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

Bhutan

DEMOGRAPHIC AND ECONOMIC ESTIMATES

Population (2012)[a]	**0.74 M**
Urban population (2012)[a]	**0.27 M**
Rural population (2012)[a]	**0.47 M**
Population growth rate (2012)[a]	**1.65%**
Gross domestic product USD (2012)[b]	**1.78 billion**

[a] World Population Prospects: The 2012 Revision, UNDESA 2013.
[b] World Development Indicators, World Bank 2013.

HEALTH ESTIMATES

Infant mortality / 1,000 live births (2012)[c]	**35.7**
Under 5 mortality / 1,000 live births (2012)[c]	**44.6**
Life expectancy at birth (2012)[d]	**68 yrs**
Diarrhoea deaths attributable to WASH (2012)[e]	**51**

[c] Levels & Trends in Child Mortality. Report 2013, UNICEF 2013.
[d] World Health Statistics, WHO 2014.
[e] Preventing diarrhoea through better water, sanitation and hygiene, WHO 2014.

SANITATION AND DRINKING-WATER ESTIMATES

Use of improved sanitation facilities (2012)[f]	**47%**
Use of drinking-water from improved sources (2012)[f]	**98%**

[f] Progress on Drinking-Water and Sanitation – 2014 Update, WHO/UNICEF 2014.

WHO/FWC/WSH/15.30

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UN WATER

World Health Organization

Sanitation, drinking-water and hygiene status overview*

Bhutan has made considerable progress in terms of coverage for both rural and urban water supply and sanitation in the last two to three decades. The goal to improve the health of the general public by reducing the incidence of water, sanitation & hygiene related diseases through the provision of safe drinking-water and improved sanitation & hygiene facilities has largely been achieved. However, the functionality of the water supply infrastructure in both rural and urban areas is questionable. More than 50% of the urban population has intermittent water supply ranging from 6–12 hours per day and the quality of water supplied does not meet the required standards. In rural areas only about 69% of rural water supply schemes are functional. Moreover safe delivery of services in rural areas is based on source protection and safe delivery through water safety plans; there are no treatment systems in place.

With regards to sanitation, septic tanks are the most common sewage treatment facility in urban areas. Most of them are without a soakpit and so they discharge effluent directly into the environment. Rural sanitation facilities consist predominantly of pit toilets, followed by pour flush toilet and others. Although, landfills are provided for almost all urban towns, none of the landfills qualify as sanitary landfills. All the existing landfills are used like open dump yards. Solid waste is becoming an emerging issue in rural communities and health workers are promoting simple pits for the proper disposal of the solid waste.

The proper development of water and sanitation infrastructure and maintaining it to optimal working condition has been limited due to the following factors:

Urban

- Lack of resources (human and financial)
- Rapid urbanization
- Inadequate planning
- Climate change
- Lack of education and awareness on proper water and waste management

Rural

- Providing water supply for the remaining unserved areas due to rugged terrain & settlements with no water source near the vicinity of their villages.
- Maintaining functionality of the water supply schemes because of infrastructure being damaged due to developmental activities, natural calamities etc. Inadequate management and maintenance of the scheme by the communities is also a reason for some of the schemes to malfunction.
- Water sources drying up due to factors such as climate change & human interference at the catchment area.
- Ensuring the quality of drinking-water supply is a low priority in communities and in regional level planning for sanitation & hygiene as compared to other priorities – roads, water supply, etc.
- Lack of adequate Sanitation Policy.
- Lack of budgetary support for the Rural Sanitation & Hygiene Programme (RSAHP) from the Government has immensely affected the programme's plan to undertake the intensification of the RSAHP nationwide and other planned activities.

All of the activities that will be undertaken in the 11th Five Year Plan (FYP) are geared towards meeting the above mentioned challenges both in urban and rural communities. Apart from infrastructure development, components such as Water Safety Plans (WSP) for both rural and urban water supply and the RSAHP in the communities have been initiated.

* Sanitation, drinking-water and hygiene status overview provided and interpreted by national focal point based on GLAAS results.

Highlights based on country reported GLAAS 2013/2014 data[1]

I. Governance

Four ministries share the lead for sanitation and drinking-water and three share the lead for hygiene promotion. The Ministry of Health plays a lead role in each area.

LEAD INSTITUTIONS	SANITATION	DRINKING-WATER	HYGIENE PROMOTION
Ministry of Health	✔	✔	✔
Ministry of Works and Human Settlement	✔	✔	
Ministry of Education	✔	✔	✔
Dratshang Lhentshog (Religion and Health)	✔	✔	✔

Number of ministries and national institutions with responsibilities in WASH: **8**

PLAN AND TARGETS FOR IMPROVED SERVICES	INCLUDED IN PLAN	COVERAGE TARGET (%)	COVERAGE TARGET YEAR
Urban sanitation	✘	100	2018
Rural sanitation	✔	80	2018
Sanitation in schools	✔	100	2018
Sanitation in health facilities	✔	100	
Urban drinking-water supply	✘	100	2018
Rural drinking-water supply	✔	100	2018
Drinking-water in schools	✔	100	2018
Drinking-water in health facilities	✔	100	2018
Hygiene promotion	✘	80	2018
Hygiene promotion in schools	✘	100	2018
Hygiene promotion in health facilities	✘	100	2018

Specific plans exist for keeping rural water supply functioning over long-term, safely emptying or replacing latrines when full, and resilience to climate change, however, the implementation is not complete.

SPECIFIC PLANS FOR IMPROVING AND SUSTAINING SERVICES[a]	EXISTENCE AND LEVEL OF IMPLEMENTATION OF MEASURES (Low → High)
Keep rural water supply functioning over long-term	
Improve reliability/continuity of urban water supply	
To rehabilitate broken public latrines	
Safely empty or replace latrines when full	
Reuse of wastewater or septage	
Ensure DWQ meets national standards	
Address resilience to climate change	

[a] Including implementation.

[1] All data represented in this country highlight document is based on country responses to GLAAS 2013/2014 questionnaire unless otherwise stated.

II. Monitoring

There is some data availability reported for policy-making and response to WASH related disease outbreak. Surveillance in rural areas is difficult due to the number of locations in mountainous terrain.

MONITORING	SANITATION		DRINKING-WATER		HYGIENE
Latest national assessment	2010		2010		2010
Use of performance indicators[a]	●		✔		●
Data availability for decision-making[a]					Health sector
Policy and strategy making	●		●		●
Resource allocation	✔		✔		NA
National standards	NA		✘		NA
Response to WASH related disease outbreak	NA		NA		✔
Surveillance[b]	Urban	Rural	Urban	Rural	
Independent testing WQ against national standards	NA	NA	●	✘	
Independent auditing management procedures with verification	NA	NA	●	✘	
Internal monitoring of formal service providers	✔	✔	✔	✔	
Communication[a]					
Performance reviews made public	●	●	●	●	
Customer satisfaction reviews made public	✘	●	✘	●	

[a] ✘ Few. ● Some. ✔ Most.
[b] ✘ Not reported. ● Not used. ✔ Used and informs corrective action.
NA: Not applicable.

III. Human resources

Human resource strategies are in development for sanitation, drinking-water and hygiene. The most important constraints identified are the lack of financial resources and skilled graduates, and the availability of education and training organisations.

HUMAN RESOURCES	SANITATION	DRINKING-WATER	HYGIENE
Human resource strategy developed[a]	●	●	●
Strategy defines gaps and actions needed to improve[a]	✘	✘	✘
Human resource constraints for WASH[b]			
Availability of financial resources for staff costs	✘	✘	✘
Availability of education/training organisations	✘	✘	✘
Skilled graduates	✘	✘	✘
Preference by skilled graduates to work in other sectors	●	●	●
Emigration of skilled workers abroad	●	●	●
Skilled workers do not want to live and work in rural areas	✘	✘	✘
Recruitment practices	✘	✘	✘
Other			

[a] ✘ No. ● In development. ✔ Yes.
[b] ✘ Severe constraint. ● Moderate constraint. ✔ Low or no constraint.

IV. Financing

A financing plan is in place and used for most WASH areas, however, there is a reported insufficiency of funds to meet MDG targets for sanitation.

FINANCING

	SANITATION		DRINKING-WATER	
Financing plan for WASH	Urban	Rural	Urban	Rural
Assessment of financing sources and strategies[a]	✔	●	✔	✔
Use of available funding (absorption)				
Estimated % of domestic commitments used[b]	✔	✔	✔	✔
Estimated % of donor commitments used[b]	✔	✔	✔	✔
Sufficiency of finance				
WASH finance sufficient to meet MDG targets[b]	✘	✘	✔	✔

[a] ✘ No agreed financing plan. ● Plan in development or only used for some decisions. ✔ Plan/budget is agreed and consistently followed.
[b] ✘ Less than 50%. ● 50–75%. ✔ Over 75%.

WASH VS. OTHER EXPENDITURE DATA

Total WASH expenditure[1]	
2012–2013	9.34 M.USD
Expenditure as a % GDP	
Education[2]	4.3
Health[2]	3.9
WASH[3]	0.5

[1] Reported WASH expenditure in GLAAS 2013/2014 converted using UN exchange rate 31/12/12.
[2] Expenditure as a % GDP – Average 2010–2012, sources UNESCO 2014, WHO 2014.
[3] WASH expenditure from country GLAAS 2013 response, GDP Average 2010–2012, World Development Indicators, World Bank 2013.
NA: Not available.

V. Equity

As a step towards addressing equity in access to WASH services, three disadvantaged groups are identified in WASH plans.

EQUITY IN GOVERNANCE

	SANITATION		DRINKING-WATER	
Laws				
Recognize human right in legislation	✔		✔	
Participation and reporting[a]	Urban	Rural	Urban	Rural
Clearly defined procedures for participation	✔	✔	✔	✔
Extent to which users participate in planning	●	✔	●	✔
Effective complaint mechanisms	✔	✘	✔	●

[a] ✘ Low/few. ● Moderate/some. ✔ High/most.

DISADVANTAGED GROUPS IN WASH PLAN

1. Poor populations
2. Remote populations
3. People living with disabilities

EQUITY IN FINANCE

Figure 1. Urban vs. rural WASH funding

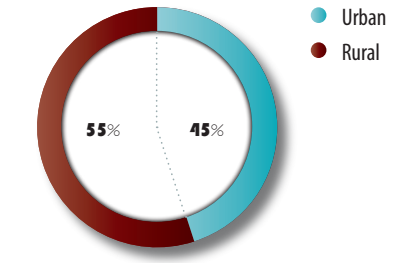


Figure 2. Disaggregated WASH expenditure

[No data available.]

EQUITY IN ACCESS[1]

Figure 3. Population with access to improved sanitation facilities

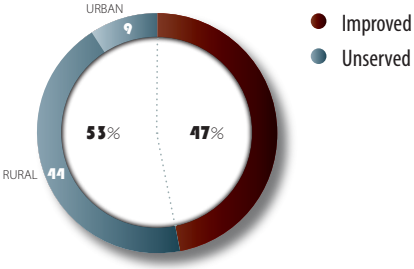
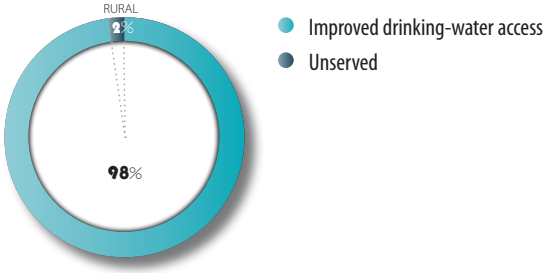


Figure 4. Population with access to improved drinking-water sources



[1] Progress on Drinking-Water and Sanitation – 2014 Update, WHO/UNICEF 2014.