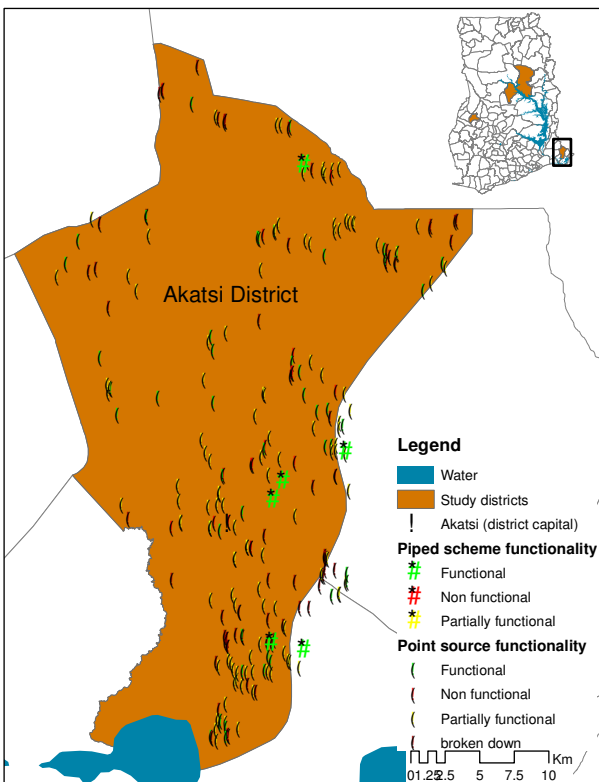


This fact sheet presents the results of an assessment of water service delivery in Akatsi District, Volta Region (Ghana) on **functionality** of water facilities and the **level of services** provided. Furthermore, the compliance of **community-based service providers** and **service authorities** with national norms, standards and guidelines was assessed. Data collection took place in the period November 2011-January 2012. The results of this assessment can inform planning at district level. Additionally, it can serve as a baseline to track progress in service provision over time and can stimulate discussion on policies, guidelines and practices in the community water supply sub-sector.

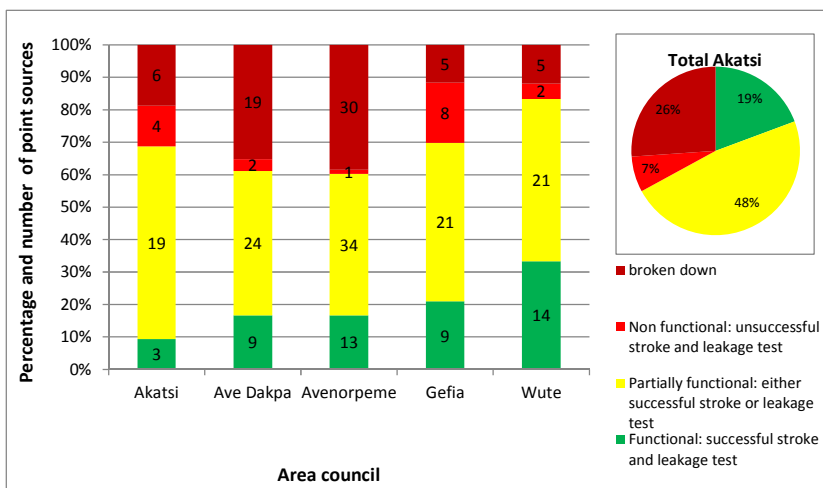
Region:	Volta Region
Area (km ²):	405
Population (2010):	117,306
Water supply coverage:	62%
Number of area councils:	5



Area council	Number of improved point sources	Number of WATSANs	Number of piped schemes
Akatsi	32	14	1
Ave Dakpa	54	28	1
Avenorpeme	78	14	2
Gefia	43	32	2
Wute	42	23	0
Total	249	111	6

Functionality

All six piped schemes in the District were found to be functional at time of the assessment, but many of the improved point sources (boreholes with hand pumps) were not functioning optimally, as illustrated in the graph below.



Functionality—key facts:

- Out of the 249 point sources, only 48 (19%) were functioning as they should
- 26% of point sources in Akatsi district were broken down completely
- Functionality rate of point sources was highest in Wute and lowest in Akatsi Area Councils
- All piped systems were found to be functional

Stroke test: In order for this test to be successful, the maximum number of strokes to fill a size 34 bucket (18 litres) is 40 strokes within 1 minute for Afridev and Ghana Modified India Mark II and 30 strokes for Nira AF-85 hand pump.

Leakage test: For the leakage test, pumping is resumed after 5 minutes rest following the stroke test. If water flows from the hand pump within 5 strokes, the pump has passed the leakage test.

Level of service

The level of water services to which people have access, is determined by the **quantity** and **quality** of water, the accessibility of the services, in terms of **distance** and **crowding**, and the **reliability** of the water services (functionality over time). The Community Water and Sanitation Agency in Ghana has set norms and standards related to these service level sub-indicators. The table below gives an overview of these standards and the percentage of facilities that met the indicators.

Table 3: Percentage of schemes meeting service level sub-indicators norms		
Service level sub-indicators	Point sources (n=249)	Piped schemes (n=6)
Reliable: The number of days per year that a scheme is non-functioning should not exceed 18 days (95% of the year operational)	69%	83%
Non-crowding: The maximum number of people should not exceed 300 people per borehole or standpipe, or 150 people per hand dug well	72%	83%
Distance: The distance to the farthest household should not exceed 500 metres	83%	100%
Quality: The quality should be in-line with standards set by the Ghana Standard Board (for this assessment: quality perceived as acceptable by users)	94%	100%
Quantity: People should have access to at least 20 litres per capita per day	51%	Standpipes: 0% Household connections: 40%

Service levels—key facts:

- Almost a third of the point sources provide unreliable water services
- For only half of the point sources, average water use was estimated to be at least 20 litres per capita per day
- Only about a third of the point sources provide basic water services in line with national standards
- Piped systems perform better than point sources on all service level indicators, except quantity. Limited data is available of quantity of water use from piped systems

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



A resident paying for water from a vendor at a standpipe in Akatsi town

Photo credit: Lamisi Dabire/Triple-S Ghana

Table 4: Percentage of point sources providing basic or sub-standard level of service

Service level	%
Basic services: facilities provide services meeting all service level indicators	34%
Sub-standard services: facilities provide services <u>not</u> meeting all service level indicators	38%
Not providing services: facilities do not provide services (facilities broken down)	29%

Table 5: Number of piped schemes providing basic or sub-standard level of service

Service level	Nr (n=6)
Partially basic services: facility provides basic level service to people with household connection and sub-standard level to people using standpipe	2
Potential basic services (not considering water quantity*): facilities provide services meeting the benchmark on the distance, non-crowding, quality and reliability	2
Sub-standard services: facilities provide services <u>not</u> meeting all service level indicators	2
Not providing services: facilities do not provide services (facilities broken down)	0

* No data could be obtained on water quantity produced and sold

Performance of water service providers

The performance of water service providers was assessed using **service provider indicators**. Benchmarks have been set for governance, operations and financial management indicators, against which WATSANs and WSDBs have been assessed.

WATSAN Committees

In total, 109 WATSAN committees were identified, which manage 68% of point sources in Akatsi District. Under a third of point sources do not have a WATSAN committee.

Governance: A little over half (53%) of the WATSANs have a gender balanced membership, separate technical and administrative positions and water vendors. None of the WATSANs experienced chieftaincy or political interference. However, less than half (41%) of the WATSANs were observed to keep records up-to-date and share these with their respective communities.

Operational performance: The majority (about 75%) of WATSANs carried out preventive maintenance. However, only about a third of the WATSANs carried out corrective maintenance on their hand pumps in an effective manner. Although 60% of WATSANs reported that they could access the service of area mechanics within three days, less than half (45%) reported they could access spare parts within three days. Also, none of the WATSANs carry out water quality sampling and analysis after installation of hand pumps.

Financial management: Over half (59%) of the WATSANs reported to have annual revenues exceeding expenditure. However, only a little over a third (38%) of the WATSANs have a bank account and petty cash available. Even though almost all WATSAN indicated they have set tariffs, projected costs have rarely (5%) been taken into account in setting the tariff.

Water and Sanitation Development Boards (WSDBs)

A total of six WSDBs was found in Akatsi, each managing one of the six piped schemes in the district.

Governance: None of the 6 WSDBs is composed of adequately qualified members in line with the CWSA guidelines. However, five of the 6 WSDBs did keep administrative, technical and financial reports and shared these with the communities. None of the WSDBs experienced chieftaincy or political interference.

Operational performance: Three of 6 WSDBs reported to be able to acquire spare parts and technical services within acceptable time limit, but none of the WSDBs reported they prepare and implement a maintenance schedule. Only 2 performed water quality sampling and analysis.

Financial management: Four of the six WSDBs reported annual revenues outweighing annual expenditure. However, none were practicing sound financial management, as none of them have both an operational and capital account in which at least 20% of net revenues is deposited. Although all WSDBs had set a water tariff, none had done so based on projected cost.

Water service provider 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 (WATSAN) Committees** (for point sources) and **Water and Sanitation Development Boards (WSDBs)** (for piped systems).

Service provider indicators:

Governance indicators:

- Composition of WATSAN/WSDB
- Reporting and accountability
- No political and chieftaincy influence

Operational indicators:

- Spare part supply and technical services (WATSAN: 2 separate indicators: spare part 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:

- Both WATSANs as well as WSDBs struggle to meet the benchmarks on the service provider indicators.
- On 6 out of 11 WATSAN indicators, at least half of the WATSANs did not meet the benchmark.
- On 5 out of the 9 WSDB indicators, at least 3 out of the 6 WSDBs did not meet the benchmark

Performance of service authorities

The district allocated a budget for both operational as well as capital investment costs. Most NGOs provide facility data on new systems and most NGOs align their implementation to the District Water and Sanitation Plan. Furthermore, the District Water and Sanitation Team tries to ensure that NGO activities are in line with Community Water and Sanitation Agency standards, norms and guidelines. 87% of WATSANs and all six WSDBs indicated that they received monitoring support from the District Water and Sanitation Team.

However, not all monitoring data was transferred on quarterly basis from the district to regional (CWSA) level. And although the District Water and Sanitation Team consists of well-qualified, resources and trained members, it did not include a community development officer at the time of the assessment and thus did not meet the benchmark. Also, facility management plans detailing out the tasks of the WATSANs and WSDBs, were in place, but not updated on an annual basis and bye-laws had not been passed to legalize WATSANs and WSDBs.

Water service authority functions:

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

Service authority indicators:

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

Service authority—key facts:

- Akatsi district scored on the benchmark for 3 out of the 6 service authority indicators.
- The District Assembly fulfilled its mandate by providing monitoring and technical support visits to over 80% of WATSANs and all WSDBs.

Main conclusions:

- About a third of the point sources are either broken or not functioning properly.
- About two-third of the point sources in the district do not supply water services in line with the CWSA norms on reliability, accessibility, quantity and (perceived) quality.
- Almost a third of point sources in the district is not managed by a WATSANs.
- WATSANs and WSDBs generally perform poorly, especially on maintenance, water quality testing indicators.
- Safety of water produced and delivered to communities by water management institutions can not be guaranteed as water quality sampling and analysis is not being carried out as required.

Main recommendations:

- To ensure that communities have access to water services in line with the CWSA norms and standards, the District Assembly needs support WATSANs to repair or rehabilitate broken down boreholes.
- In order for effective operation, maintenance and management of the water facilities, there is the need for immediate formation and training of WATSANs for the orphan boreholes.
- For effective delivery on their mandate, existing WATSANs and WSDBs require refresher trainings in specific areas as identified in the baseline.
- To guarantee water safety, the District Assembly has to ensure that water quality sampling and analysis is conducted by WATSANs and WSDBs on half yearly basis.

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 Report on service level and sustainability of water supply in Akatsi District, Volta Region, Ghana.

Authors: Tom Laari Chimbar, Seth Damasah and Sylvester Eyramh. **Reviewed by** Marieke Adank, Tyhra Kumasi (PHD) and Vida Duti