

Fact sheet

Rural and Small Towns Water Services

September 2015

Central Region



Area: 9,826 km²

Number of districts: 20

Total population: 2,201,863

Rural population: 1,0378,78

Urban population: 1,163,985

This fact sheet gives an overview of rural and small towns water services in the **Central Region**. 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 Central Region. In Figure 2, piped scheme functionality(75%) is higher as compared to handpump functionality of about 53%. The most commonly used handpumps in the region are Ghana Modified India Mark II (28%), Vergnet (28%), Afridev (24%) and Nira AF-85 (17%). The largest community-managed Piped Scheme in the region is the Assin Foso Small Town Piped System with a designed population of 45,000.

Figure 1: Regional map

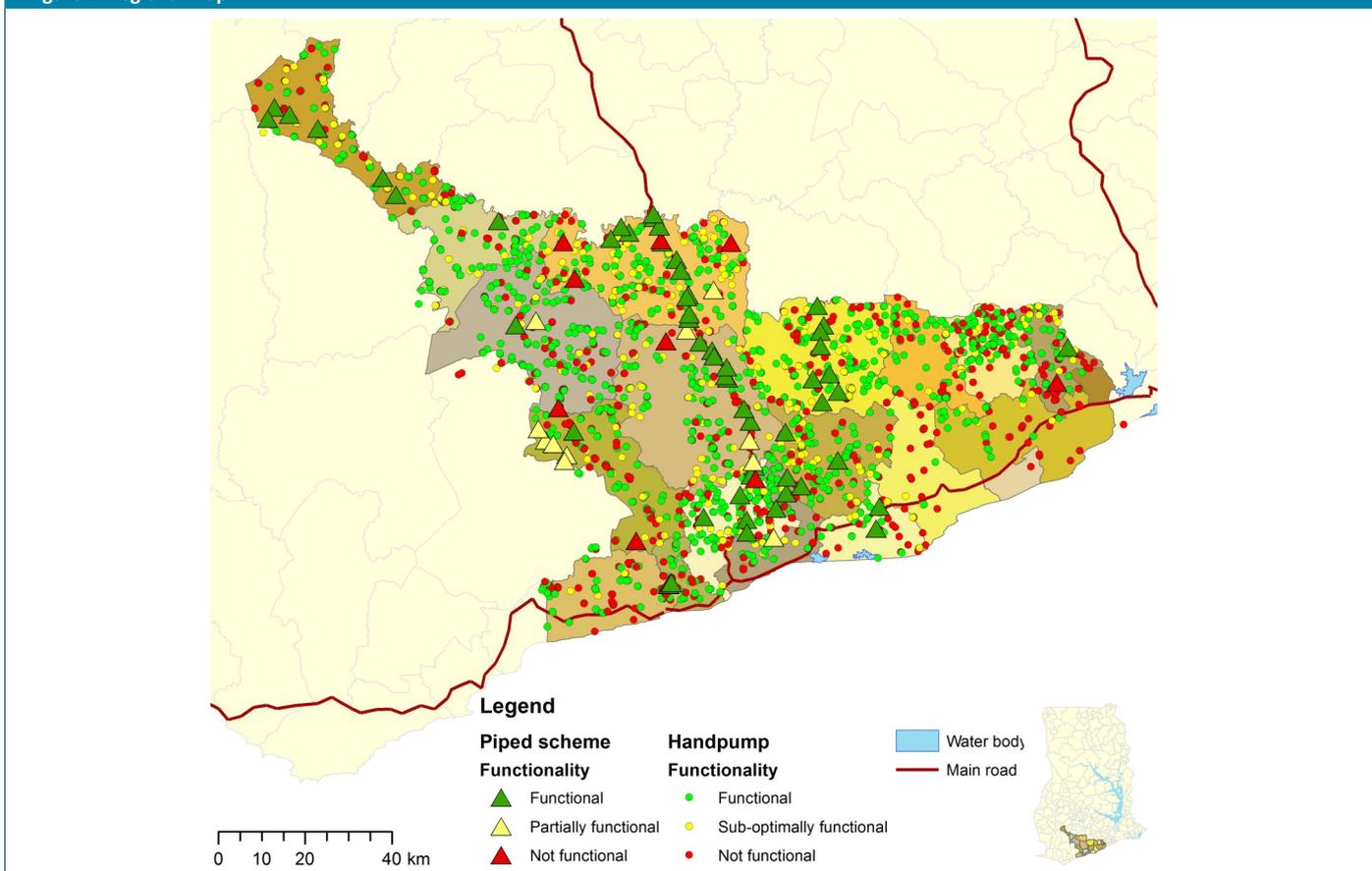
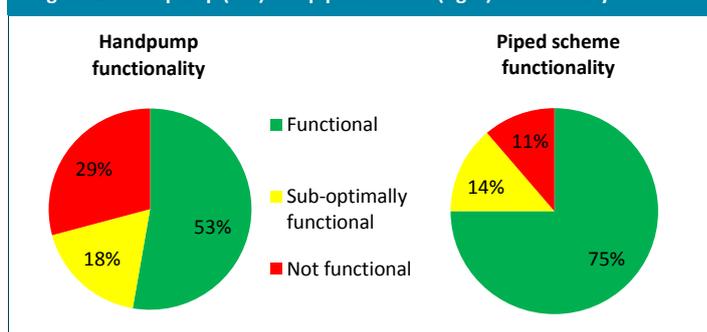


Table 1: Overview of water schemes

Rural and small town water coverage:				63.73%
Number of handpumps:				2,533
Type of piped scheme	Number	Number of standpipes	Number of hh connections	
Limited mechanised piped schemes	36	164	6	
Small community piped scheme	2	6	0	
Small town piped scheme	41	430	1,553	
Total piped schemes	79	600	1559	

Figure 2: Hand pump (left) and piped scheme (right) functionality

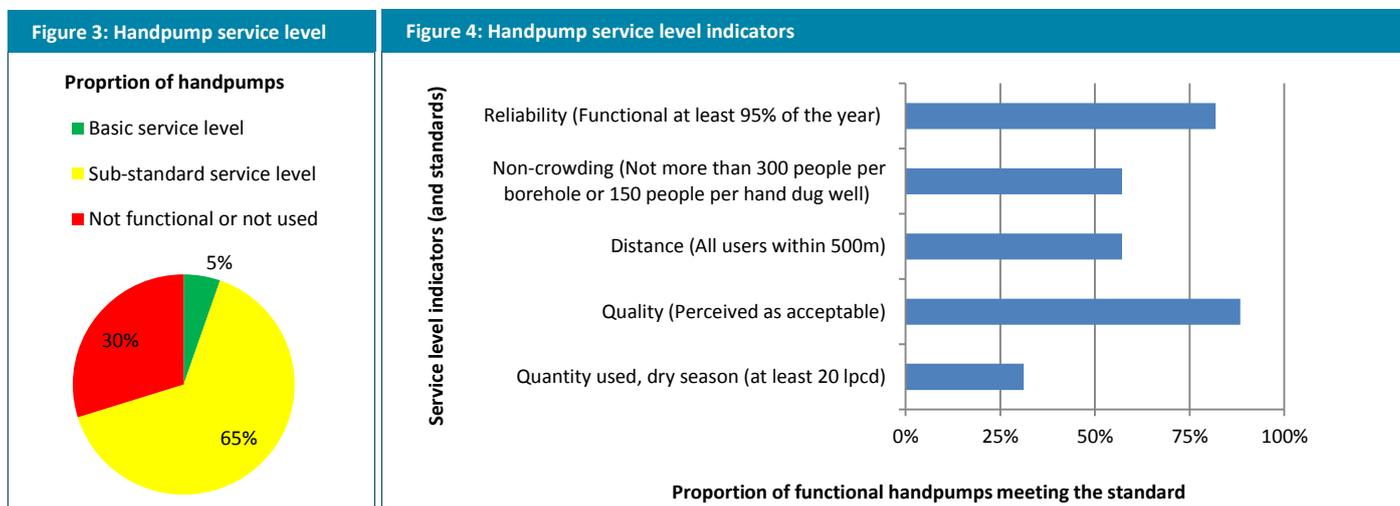


it takes more than 5 strokes for water to flow and not functional if water does not flow at all. A piped scheme is considered fully functional if all its sources are fully functional, sub-optimally functional if one or more of its sources are not functional, and not functional if none of its sources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

Note: A hand pump is considered fully functional if water flows within 5 strokes, sub-optimally functional if

Handpump Water Services

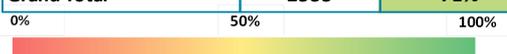
The level of service provided by handpumps has been assessed against the national standards for water **quantity**, and water-**quality**, **distance** from users, the maximum number of people per handpump (as an indication for **crowding**), and the **reliability** of the water services. Handpumps which 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.



About 71% of the handpumps in the region are functional. The Upper Denkyira East Municipality recorded the highest number of point sources functioning (78%) and the lowest was registered by Gomoa West District (35%) as shown in Table 2. The majority of functional handpumps provide reliable services. However, almost two third of handpumps provided water less than the standard 20 litres per capita per day (lpcd). Nearly 5% of all handpumps in the region provide basic services (meeting all service level indicators) with Agona East recording the highest (23%). However, handpumps in Assin South, Awutu Senya East, Cape Coast and Effutu districts did not provide water services. Overall, more than half of handpumps in Agona East, Asikuma Odoben, and Komenda Edina districts are reliable, serving not more than 300 people, provided water of acceptable quality and required quantity(20lpcd).

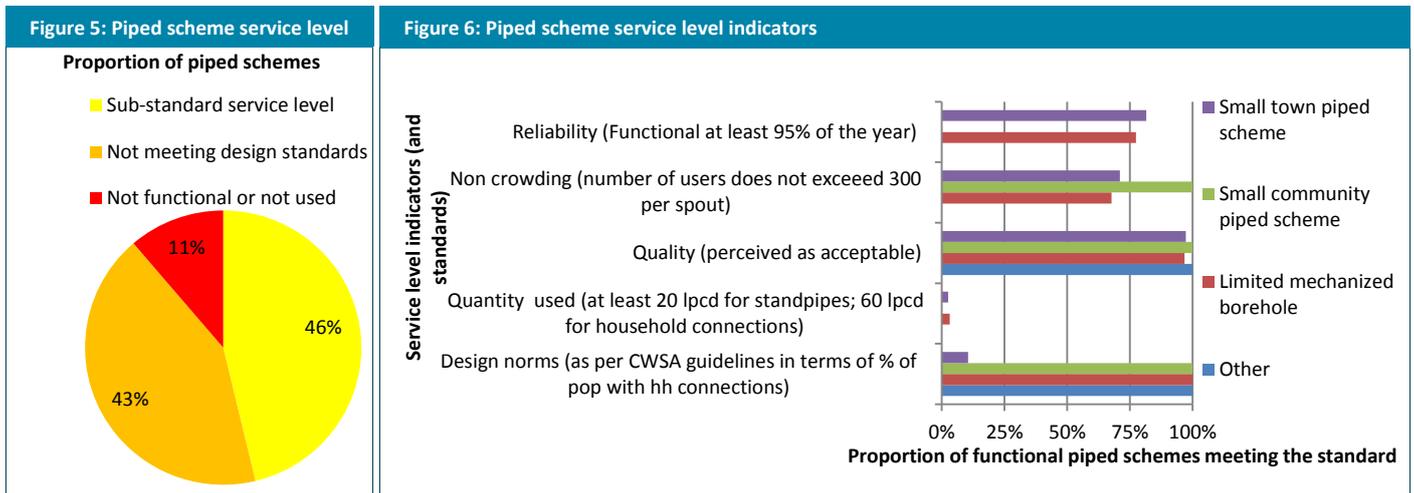
Table 2: District overview of handpump water services

District	Number of handpumps	Functionality	Providing basic services	Proportion of functional handpumps meeting the standard				
				Reliability	Non-crowding	Distance	Quality	Quantity used, dry season
Abura Asebu Kwamankese	195	74%	5%	76%	60%	80%	94%	22%
Agona East	155	74%	23%	89%	52%	87%	90%	91%
Agona West	58	69%	4%	73%	38%	48%	95%	44%
Ajumako Nyan Essiam	148	78%	5%	90%	44%	49%	83%	36%
Asikuma Odoben Brakwa	223	74%	20%	83%	57%	63%	95%	86%
Assin North	336	76%	1%	90%	74%	58%	96%	2%
Assin South	267	73%	0%	78%	54%	48%	85%	5%
Awutu Senya	124	56%	2%	96%	50%	86%	87%	21%
Awutu Senya East	7	43%	0%	33%	67%	33%	67%	67%
Cape Coast	31	61%	0%	79%	53%	74%	63%	21%
Effutu	2	50%	0%	100%	0%	100%	0%	100%
Ekumfi	43	65%	2%	89%	82%	54%	86%	7%
Gomoa East	48	50%	6%	83%	79%	38%	79%	33%
Gomoa West	37	35%	5%	69%	69%	54%	85%	85%
Hemang Lower Denkyira	130	62%	6%	71%	60%	44%	75%	65%
Komenda Edina Eguafo Abirem	96	47%	9%	84%	62%	96%	87%	50%
Mfantsiman	88	72%	1%	84%	56%	16%	70%	14%
Twifo Atti Mokwa	244	77%	1%	79%	65%	55%	96%	6%
Upper Denkyira East	166	78%	2%	74%	41%	53%	90%	47%
Upper Denkyira West	135	73%	1%	74%	40%	21%	77%	14%
Grand Total	2533	71%	5%	82%	57%	57%	88%	31%



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 national guidelines for each type of piped scheme. Piped schemes which meet the standard on these service level indicators and the design norm are considered to provide basic 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 most (89%) of the piped schemes are functional, none of them provided basic services. Almost two thirds (76%) of the functioning schemes are reliable.

The water quality of all pipe schemes is perceived as acceptable. Most of the facilities performed creditably well in all the service level indicators except for the quantity of water used, which recorded a regional average of 3%. More than half of all piped schemes in the region provided water of acceptable quality and quantity, were accessible, and reliable except in the Hemang Lower Denkyira district where only the quantity indicator was met.

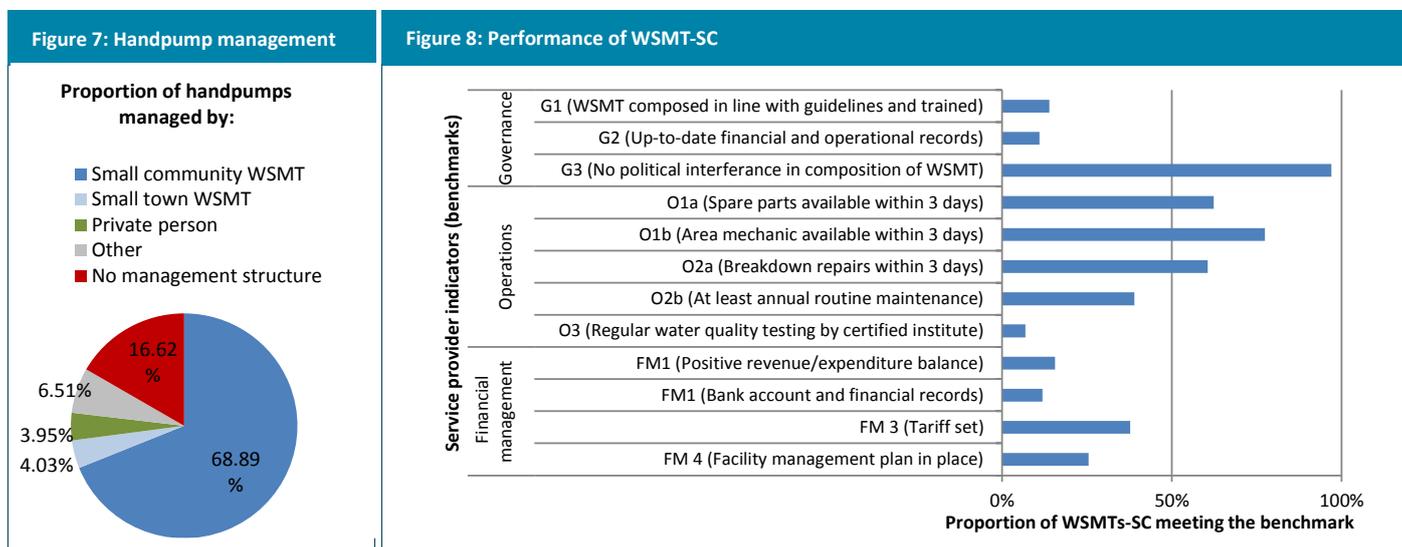
Table 3: District overview of piped scheme water services

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
Abura Asebu Kwamankese	7	86%	0%	83%	83%	100%	0%	50%
Ajumako Nyenan Essiam	2	100%	0%	100%	100%	100%	0%	50%
Asikuma Odoben Brakwa	8	100%	0%	88%	50%	100%	0%	25%
Assin North	21	81%	0%	94%	65%	100%	6%	41%
Assin South	15	93%	0%	86%	93%	100%	0%	57%
Awutu Senya	2	50%	0%	100%	100%	100%	0%	100%
Ekumfi	2	100%	0%	50%	0%	100%	0%	100%
Hemang Lower Denkyira	7	86%	0%	0%	17%	83%	0%	83%
Komenda Edina Eguafo Abirem	4	100%	0%	100%	50%	100%	25%	100%
Mfantisman	2	100%	0%	100%	100%	100%	0%	100%
Twifo Atti Mokwa	3	67%	0%	50%	100%	100%	0%	0%
Upper Denkyira East	1	100%	0%	100%	100%	100%	0%	0%
Upper Denkyira West	6	100%	0%	50%	83%	83%	0%	33%
Grand Total	80	89%	0%	77%	69%	97%	3%	52%



Handpump Management

As shown in Figure 7, the majority of hand pumps in the region are managed by Water and Sanitation Management Teams for Small Communities (WSMTs-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.



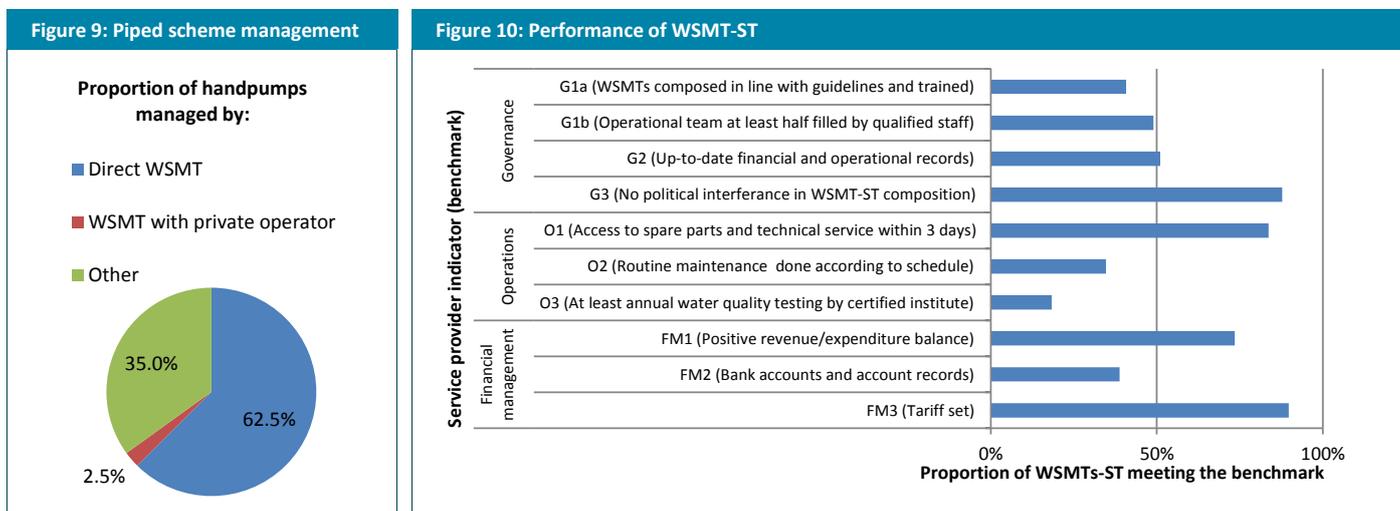
More than 50% of the WSMTs-SC met the benchmarks for no-political interference, spare parts availability, area mechanics availability and breakdown repairs whilst many missed the benchmark for the rest of the indicators. The performance of the WSMTs was generally poor in water quality testing, financial management, and composition of WSMTs-SC. Nevertheless, good performances were recorded in all districts in the areas of non-political interference and area mechanics availability within 3 days. The WSMTs-SC in the Effutu district performed well as compared to the Gomoa East district that performed poorly in the region.

District	Number of WSMTs-SC	Governance			Operations					Financial management			
		G1	G2	G3	O1a	O1b	O2a	O2b	O3	FM1	FM2	FM3	FM4
Abura Asebu Kwamankese	69	16%	29%	94%	61%	88%	67%	35%	75%	38%	33%	59%	42%
Agona East	77	22%	3%	96%	62%	83%	66%	39%	1%	12%	4%	39%	45%
Agona West	21	14%	14%	90%	62%	76%	71%	33%	0%	19%	10%	29%	19%
Ajumako Enyan Essiam	77	25%	6%	97%	69%	86%	64%	32%	0%	21%	10%	30%	16%
Asikuma Odoben Brakwa	87	3%	3%	98%	66%	76%	54%	69%	0%	2%	2%	14%	38%
Assin North	164	11%	5%	99%	82%	88%	77%	34%	0%	12%	7%	27%	11%
Assin South	118	18%	18%	97%	62%	79%	55%	13%	3%	17%	19%	56%	18%
Awutu Senya	64	13%	3%	94%	64%	92%	50%	64%	5%	6%	5%	22%	16%
Awutu Senya East	5	40%	20%	100%	20%	80%	40%	20%	40%	20%	0%	40%	100%
Cape Coast	13	31%	38%	92%	62%	85%	69%	62%	0%	31%	23%	77%	15%
Effutu	2	100%	50%	100%	100%	50%	50%	0%	0%	0%	100%	50%	50%
Ekumfi	18	28%	17%	89%	50%	78%	61%	67%	0%	22%	11%	83%	67%
Gomoa East	17	6%	0%	100%	24%	29%	12%	0%	0%	0%	0%	0%	12%
Gomoa West	16	6%	6%	100%	69%	75%	56%	38%	25%	6%	13%	13%	31%
Hemang Lower Denkyira	40	8%	5%	100%	70%	75%	73%	83%	0%	15%	5%	28%	13%
Komenda Edina Eguafo Abirem	25	20%	12%	96%	96%	88%	72%	24%	0%	20%	20%	56%	44%
Mfantsiman	25	24%	16%	100%	56%	80%	52%	24%	4%	8%	16%	20%	32%
Twifo Atti Mokwa	128	4%	5%	98%	46%	53%	50%	36%	0%	10%	4%	41%	29%
Upper Denkyira East	58	19%	29%	97%	43%	78%	59%	50%	5%	29%	33%	64%	26%
Upper Denkyira West	24	4%	33%	100%	25%	42%	46%	13%	8%	42%	25%	38%	8%
Grand Total	1048	14%	11%	97%	62%	77%	61%	39%	7%	16%	12%	38%	25%



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.



As shown in Figure 9, the commonest management structure in the region was the Direct WSMT followed by the WSMT with private operator. More than 50% of the WSMTs - ST met the benchmark for no political interference, spare parts availability, positive revenue/expenditure balance and tariff setting. Many WSMTs missed the benchmark for the rest of the indicators.

Generally, the Assin South and Abura Asebu Kwamankese districts WSMTs-ST performed better as compared to worse performing districts like Awutu Senya and Awutu Senya East where only the benchmark of 3 out of 10 indicators were met.

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
Assin South	7	57%	43%	57%	100%	71%	57%	57%	86%	43%	86%
Abura Asebu Kwamankese	3	33%	33%	100%	100%	100%	33%	33%	100%	33%	100%
Assin North	3	0%	67%	33%	100%	100%	33%	33%	100%	33%	67%
Komenda Edina Eguafu Abirem	1	100%	100%	0%	0%	100%	100%	0%	100%	0%	100%
Asikuma Odoben Brakwa	11	27%	100%	55%	82%	100%	55%	0%	64%	36%	100%
Ajumako Enyan Essiam	1	0%	100%	100%	100%	100%	0%	0%	100%	0%	100%
Hemang Lower Denkyira	4	75%	25%	0%	100%	100%	25%	25%	50%	25%	100%
Twifo Atti Mokwa	3	33%	0%	33%	67%	33%	0%	0%	67%	0%	100%
Upper Denkyira East	4	50%	50%	50%	100%	25%	0%	0%	100%	50%	100%
Upper Denkyira West	7	29%	14%	71%	86%	86%	29%	29%	29%	86%	100%
Awutu Senya	2	100%	0%	0%	100%	100%	0%	0%	100%	0%	0%
Mfantsiman	2	50%	50%	100%	50%	100%	50%	0%	100%	50%	100%
Awutu Senya East	1	0%	0%	0%	100%	100%	0%	0%	100%	0%	0%
Grand Total	49	41%	49%	51%	88%	84%	35%	18%	73%	39%	90%



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. Majority of the MMDAs did not have District Water and Sanitation Plans, adequate budgetary allocation and disbursements and published and gazetted bye-laws to guide operations of WSMTs.

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	
Abura Asebu Kwamankese	1	0	0	0	0	0	1	29%
Agona East	1	0	0	0	0	1		33%
Agona West	1	1	0	0	0	1		50%
Ajumako Enyan Essiam	0	0	0	0	0	0	0	0%
Asikuma Odoben Brakwa	1	0	0	1	1	0	1	57%
Assin North	1	0	1	0	0	0	1	43%
Assin South	1	0	0	0	1	0	1	43%
Awutu Senya	1	0	0	0	0	0	0	14%
Awutu Senya East	1	0	0	0	1	0	0	29%
Cape Coast	1	0	0	0	0	0		17%
Effutu	1	0	0	0	0	1		33%
Ekumfi	1	0	0	0	1	0	0	29%
Gomoa East	1	1	1	0	1	1		83%
Gomoa West	1	0	0	0	0	1	1	43%
Hemang Lower Denkyira	1	0	0	0	1	0	0	29%
Komenda Edina Eguafu Abirem	0	0	0	0	0	1	1	29%
Mfantseman	1	0	0	0	0	1	0	29%
Twifo Atti Mokwa	1	0	0	0	1	1	0	43%
Upper Denkyira East	1	0	0	0	0	0	0	14%
Upper Denkyira West	1	0	1	1	1	1	1	86%
Grand Total	18	2	3	2	8			660%

Summary of main findings

- Majority of the piped schemes in the region were functional (75%) as compared to about 53% of handpumps that were functional. The 739(29%) non functional handpumps could be serving an estimated 221,700 people in the region
- Even though more than half of water supply systems were functional, majority did not provide basic services.
- Management of water facilities was generally better for pipe schemes than hand pumps which translated into higher functionality for pipe schemes (75%) than in handpumps(53%).
- The performance of all the districts, except Upper Denkyira which recorded 86% was generally poor. Majority of the MMDAs did not have District Water and Sanitation Plans, adequate budgetary allocation and disbursements and published and gazetted bye-laws to guide operations of WSMTs.

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