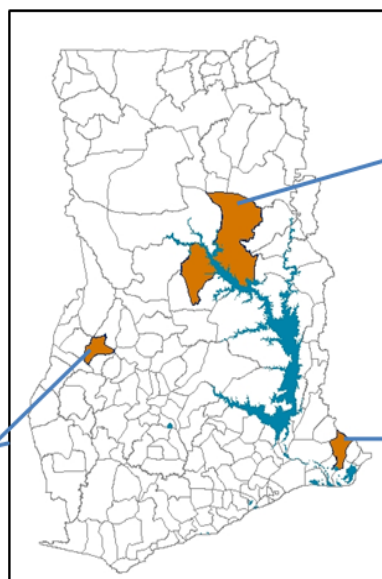


This fact sheet presents the results of an assessment of water service delivery in three districts in Ghana - Akatsi District in Volta Region, East Gonja District in Northern Region and Sunyani West District in Brong Ahafo Region. The assessment focused on the **functionality** of water facilities and the **level of service** provided. It also investigated the compliance of **community-based service providers** and **service authorities** with national norms, standards and guidelines for community water supply, as set by the Community Water and Sanitation Agency (CWSA). Data collection took place between November 2011 and January 2012.

The results of this assessment are useful for informing planning at district level. Additionally, they constitute a baseline to track progress in water service provision over time and can stimulate discussion around policies, guidelines and practices in the community water supply sub-sector.



East Gonja District, Northern Region	
Area (km ²):	9,015
Population (2010):	135,450 *
Population density (per km ²):	15
Number of area councils:	6
Water supply coverage:	47%
Number of point sources:	122
Number of piped schemes:	8

Akatsi District , Volta Region	
Area (km ²):	906
Population (2010):	128,461 *
Population density (per km ²):	142
Number of area councils:	5
Water supply coverage:	62%
Number of point sources:	249
Number of piped schemes:	6

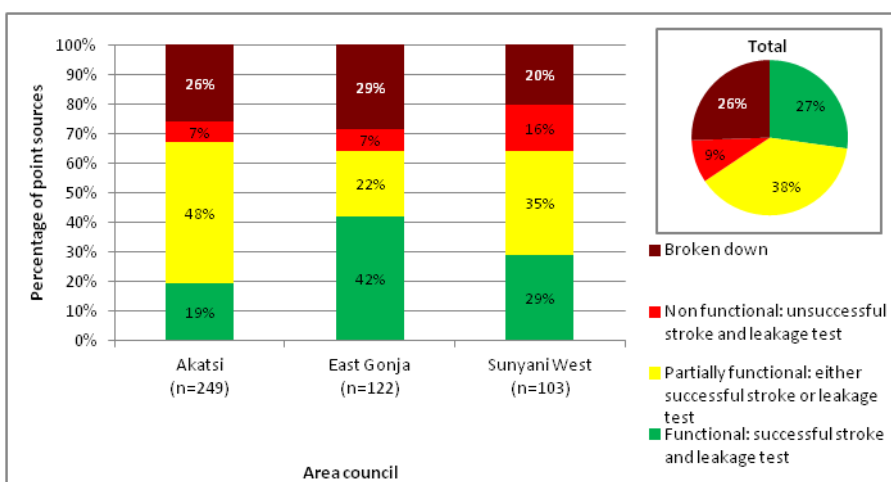
Sunyani West District , Brong Ahafo Region	
Area (km ²):	1, 658
Population (2010):	85,272 *
Population density (per km ²):	51
Number of area councils:	7
Water supply coverage:	56%
Number of point sources:	103
Number of piped schemes:	19

*2010 Ghana Population and Housing Census (GSS, 2012)

** CWSA Coverage Data, 2011

Functionality

The majority of the 33 piped schemes in the three assessed districts were found to be functional. Only four schemes (three limited mechanised boreholes and the Salaga small town scheme in East Gonja) were found to be non functional. Of the 255 standpipes connected to these piped schemes in the three districts, 84% were found to be functional. Functionality of improved point sources (hand-dug wells and boreholes with handpumps) was much lower, with only 27% of point sources fully functional and an additional 38% functional, but not passing the stroke or leakage test, as shown in the graph below.



Functionality—key facts:

- 36% of point sources were found to have either broken down completely or were not functioning optimally.
- The functionality of piped schemes and their standpipes was much higher.

Stroke test: In order for a point source to pass this test, it should take a maximum of 40 strokes to fill a size 34 bucket (18 litres) within 1 minute for Afridev and Ghana Modified India Mark II and 30 strokes for Nira AF-85 handpump (three of the four handpumps in Ghana).

Leakage test: In order to pass the leakage test, water should flow within 5 strokes, when pumping is resumed after 5 minutes rest following the stroke test.

Level of service

The level of water service to which people have access, is indicated by the **quantity** and **quality** of water, the accessibility of the services in terms of **distance** and **non-crowding**, and the **reliability** of the water services (functionality over time). Norms and standards related to these service level sub-indicators have been set for the community water sector in Ghana by CWSA. The table below gives an overview of these standards and the proportion of schemes that met the indicators.

Table 3: Number and proportion of schemes meeting service level sub-indicator norms		
Indicator	Point Source (n= 474)	Piped schemes (n=33)
Reliable: The period that a scheme is non-functioning should not exceed 18 days per year (95% of the year)	313 (66%)	19 (58%)
Non-crowding: The maximum number of people served by a facility should not exceed 300 per bore-hole or standpipe, or 150 per hand-dug well	246 (52%)	24 (73%)
Distance: The distance to the farthest household should not exceed 500 metres	313 (66%)	27 (82%)
Quality: The quality should be in line with standards set by the Ghana Standards Authority (for this assessment, aesthetic quality alone was assessed)	436 (92%)	33 (100%)
Quantity: The amount of water used from the scheme should be at least 20 litres per capita per day	261 (55%)	* Household connection: 2 (67% of the 3 schemes with household connection quantity data available) * Public standpipe: 0 (0%)

Service levels—key facts:

- Piped systems score better on most service level sub-indicators than point sources.
- Data on water use of piped schemes is lacking.

* For 29 of the 33 piped schemes (88%), data could not be obtained on water quantity produced and sold

The **level of service** is determined based on whether or not the benchmarks on the different sub-indicators are met, as indicated in tables 4 and 5.



Women fetching water from a handpump at Live-Tsievie in the Akatsi District of the Volta Region, Ghana.

Photo Credit: Victor Narteh Otum -IRC/Triple-S Ghana

Table 4: Proportion of point sources providing different levels of service	
Service level	%
Basic service: facilities meeting all service level indicators	19%
Sub-standard service: facilities <u>not</u> meeting all service level indicators	54%
Not providing service: facilities not providing services (broken down or unused facilities)	27%

Table 5: Proportion of population served by piped schemes, provided with different levels of service	
Service level	% of population served by piped schemes
Basic service: people provided with water services meeting all benchmarks	1%
Potential basic service: people provided with water services meeting all benchmarks, but for whom data on quantity was not available	20%
Sub-standard services: people provided with water services <u>not</u> meeting at least one benchmark	78%
Not provided with water services	2%

Performance of water service providers

The performance of water service providers has been assessed using **service provider indicators** based on water service provider structures and procedures prescribed in CWSA guidelines and the WSDB model by-law. Benchmarks have been set for indicators of governance, operations and financial management against which Water and Sanitation Management Teams (WSMTs—formerly Water and Sanitation Committees (WATSANS) have been assessed.

WSMTs—Point Sources (WATSAN Committees)

In total, 188 WATSAN Committees were identified, managing about 74% of the 474 point sources identified and mapped in the three districts. The WATSANS that were in place were found to be struggling to meet the benchmarks on the service provider indicators.

Governance: A little more than half (57%) of WATSANS are gender-balanced, have water vendors at each water point and separate technical and administrative positions. 44% WATSANS keep up-to-date reports and share these with the communities. Political and chieftaincy interference were virtually non-existent.

Operations: Only 58% of WATSANS reported that they are able to acquire the services of an area mechanic within 3 days and 43% reported that spare parts were accessible within 3 days. 74% of WATSANS carried out periodic maintenance, while only 35% carried out corrective maintenance within three days of scheme failure. Water quality sampling and analysis is carried out by very few WATSANS (20%).

Financial management: A little more than one half of WATSANS reported annual revenues exceeding expenditure. Only 28% of WATSANS practised sound financial management, i.e. operating a bank account and petty cash. While 63% of WATSANS reported to have set a tariff, only 15% had set this tariff based on projected costs.

WSMTs—Piped Systems (WSDBs)

A total of 28 management structures were identified, including 23 WSDBs, Ghana Water Company Ltd (GWCL)-managed clusters of standpipes, and four privately-managed mechanised boreholes.

Governance: None of the WSDBs was composed of sufficiently qualified staff as prescribed in the CWSA guidelines and none kept up-to-date records. However, there was no political or chieftaincy interference in the composition of the WSDBs.

Operations: Six of the 23 WSDBs have access to support from the private sector and spare parts in case of breakdowns or to address maintenance needs beyond their capacity. Only 4 of the 23 WSDBs undertake routine and periodic maintenance according to the maintenance schedule. Water quality sampling and analysis is undertaken by only 5 WSDBs.

Financial Management: About half of the WSDBs indicated that their revenues for the last year exceeded their expenditures. Only four of the 23 WSDBs had both an operations as well as a capital account, meeting the benchmark on the financial management indicator. Likewise, four of the 23 WSDBs indicated that they had set tariffs based on projected costs.

Water service providers functions:

The water service provider functions refer to the day-to-day management of a water service, including operation, preventative and corrective maintenance, and administration activities (book keeping, tariff collection, customer care, etc). In rural water supply in Ghana, these functions are commonly executed by Water and Sanitation Management Teams [**WATSAN Committees** (for point sources) and **Water and Sanitation Development Boards (WSDBs)** (for piped systems)].

Service provider indicators:

Governance indicators:

- Composition of WSMTs (WATSAN/WSDB)
- Reporting and accountability
- Freedom from political and chieftaincy interference

Operational indicators:

- Spare parts supply and technical services (WATSAN: 2 separate indicators: spare parts supply; technical services)
- Maintenance (WATSAN: 2 separate indicators: corrective maintenance; preventive maintenance)
- Water quality testing

Financial management indicators

- Revenue/ expenditure balance
- Financial management
- Tariff setting

Service provider—key facts:

- There is widespread non-compliance with national guidelines in the areas of governance, financial management and operations.
- At least half of the WATSANS failed to meet the benchmark on seven out of the 11 WATSAN indicators.
- At least half of the WSDBs did not meet the benchmark on seven out of the nine WSDB indicators.

Performance of service authorities

59% of WATSANs and 38% of the WSDBs indicated that they receive monitoring support from their respective District Water and Sanitation Teams. In Akatsi District, which had in the past benefitted from the Monitoring Operation and Maintenance (MOM) project, 87% of WATSANs and 100% of WSDBs had received monitoring support. However, in none of the districts, was MOM data and facility data transferred from district to regional level on a quarterly basis. None of the three districts had a three-member District Water and Sanitation Team sufficiently resourced to do its job. There are no bye-laws to legalise WATSANs and WSDBs. Coordination with NGOs was found to be poor in East Gonja and Sunyani West, with most NGOs not providing data on new facilities to the District Assemblies.

Water service authority functions:

Service authority functions include planning, coordination and oversight in a specified geographical area of jurisdiction. Direct support functions, like monitoring and technical support to community-based service providers are also part of the service authority mandate. In Ghana, service authority functions lie mainly with the Metropolitan, Municipal and District Assemblies (MMDAs).

Service authority indicators:

- Monitoring support
- Data transfer from district to regional level
- Presence of District Water and Sanitation Team
- Budget allocation and utilization
- Facility management plans and by-laws
- NGO coordination

Service authority—key facts:

Only Akatsi District met two of the service authority benchmarks, while the other two districts did not meet any of these benchmarks.

Main conclusions:

- The functionality of piped schemes is higher than point sources. About a third of the point sources in the three study districts were not functioning efficiently (either broken down or not passing the stroke and leakage test), while only a small part (12%) of piped schemes in the three study districts were not functioning.
- Only 19% of point sources in the district provide water services in line with the CWSA norms on reliability, accessibility, quantity and (perceived) quality.
- Performance of Water and Sanitation Management Teams (WATSANs and WSDBs) is low.
- The service authority (MMDAs) does not provide adequate support to WSMTs (formerly WATSANs and WSDBs).

Main recommendations:

- Implementation of additional infrastructure or expansion of existing facilities will be needed, especially in East Gonja.
- However, in order to ensure that these investments result in sustainable water services, more attention has to be given to the establishment and performance of service providers, which currently struggle to meet the benchmarks.
- In order for service authorities to take up their planning, supervisory, regulatory and support functions, they need to be strengthened in terms of resources and capacities.

About Triple-S

Triple-S (Sustainable Services at Scale) is an IRC-led learning initiative to improve water supply to the rural poor. Triple-S is hosted in Ghana by the Community Water and Sanitation Agency (CWSA). For more information, see www.waterservicesthatlast.org

About the Factsheet

This summary is based on a 2012 baseline study on service levels and sustainability of water supply in 3 districts in Ghana.

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