# water services

## Water services in Sunyani West District,

Brong Ahafo Region, Ghana.

**Fact Sheet** 

This fact sheet presents the results of an assessment of water service delivery in Sunyani West District in Brong Ahafo Region of Ghana. 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.

Table 1: Basic facts about Sunyani West District		
Region:	Brong Ahafo Region	
Area (km²):	1, 658	
Population (2010):	85,272 *	
Number of area councils:	7	
Water supply coverage:	56%	

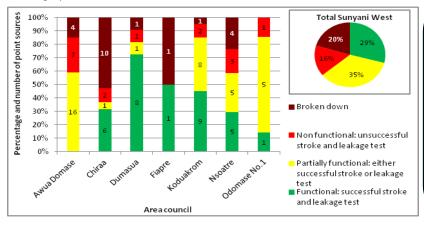
Table 2: Overview of water facilities **			
Area council	Number of improved point sources	Number of WATSANs	Number of piped schemes
Awua Do- mase	27	12	0
Chiraa	19	9	10
Dumasua	11	1	0
Fiapre	2	0	5
Koduakrom	20	3	0
Nsoatre	17	2	1
Odumase No.1	7	1	2
Total	103	28	18



\*\* CWSA Coverage Data, 2011

### **Functionality**

Of the 18 identified piped systems, 16 were found to be fully functional at the time of the assessment, with 97% of standpipes functioning. Functionality of improved point sources (hand dug wells and boreholes with handpumps), was found to be lower, as shown in the graph below.

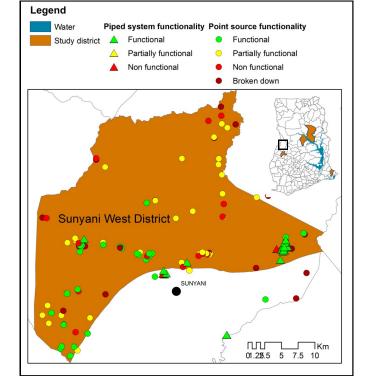


Functionality—key facts:

- 20% of point sources in the district have broken down
- Dumasua Area Council had the largest proportion of functional point sources.
- Majority of piped schemes were functional

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 standard 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: Proportion of schemes meeting service level sub-indicators norms			
Indicator	Point Source (n=103)	Piped schemes (n=23)	
<b>Reliable</b> : The period that a scheme is non-functioning should not exceed 18 days per year (95% of the year)	64%	70%	
<b>Non-crowding</b> : The maximum number of people served by a facility should not exceed 300 per borehole or standpipe, or 150 per hand-dug well	54%	61%	
<b>Distance</b> : The distance to the farthest household should not exceed 500 metres	34%	83%	
Quality: The quality should be in line with standards set by the Ghana Standards Board (for this assessment, aesthetic quality alone was assessed)	87%	100%	
Quantity: The amount of water used from the scheme should be at least 20 litres per capita per day	58%	0% No data: 87%	

#### Service levels—key facts:

- About a third of the point sources, can be found within 500 metres.
- For the majority of facilities, water quality is perceived as acceptable.
- Water use from 42% of point sources is estimated to be below the 20 litres per capita per day norm
- Piped systems score better on most service level sub-indicators than point sources

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.



Children fetching water from a borehole in Twumasikrom, in the Sunyani West District, Brong Ahafo Region of Ghana.

Table 4: Proportion of point sources providing basic or sub-standard level of service		
Service level	%	
<b>Basic services</b> : facilities provide services meeting all service level indicators	3%	
Sub-standard services: facilities provide services <u>not</u> meet- ing all service level indicators	75%	
<b>Not providing services</b> : facilities do not provide services (facilities broken down)	22%	

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

Service level	Nr
<b>Potential basic services (not considering water quantity*)</b> : facilities provide services meeting the benchmark on the distance, non-crowding, quality and reliability	7
Sub-standard services: facilities provide services <u>not</u> meet- ing the benchmark on the distance, non-crowding, quality or reliability	13
Not providing services: facilities do not provide services (facilities broken down)	3

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

## 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 bye-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) and Water and Sanitation Development Boards (WSDBs)] have been assessed.

#### WSMTs—Point Sources (WATSAN Committees)

In total, 28 WATSAN Committees were identified, managing 48% of the 103 point sources in Sunyani West. The WATSANs that were in place were found to be struggling to meet the benchmarks on the service provider indicators.

#### 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 and small town water supply in Ghana, these functions are commonly executed by Water and Sanitation Management Teams [(WSMTs ) formerly **WATSAN Committees** for point sources and **Water and Sanitation Development Boards (WSDBs)** for piped systems.]

*Governance:* 79% of WATSANs do not have a gender balanced membership, separate technical and administrative positions and water vendors. Less than half of the WATSANs were found to keep up-to-date reports and share these with the communities. Political and chieftaincy influences were virtually non existent .

Operations: 43% of WATSANs reported that they would be able to acquire the services of an area mechanics within 3 days

when a facility breaks down and only 27% reported availability of spare parts within 3 days. 46% of WATSANs carried out periodic maintenance and only 25% corrective maintenance. Only 18% of WATSANs have carried out water quality sampling and analysis.

**Financial management:** A quarter of WATSANs reported annual revenues exceeding expenditure. Majority of the WATSANs do not practice sound financial management, i.e operating a bank account and petty cash. 32% of WATASANs reported to have set tariffs based on projected costs.

#### WSMTs - Piped Systems (WSDBs)

A total of 14 management structures were identified, including 9 WSDBs, utility-managed standpipes connected to the utility system from neighbouring Abesem, and 4 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. There was however no political or chieftaincy influences in the composition of the WSDB.

**Operations:** 2 of the 9 WSDBs reported that they had access to support from private sector and spare parts in case of breakdowns or maintenance requirements beyond the capacity of the WSDB. Only 3 of the 9 WSDBs indicated that they undertake planned routine and periodic maintenance according to the maintenance schedule. Only the Sunyani WSDB carries out water quality sampling and analysis.

**Financial Management:** Only the Sunyani WSDB indicated that their revenues for the last year exceeded expenditure. Only one of the 9 WSDBs had both an operation as well as a capital account, meeting the benchmark on the financial management indicator. Less than half of the WSDBs indicated that they had set tariffs based on projected costs.

#### Service provider indicators:

#### **Governance indicators:**

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

#### **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:

- There is widespread non-compliance with national guidelines in the area of governance, financial management, and operations
- At least half of the WATSANs did not meet the benchmark on 10 out of 11 WATSAN indicators.
- At least half (4 of the 8) WSDBs did not meet the benchmark on 8 out of the 9 WSDB indicators.

## Performance of service authorities

Only 7% of WATSANs and 3 of the 9 WSDBs indicated that they receive monitoring support from the District Water and Sanitation Team (DWST)/District Works Department (DWD). Data on Monitoring Operation and Maintenance (MOM) and facility data was not transferred from district to regional level on quarterly basis. The 3-member District Water and Sanitation Team was found to be insufficiently resourced to do its job. The District did not allocate a budget for operational or investment costs. There are facility management plans which spell out the roles and responsibilities of WATSANs and WSDBs, but these have not been updated and the bye-laws have not been passed to legalize WSMTs (WATSANs and WSDBs). Coordination with NGOs was also poor, with most NGOs not providing data on new facilities constructed to the District Assembly.

#### 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/ District Works Department
- Budget allocation and utilization
- Facility management plans and by-laws
- NGO coordination

#### Service authority—key facts:

The performance of the District Water and Sanitation Team (DWST)/District Works Department (DWD) in Sunyani West did not meet any of the benchmarks on the six service authority indicators.

#### Main conclusions:

- 36% of point sources are either broken down or not functioning properly.
- Only 3% of point sources in the district provide water services in line with the CWSA norms on reliability, accessibility and quantity.
- More than half of the districts point sources are not managed by a WSMT (WATSAN)
- Performance of WSMTs (formerly WATSANs and WSDBs )is very low, with less than half meeting the benchmark on all but one of the indicators.
- The service authority (MMDAs) is not providing adequate support to WSMTs (formerly WAT-SANs and WSDBs).

#### Main recommendations:

- Government and other NGOs involved in provision of water facilities should be encouraged to form WSMTs (WATSANs and WSDBs) when providing water facilities.
- Performance of WSMTs (WATSANS and WSDBs) need to be improved. Regular training and retraining for the water service providers should be organized.
- DA/DWST should ensure that there is regular monitoring of activities of Water and Sanitation Management Teams (WATSAN and WSDB) and provide the necessary support when required.
- DA should enforce by-laws on water service provision.

#### **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 <u>www.waterservicesthatlast.org</u>

#### About the Fact Sheet

This summary is based on a 2012 baseline study on service level and sustainability of water supply in Sunyani West District, Brong Ahafo Region, Ghana. Authors: Eugene Effah, George Azigli and George Nii Amartei Reviewed by: Marieke Adank, Tyhra Kumasi (PhD), Charlotte Engmann and Vida Duti





