

Fact sheet

Rural and Small Towns Water Services

September 2015

Western Region



Area: 23,391 km²

Number of districts: 22

Total population: 2,325,597

Rural population: 1,627,918

Urban population: 697,679

This fact sheet gives an overview of rural and small towns water services in the **Western Region** of Ghana. It is the result of the 2014 service monitoring round executed by the Community Water and Sanitation Agency (CWSA) in collaboration with Metropolitan, Municipal and District Assemblies (MMDAs). Water services have been assessed against the indicators set out in CWSA's 'Framework For Assessing And Monitoring Rural And Small Towns Water Supply Services In Ghana', available at www.cwsa.gov.gh

Water Supply Facilities and their Functionality

Figure 1 gives an overview of the number and functionality of water supply facilities in rural areas and small towns in the Western Region. As shown in Figure 2, more than two thirds of piped schemes are functional, whilst just about half of hand-pumps are fully working. The most commonly used hand pumps in the region is the Afridev (37%) closely followed by the Ghana Modified India Mark II (32%) and the Nira (24.95%). The largest community-managed piped schemes in the region are the Aiyana and Bibiani's Pipe Schemes with designed populations of 45,000 and 12,000 respectively.

Figure 1: Regional map

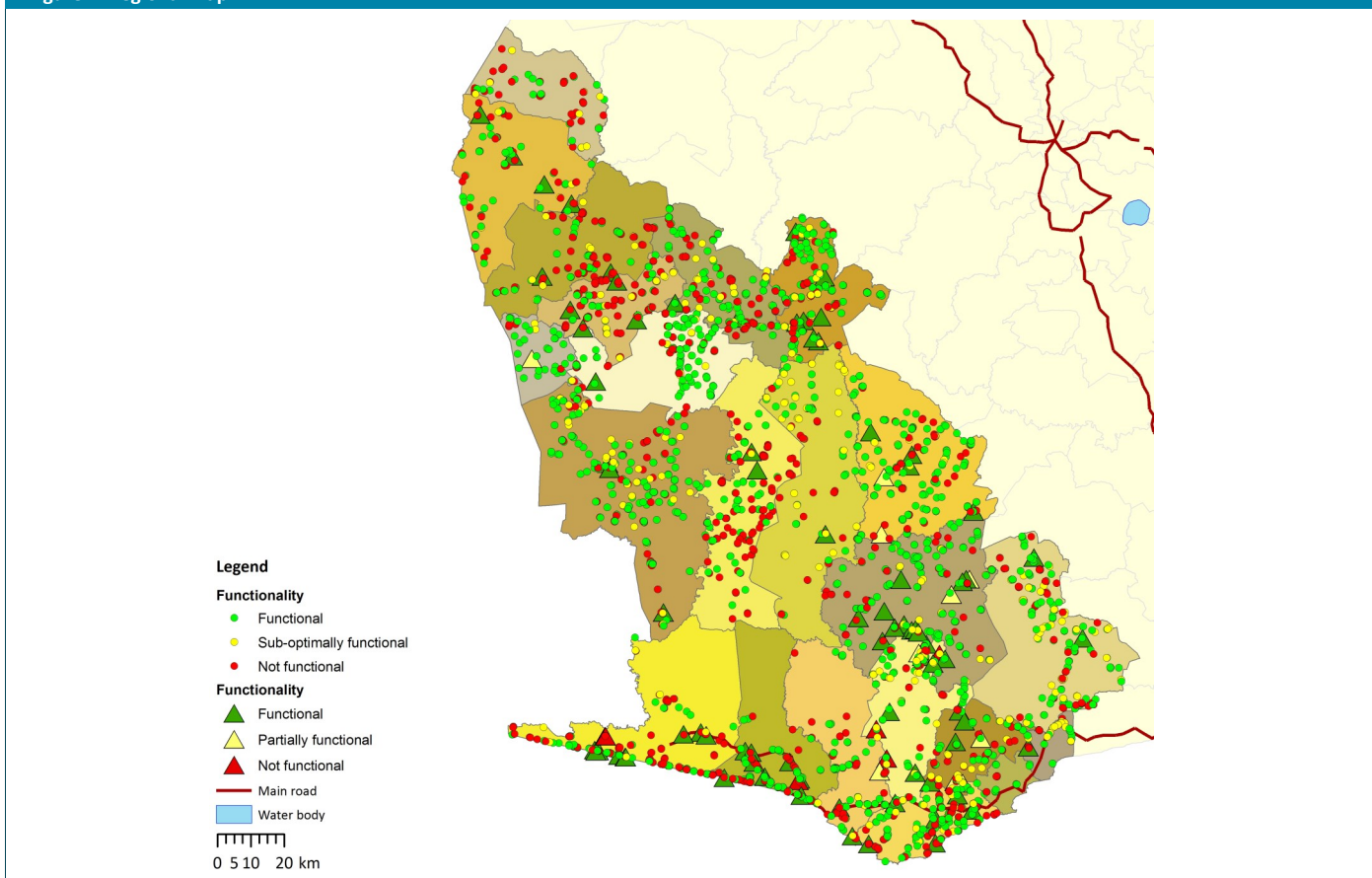
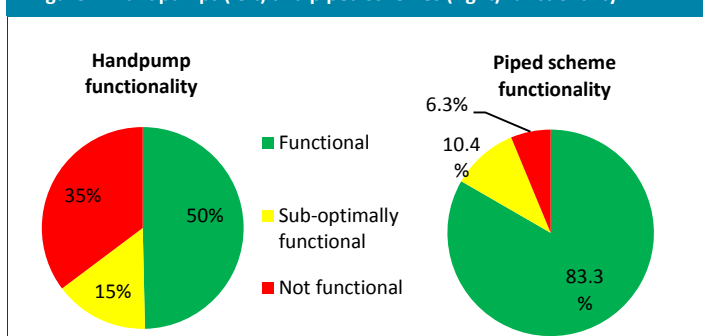


Table 1: Overview of water schemes

Rural and small town water coverage:		55.19%	
Number of handpumps:		2,951	
Type of piped scheme	Number	Number of standpipes	Number of hh connections
Limited mechanized piped schemes	30	68	53
Small community piped scheme	7	35	2
Small town piped scheme	59	736	9,179
Total piped schemes	96	839	9234

Figure 2: Handpumps (left) and piped schemes (right) functionality



Note: A hand pump is considered fully functional if water flows within 5 strokes, sub-optimally functional if it takes more than 5 strokes for water to flow and not functional if water does not flow. A piped scheme is considered fully functional if all its sources are fully functional, sub-optimally functional if one or more of its sources are not functional, and not functional if none of its sources are functional

Handpump Water Services

The level of service provided by handpumps has been assessed against the national standards for water **quantity**, and water-**quality**, **distance** from users, the maximum number of people per handpump (as an indication for **crowding**), and the **reliability** of the water services. Handpumps which meet the standards for all five service level indicators are considered to provide **basic services**. Figure 3 gives an overview of the proportion of handpumps providing basic, sub-standard and no water services (not functional or not used). Figure 4 shows the proportion of (fully and sub-optimally) functional handpumps meeting the standard on these service level indicators. An overview of handpump water services in each district is presented in Table 2.

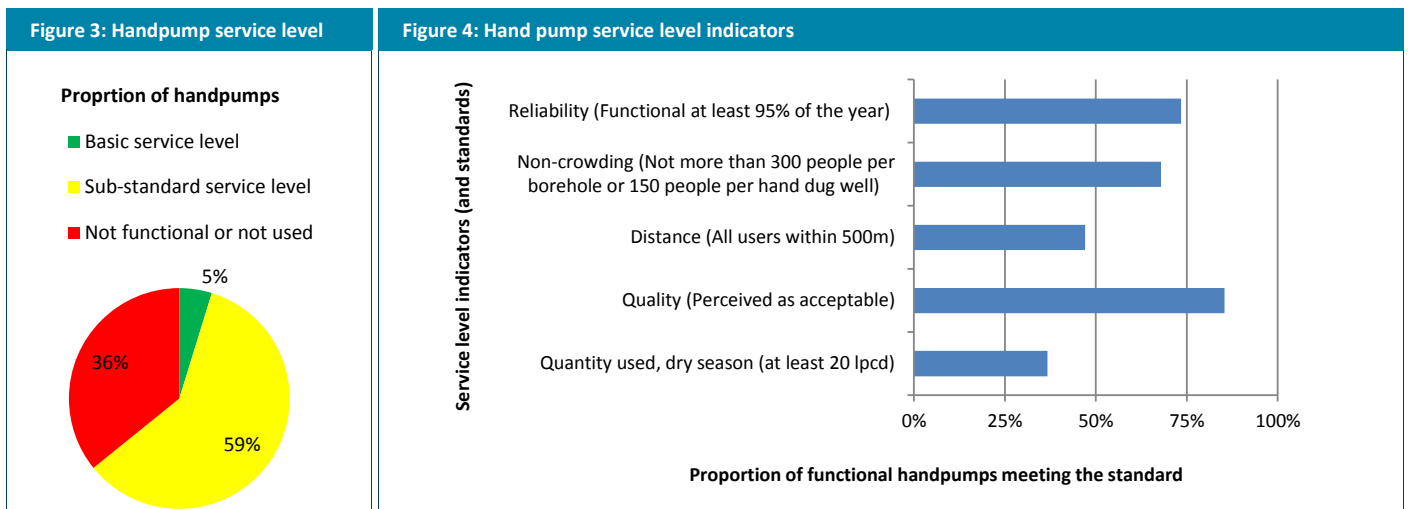


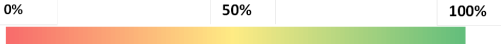
Figure 4 shows that 73% of handpumps were reported as reliable with more than half (68%) of the handpumps crowded. Additionally, distances to most water facilities in the region were more than 500m, with more than half of the people using less than the required amount of water per day. Majority of handpump users in the region perceived the water to be of acceptable quality.

Table 2 shows high handpump reliability(73%) of the facilities worked all year round. Water usage in the dry season was found to be low (37%). Even though more than half of handpumps were functional, most of the them do not provide basic services (5%). The Nzema district had the highest number of facilities providing basic water services (20%) whilst handpumps in Bia East, Juabuso, Prestea-Huni Valley, Sekondi Takoradi and Suaman districts provide no basic services. In the Jomoro district, more than half of handpumps met the benchmark on all service level indicators of reliability, crowding, distance, quality and quantity.

Table 2: District overview of handpump water services

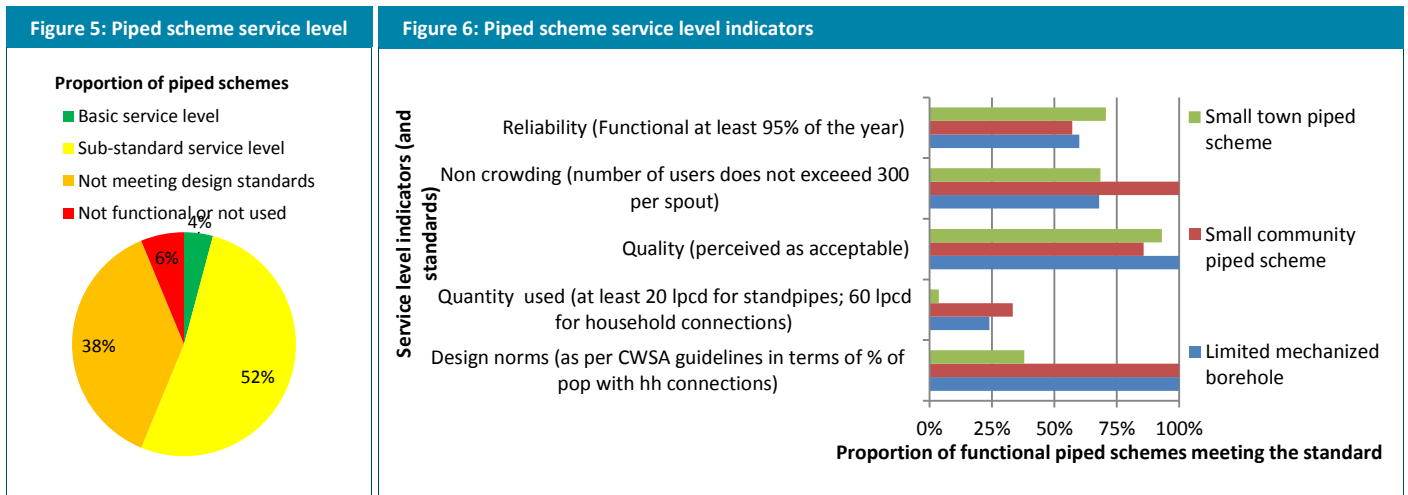
District	Number of handpumps	Functionality	Providing basic services	Proportion of functional handpumps meeting the standard				
				Reliability	Non-crowding	Distance	Quality	Quantity used, dry season
Ahanta West	225	62%	4%	74%	71%	45%	94%	24%
Aowin	258	74%	1%	84%	74%	12%	94%	4%
Bia East	66	53%	0%	60%	80%	17%	83%	43%
Bia West	89	54%	2%	48%	71%	96%	96%	17%
Bibiani-Ahwiaso-Bekwai	213	77%	7%	72%	87%	42%	82%	62%
Bodi	118	38%	5%	93%	64%	44%	93%	73%
Ellembelle	154	63%	10%	99%	39%	92%	94%	58%
Jomoro	144	44%	8%	79%	67%	62%	84%	63%
Juabuso	110	35%	0%	66%	74%	3%	95%	100%
Mpohor	80	55%	13%	68%	68%	57%	86%	46%
Nzema East	76	64%	20%	76%	73%	65%	96%	73%
Presetea-Huni Valley	201	73%	0%	73%	74%	19%	80%	10%
Sefwi Akontombra	142	80%	4%	77%	74%	43%	94%	27%
Sefwi Wiaso	189	63%	11%	57%	70%	54%	89%	73%
Sekondi Takoradi	17	71%	0%	83%	75%	25%	100%	17%
Shama	31	94%	3%	100%	17%	21%	97%	62%
Suaman	36	89%	0%	84%	78%	53%	88%	6%
Tarkwa-Nsuem	151	74%	4%	73%	76%	43%	82%	22%
Wassa Amenfi Central	103	75%	10%	48%	82%	57%	95%	42%
Wassa Amenfi East	193	78%	2%	56%	54%	83%	55%	27%
Wassa Amenfi West	153	37%	3%	84%	84%	52%	64%	23%
Wassa East	202	75%	3%	81%	40%	50%	82%	31%
Grand Total	2951	65%	5%	73%	68%	47%	85%	37%

0% 50% 100%



Piped Scheme Water Services

The level of service provided by piped schemes has been assessed against the national standards set for the rural water sub sector in Ghana on water quality and quantity (both for standpipes as well as household connections), the accessibility of the piped scheme in terms of maximum number of people per standpipe spout (as an indication for standpipe crowding), and its reliability. Also the proportion of household connection users is checked against the design norm for each type of piped scheme. Piped schemes which meet the standard on these service level indicators and the design norms are considered to provide basic level of services. Figure 5 presents the proportion of piped schemes providing different levels of water services. Figure 6 gives an overview of the proportion of functional piped schemes meeting the standard on the service level indicators. Table 3 gives an overview of piped scheme water services per district.



Even though majority (94%) of the piped schemes are functional, only 4% provide basic services implying that they met all the service level indicators described in Table 3. Overall, about 94% of the functioning piped schemes are reliable, provide water of acceptable quality, and are designed in accordance with national standards and guidelines. However, most of the piped schemes were providing water less than 20lpcd to water users and serving more than 300 people which contravenes the national guidelines. It was found that Piped Schemes in the Nzema East, Jomoro, and Ellebelle districts provided better water services in the region. On the otherhand, piped schemes in 16 districts did not provide any water services at all.

Table 3: District overview of piped scheme water services

District	Number of piped schemes	Functionality	Providing basic services	Proportion of functional piped schemes meeting the standard				
				Reliability	Non crowding	Quality	Quantity used	Design as per guidelines
Ahanta West	7	100%	0%	75%	25%	75%	0%	88%
Aowin	3	100%	0%	60%	100%	100%	0%	0%
Bia West	4	100%	0%	88%	63%	100%	0%	100%
Bibiani-Ahwiaso-Bekwai	7	100%	0%	100%	100%	100%	0%	100%
Bodi	4	100%	0%	88%	88%	100%	13%	88%
Ellebelle	9	89%	11%	88%	38%	100%	13%	94%
Jomoro	11	82%	18%	70%	70%	100%	40%	70%
Juabuso	2	100%	0%	88%	63%	100%	25%	88%
Mpohor	5	100%	0%	100%	50%	100%	0%	0%
Nzema East	1	100%	100%	100%	100%	50%	50%	50%
Presetea-Huni Valley	14	100%	0%	100%	33%	100%	33%	100%
Sefwi Akontombra	1	100%	0%	33%	67%	100%	0%	67%
Sefwi Wiaso	2	100%	0%	100%	100%	100%	0%	50%
Suaman	1	100%	0%	50%	100%	50%	0%	50%
Tarkwa-Nsuem	14	79%	0%	67%	80%	100%	0%	100%
Wassa Amenfi Central	1	100%	0%	50%	100%	100%	0%	100%
Wassa Amenfi East	6	100%	0%	84%	95%	95%	0%	84%
Wassa Amenfi West	2	100%	0%	100%	100%	100%	0%	100%
Wassa East	2	100%	0%	11%	64%	94%	72%	100%
Grand Total	96	94%	4%	100%	33%	100%	33%	67%



Handpump Management

As shown in figure 7, the majority of handpumps in the region are managed by Water and Sanitation Management Teams for Small Communities (WSMT-SC). The performance of WSMTs-SC has been assessed against indicators and benchmarks related to governance, operations and financial management. Benchmarks have been set based on national guidelines. Figure 8 presents the overall proportion of WSMTs-SC which meet the benchmark on these indicators in the region. The proportion of WSMTs-SC meeting the benchmarks in each district is presented in Table 4.

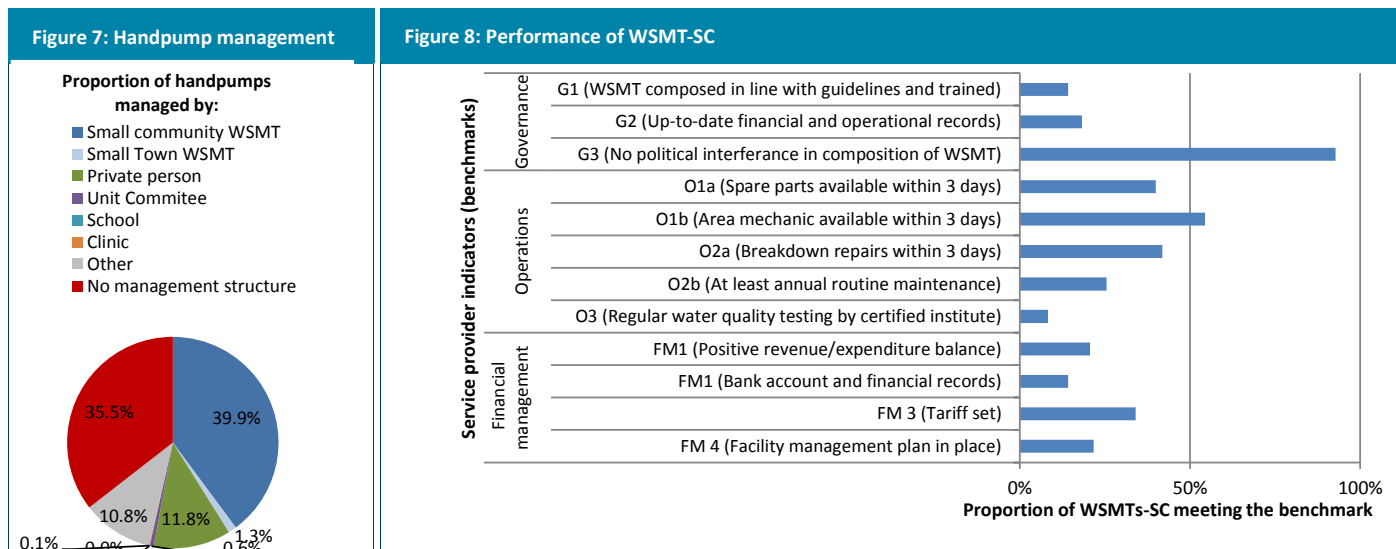


Figure 8 shows that WSMTs-SC are performing poorly in areas such as their composition, financial management and record keeping. Most WSMTs-SC do not carry out water quality testing and fail to set tariffs for the facilities. However, more than half were doing well in terms of acquiring area mechanic services and face little political interference in their operations.

The performance of the WSMTs-SC is generally poor. Majority of WSMTs-SC did not undertake water quality testing, carry out routine and preventative maintenance, keep financial records nor were they composed in line with the national standards. However, good performances were recorded in all districts in the areas of non-political interference and area mechanics availability within 3 days.

Table 4: District overview of WSMT-SC performance

District	Number of WSMTs-SC	Governance			Operations					Financial management			
		G1	G2	G3	O1a	O1b	O2a	O2b	O3	FM1	FM2	FM3	FM4
Ahanta West	19	11%	16%	100%	42%	74%	42%	32%	11%	21%	11%	21%	16%
Aowin	12	8%	0%	92%	33%	25%	33%	17%	0%	8%	17%	25%	25%
Bia East	8	25%	50%	88%	38%	38%	50%	38%	13%	38%	13%	63%	38%
Bia West	14	29%	14%	100%	21%	29%	21%	36%	7%	29%	21%	43%	43%
Bibiani-Ahwiaso-Bekwai	24	21%	17%	63%	46%	67%	46%	46%	8%	21%	29%	29%	29%
Bodi	14	0%	0%	100%	7%	7%	21%	0%	0%	0%	0%	7%	0%
Ellembelle	6	33%	67%	100%	67%	67%	67%	33%	0%	50%	67%	67%	0%
Jomoro	11	27%	18%	100%	55%	73%	45%	64%	0%	27%	9%	27%	36%
Juabuso	17	0%	24%	82%	47%	71%	35%	6%	6%	41%	47%	29%	12%
Mpohor	21	14%	10%	86%	43%	62%	52%	19%	5%	14%	14%	29%	0%
Nzema East	11	0%	0%	100%	64%	64%	64%	18%	9%	18%	9%	45%	36%
Presetee-Huni Valley	47	9%	13%	98%	32%	40%	28%	9%	15%	11%	11%	21%	13%
Sefwi Akontombra	31	10%	13%	87%	52%	77%	58%	42%	0%	16%	3%	48%	32%
Sefwi Wiaso	43	14%	23%	93%	23%	40%	16%	40%	5%	14%	12%	37%	63%
Sekondi Takoradi	7	43%	14%	100%	14%	14%	29%	29%	0%	14%	14%	0%	86%
Shama	8	13%	13%	100%	88%	100%	75%	0%	0%	25%	13%	13%	13%
Suaman	9	22%	0%	100%	33%	33%	22%	22%	0%	22%	0%	33%	33%
Tarkwa-Nsuem	21	29%	14%	90%	57%	62%	52%	62%	33%	14%	19%	43%	29%
Wassa Amenfi Central	18	28%	33%	100%	44%	44%	67%	11%	0%	33%	11%	61%	6%
Wassa Amenfi East	3	0%	67%	100%	67%	100%	33%	33%	0%	0%	33%	67%	0%
Wassa Amenfi West	58	9%	29%	93%	43%	60%	47%	7%	0%	26%	16%	22%	5%
Wassa East	68	15%	16%	96%	37%	59%	47%	28%	21%	25%	9%	46%	10%
Grand Total	470	14%	18%	93%	40%	54%	42%	26%	8%	21%	14%	34%	22%



Piped Scheme Management

As shown in figure 9, the majority of piped schemes in the region are managed by Water and Sanitation Management Teams for Small Towns (WSMTs-ST). The performance of WSMTs-ST has been assessed against indicators and benchmarks related to **governance, operations and financial management**. Benchmarks have been set based on national guidelines. Figure 10 presents the overall proportion of WSMTs-ST which meet the benchmark on these indicators in the region. The proportion of WSMTs-ST meeting the benchmarks in each district is presented in Table 5.

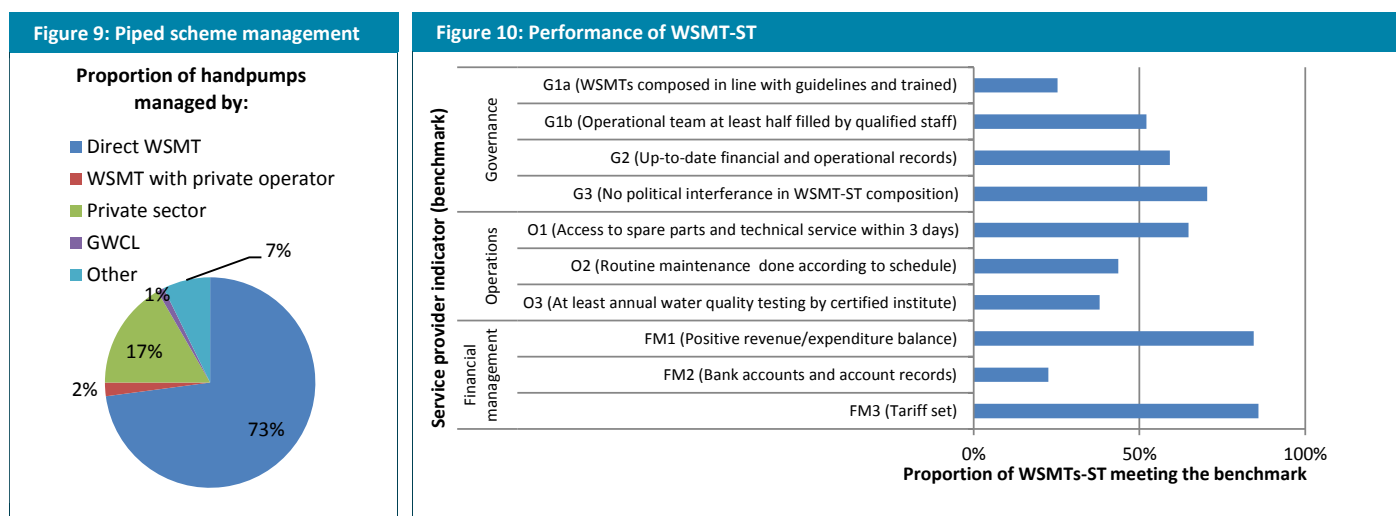


Figure 10 shows that only half of WSMTs-ST have qualified operational staff and good record keeping. On the other hand, most WSMTs-ST reported easy access to spare parts and area mechanic services. Most of the WSMTs-ST set tariffs and have a positive revenue and expenditure balance, but just a few have bank accounts and financial records.

Table 5 shows that except for Aowin, Bodi, Jomoro, Juaboso, Sefwi Akontombra and Suaman districts where half of the WSMTs have bank accounts and financial records, the rest of the districts scored below 30%. More than half of WSMTs-ST in the Aowin and Juabuso districts scored high in qualified staff and well composed WSMTs, no political interference, and having up-to-date financial records, access to spare parts and technical services and setting of tariffs. On the otherhand, Wassa Amenfi and Wassa East districts did not meet the benchmark at all for 5 out of 10 indicators making them the worse performing districts.

Table 5: District overview of WSMT-ST performance

District	Number of WSMT-STs	Governance				Operations			Financial management		
		G1a	G1b	G2	G3	O1	O2	O3	FM1	FM2	FM3
Ahanta West	7	43%	71%	57%	71%	86%	57%	29%	71%	29%	86%
Aowin	2	50%	100%	100%	100%	100%	50%	50%	100%	50%	100%
Bia West	4	25%	50%	75%	50%	75%	50%	50%	100%	25%	100%
Bibiani-Ahwiaso-Bekwai	4	0%	75%	50%	50%	0%	50%	75%	50%	0%	100%
Bodi	4	75%	75%	75%	75%	0%	75%	0%	100%	75%	100%
Ellembelle	6	0%	83%	83%	100%	100%	50%	17%	83%	17%	50%
Jomoro	4	25%	75%	100%	75%	100%	75%	75%	75%	75%	100%
Juaboso	2	50%	100%	100%	100%	100%	100%	100%	100%	50%	100%
Nzema East	2	0%	0%	50%	100%	100%	0%	50%	100%	0%	100%
Sefwi Akontombra	2	0%	50%	50%	50%	50%	0%	0%	100%	50%	100%
Sefwi Wiaso	8	25%	63%	38%	88%	100%	38%	50%	88%	13%	100%
Suaman	1	0%	100%	100%	100%	0%	100%	100%	0%	100%	100%
Tarkwa-Nsuem	5	20%	20%	20%	20%	80%	20%	20%	100%	0%	80%
Wassa Amenfi Central	1	0%	0%	0%	100%	100%	0%	0%	100%	0%	100%
Wassa Amenfi East	4	0%	25%	50%	75%	50%	0%	0%	75%	0%	100%
Wassa Amenfi West	2	0%	50%	100%	50%	50%	100%	50%	50%	0%	100%
Wassa East	2	50%	0%	0%	0%	0%	50%	50%	100%	0%	100%
Mpohor	4	25%	0%	75%	50%	50%	25%	25%	100%	25%	100%
Presetee-Huni Valley	7	43%	29%	43%	86%	29%	29%	43%	86%	0%	29%
Grand Total	71	25%	52%	59%	70%	65%	44%	38%	85%	23%	86%

Performance of Service Authorities

Metropolitan, Municipal and District Assemblies are water service authorities, overseeing and providing support to water service providers in the region. Their performance has been assessed against indicators and benchmarks related to the presence and performance of service authorities. Table 6 shows for each district whether or not the benchmark on the service authority indicators has been met. It also presents the total number of service authority benchmarks met in each district. Most of WSMTs-SC have not received any monitoring support from MMDAs. Less than half of MMDAs in the region have not published and gazetted their bye-laws for WSMTs. Overall, most MMDAs have met the benchmark for 3 out of 7 of the service authority indicators with only Aowin district meeting all indicators.

Table 6: District overview of service authority performance

District	Service authority indicator benchmarks (1 = benchmark met; 0 = benchmark not met)							Proportion of benchmarks met
	Full WASH unit with good coordination and collaboration	DWSP developed with active participation of relevant departments	WASH Budget allocation and at least 50% disbursement	Bye-laws for WSMTs published and gazetted	At least 50% of NGOs inform the MMDA about activities and align to DWSP	Regular monitoring support to at least half of the WSMTs-SC	Regular monitoring support to at least half of the WSMTs-ST	
Ahanta West	1	1	0	1	1	0	0	57%
Aowin	1	1	1	1	1	1	1	100%
Bia East	1	0	1	0	1	0		50%
Bia West	1	0	0	1	0	0	1	43%
Bibiani-Ahwiaso-Bekwai	1	1	1	0	1	0	1	71%
Bodi	0	1	0	0	1	0	1	43%
Ellembelle	1	1	1	1	0	1	0	71%
Jomoro	1	1	1	0	1	0	1	71%
Juabuso	1	1	0	0	0	0	1	43%
Mpohor	0	0	0	0	1	0	1	29%
Nzema East	1	1	1	0	1	0	1	71%
Presetee-Huni Valley	1	1	0	0	1	1	0	57%
Sefwi Akontombra	1	1	0	0	1	0	0	43%
Sefwi Wiaso	1	1	0	1	1	1	1	86%
Sekondi Takoradi	1	0	0	0	1	1		50%
Shama	1	1	1	0	1	0	1	71%
Suaman	1	0	0	0	1	0		33%
Tarkwa-Nsuem	1	1	1	1	1	0	0	71%
Wassa Amenfi Central	0	0	0	0	1	0	1	29%
Wassa Amenfi East	1	1	1	0	1	0	0	57%
Wassa Amenfi West	1	1	1	0	1	0	1	71%
Wassa East	1	1	1	1	1	0	1	86%
Grand Total	19	16	11	7	19	0	13	1214%

Summary of main findings

- More than two thirds and about half of piped schemes and handpumps respectively are fully functional (Pipe schemes 83% ; Handpumps 50%). The 35% (1,040) handpumps not working could be serving an estimated 312,000 people in the region.
- Most water facilities in the region provide low basic water services (Handpumps 5%; Piped Schemes 4%)
- Majority of WSMTs for handpumps and piped schemes in the region did not perform well especially in the areas of financial management, record keeping and governance.
- Most MMDAs did not have published and gazetted bye-laws nor did they provide regular monitoring support to at least half of WSMTs-SC.

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