

Figure 6

Monitoring of service standards by type of service provision.[1] The percentage of countries in which monitoring results are reported to regulatory authorities and used to trigger corrective action is indicated (10 countries)



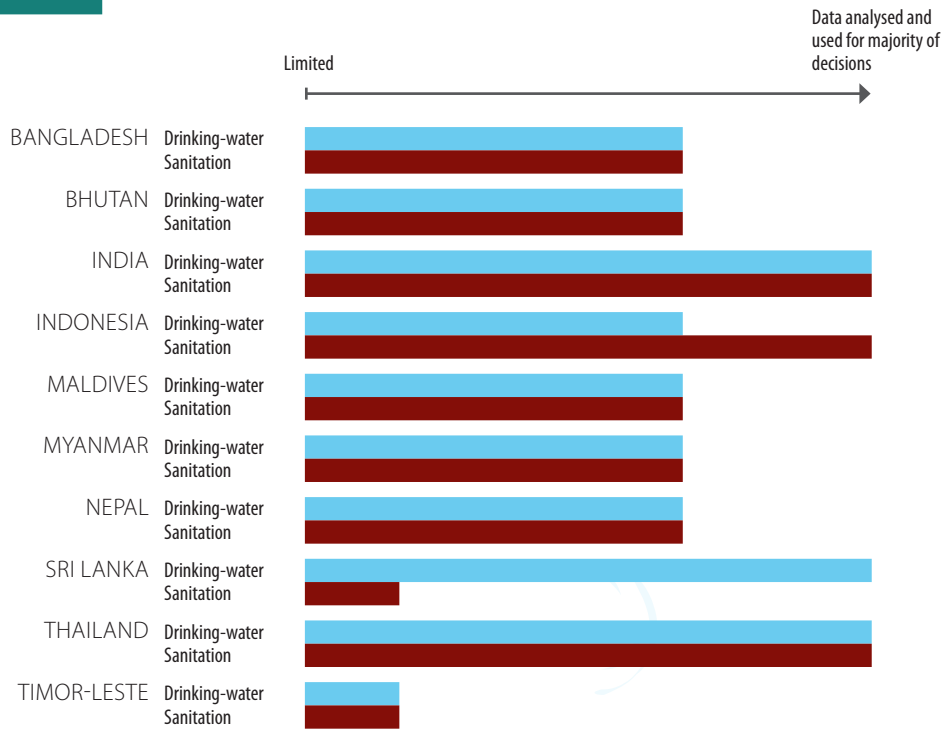
Source: GLAAS 2013/2014 country survey.

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

Only two respondent countries (India and Thailand) reported 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 7).

Figure 7 **Data availability for decision making in resource allocation (10 countries)**



Source: GLAAS 2013/2014 country survey.

COMMUNICATING PERFORMANCE DATA TO THE PUBLIC

Respondent countries report that performance and customer satisfaction reviews are rarely publicly available for most formal service providers of urban and rural areas for both sanitation and drinking water.

Most countries in the South-East Asia Region have established some performance indicators for water and sanitation.

Though 60% of countries reporting from the South-East Asia Region 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).

Table 2 **Performance indicators used to track progress – main indicators and extent of usage (10 countries)**

CATEGORY TYPE		PERCENTAGE OF COUNTRIES REPORTING USE OF STANDARD INDICATORS FOR DRINKING-WATER	TWO MOST COMMONLY CITED INDICATORS FOR DRINKING-WATER
FINANCIAL	Expenditure	60%	% or ratio spent/allocated
	Cost-recovery	20%	Coverage of costs, collection of costs (recovery of billing)
	Cost-effectiveness	30%	Cost/unit volume produced
EQUITY	Equitable service coverage	30%	—
	Affordability	10%	Ability to pay by the poor
SERVICE PROVIDER INDICATORS	Service quality	20%	Service time
	Functionality of systems	20%	—
	Institutional effectiveness	30%	Non-revenue water

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.

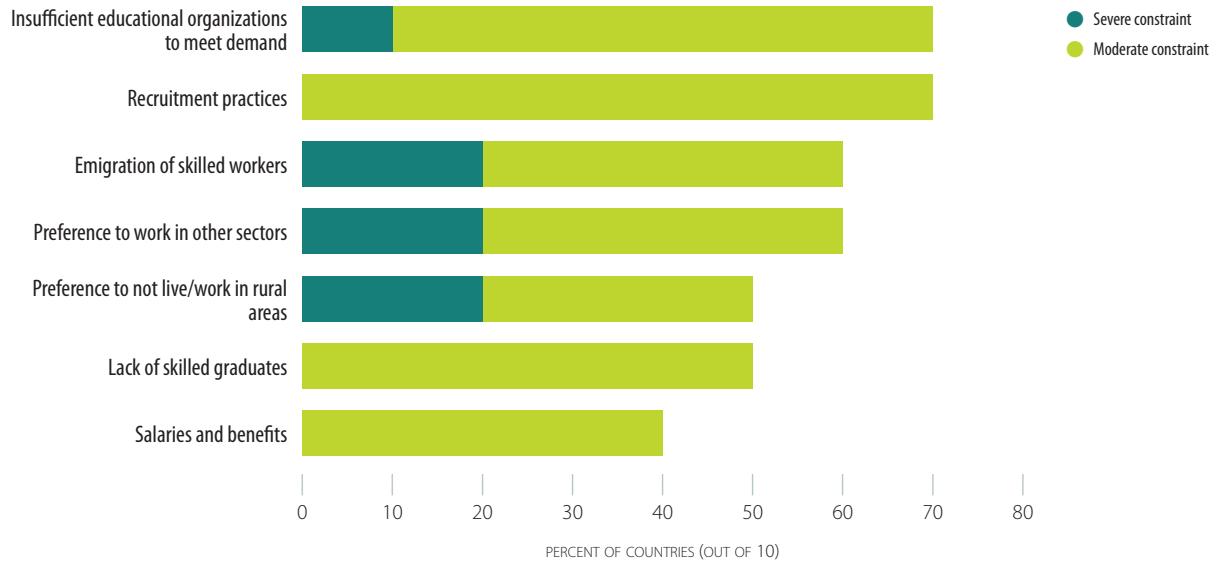
Several countries in the South-East Asia Region report a shortage of skilled workers (e.g. engineers, chemists, mechanics, hygienists, etc.) impacting a range of WASH activities from planning, design, quality of construction, operations, and maintenance. Countries surveyed cited several problem areas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

1) Difficulty retaining HR within the sector due to short-term nature of work,
2) Insufficient number of educational institutions,
3) HR development not prioritized and budget/financing inadequate for HR,
4) Lack of capacity building/professional development, and
5) Lack of modern equipment/instrumentation.

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

Most surveyed countries in the South-East Asia Region cited moderate WASH human resource constraints, especially due to insufficient educational institutions and recruitment practices (Figure 8).

Figure 8 **Constraints to WASH human resources for sanitation**



Source: GLAAS 2013/2014 country survey.

Despite staff shortages, one-half of countries surveyed in the South-East Asia Region have an overall strategy to develop and manage human resources for drinking-water and sanitation, and one-half of 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.

Nearly all respondent countries indicate they have an approved financing plan/budget for the WASH sector. However, only 40% of countries reported that it is consistently followed for drinking water and 30% for sanitation. Very limited data was available from the region on WASH budget and expenditure, with only four countries providing data on national WASH budgets and three countries providing data on WASH expenditure (Table 3).

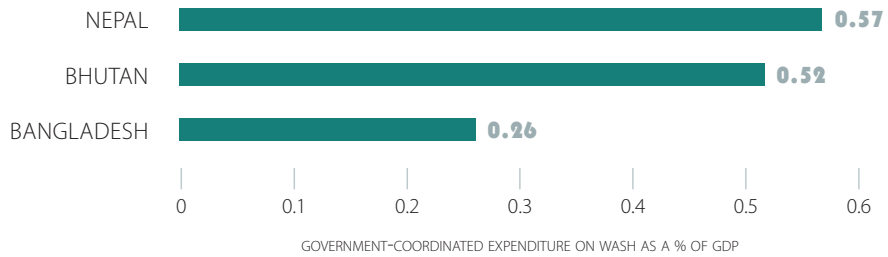
Table 3 **Annual WASH budget and expenditure data (five countries)**

COUNTRY	REPORTED NATIONAL WASH BUDGET (US$ MILLION)	REPORTED TOTAL WASH EXPENDITURE (US$ MILLION)	PARTIALLY-REPORTED WASH EXPENDITURE (US$ MILLION)
Bangladesh	266	473	—
Bhutan	10	—	9
Nepal	—	134	—
Myanmar	7	—	—
Viet Nam	49	—	—

Source: GLAAS 2013/2014 country survey.

The proportion of WASH expenditure as a percentage of GDP could be estimated for the three countries providing total WASH expenditure. Total expenditure, however, may not be complete in the case of Bhutan, where most of the expenditures in sanitation and hygiene were not reported (Figure 9).

Figure 9 **Proportion of government-coordinated expenditure on WASH as a percentage of GDP for three respondent countries**



Source: GLAAS 2013/2014 country survey.

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 South-East Asia Region.

WATER VERSUS SANITATION – The disaggregation of expenditure data for water and sanitation was available for two countries. The percentage of expenditure for sanitation of the total WASH expenditure was obtained for Bangladesh (24%) and Nepal (13%).

URBAN VERSUS RURAL – The disaggregation of expenditure data for urban and rural areas was available for two countries. The percentage of expenditure for rural areas of the total WASH expenditure was obtained for Bangladesh (24%) and Nepal (49%).

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.

From the information available, only three countries (India, Thailand, and Bhutan) out of 10 respondents indicated that sufficient financing is available to meet water/sanitation and hygiene targets.

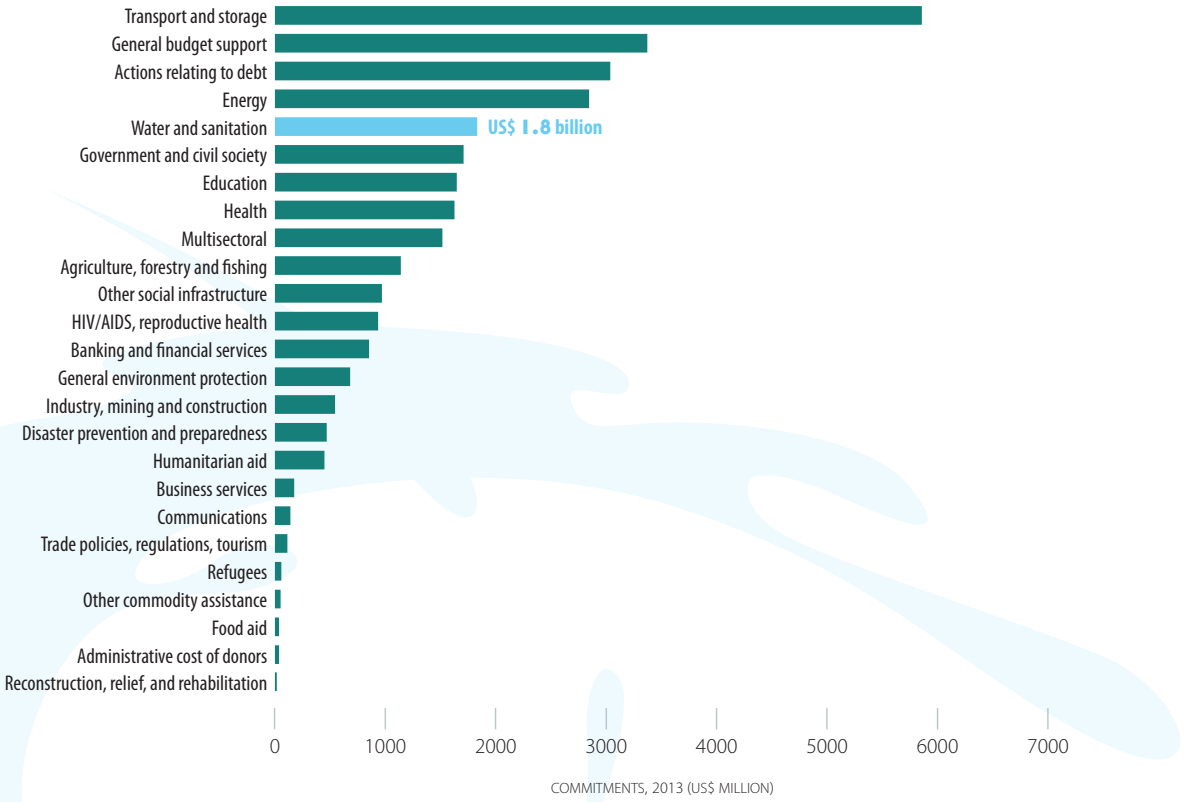
There is also an indication that basic costs for sustaining and maintaining services are not being met by tariffs. Only Indonesia reported that tariffs cover over 80% of operation and maintenance costs in both drinking-water and sanitation. Government subsidies are most often cited as the means for covering the operational finance gap, though Myanmar aims to reduce non-revenue water to improve cost recovery.

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 10).

Aid commitments to water and sanitation (US$ 1.8 billion) comprised 6.1% of total reported development aid (US$ 30.2 billion) to the South-East Asia Region in 2013.

Figure 10 **Comparison of development aid for water and sanitation in 2013 relative to other sectors, South-East Asia Region**

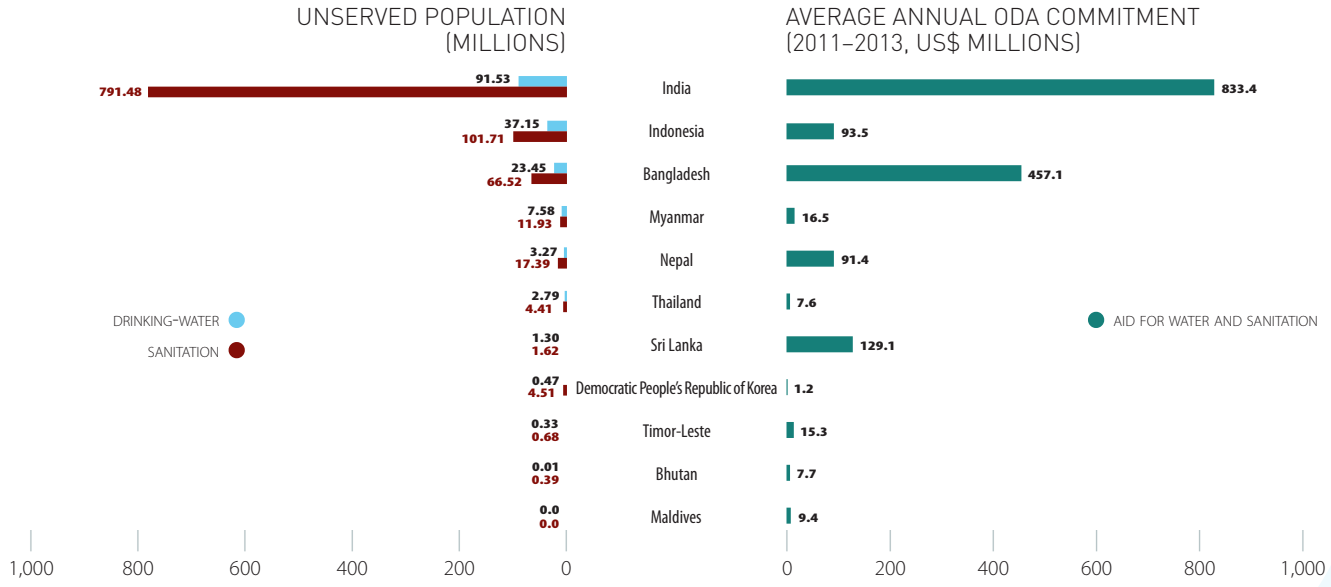


Source: OECD-CRS 2015.

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 11 shows how coverage levels relate to aid levels in the South-East Asia Region.

Figure 11 **Comparison of unserved populations and WASH aid to the South-East Asia Region, by country**

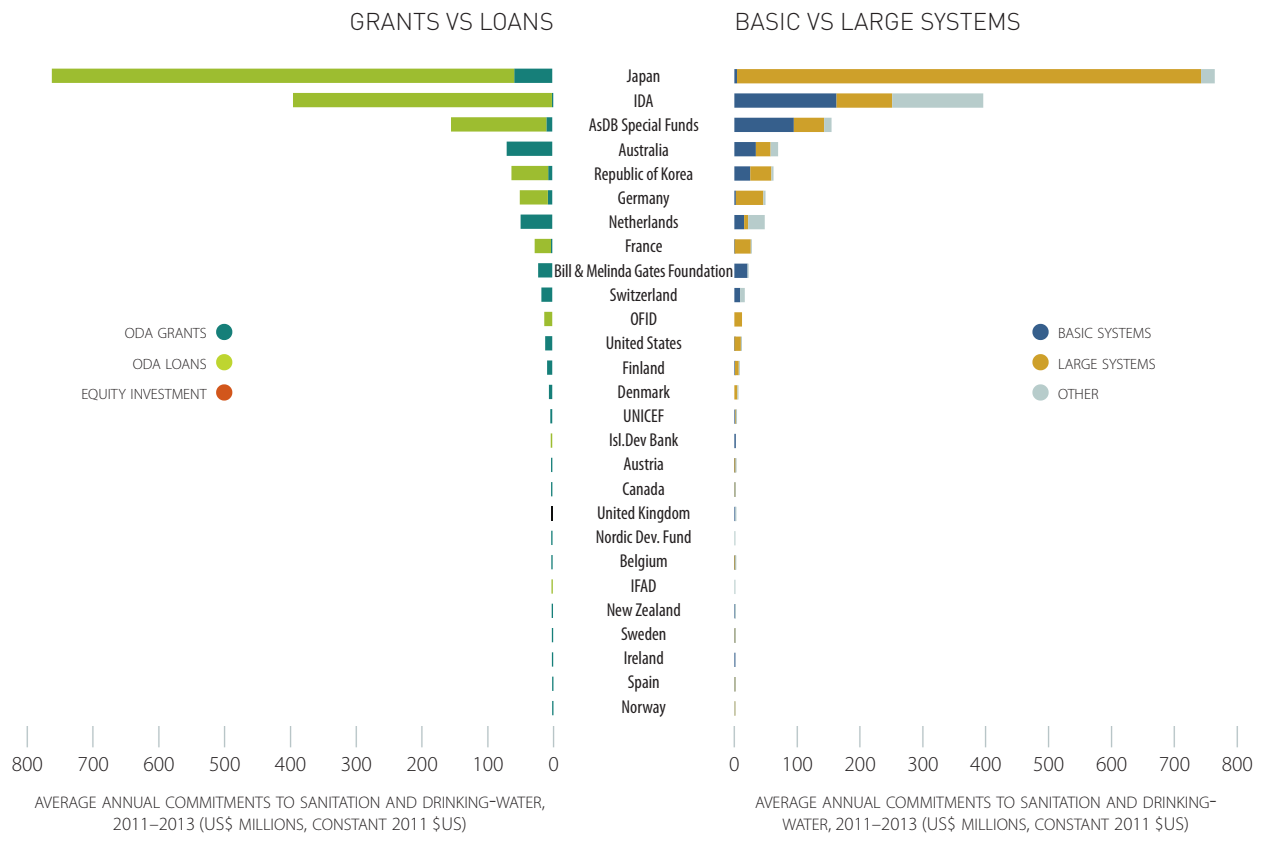


Source: OECD-CRS 2015; WHO/UNICEF, 2014.

Important contributors to the South-East Asia Region in terms of aid amounts include Japan, the World Bank, and the Asian Development Bank.

Twelve ESAs contributed more than US$ 10 million per year on average to the South-East Asia Region from 2011 to 2013. The majority of aid for water and sanitation (77%) is targeted towards large systems, while 23% of development aid is targeted towards basic systems. Eighty-three per cent (83%) of aid is in the form of concessional loans[1] and 17% of aid is in the form of grants (Figure 12).

Figure 12 **Breakdown in aid commitments to sanitation and drinking-water to the South-East Asia Region 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.

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.

Notes

http://www.who.int/water_sanitation_health/glaas/en/
contact email: glaas@who.int

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