

Fact sheet

Rural and Small Towns Water Services September 2015

Northern Region



Area: 70,383 km²

Number of districts: 26

Total population: 2,479,461

Rural population: 17,287,49

Urban population: 750,712

This fact sheet gives an overview of rural and small towns water services in **Northern 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 Northern Region. Functionality of handpump facilities and piped schemes in the region were 57% and 67% respectively. The most commonly used hand pumps in the region were Afridev (63%) and the Ghana Modified Indian Mark II (26%). The largest community-managed Piped Scheme is the Savelugu Small Town Scheme with a design population of 34,000.

Figure 1: Regional map

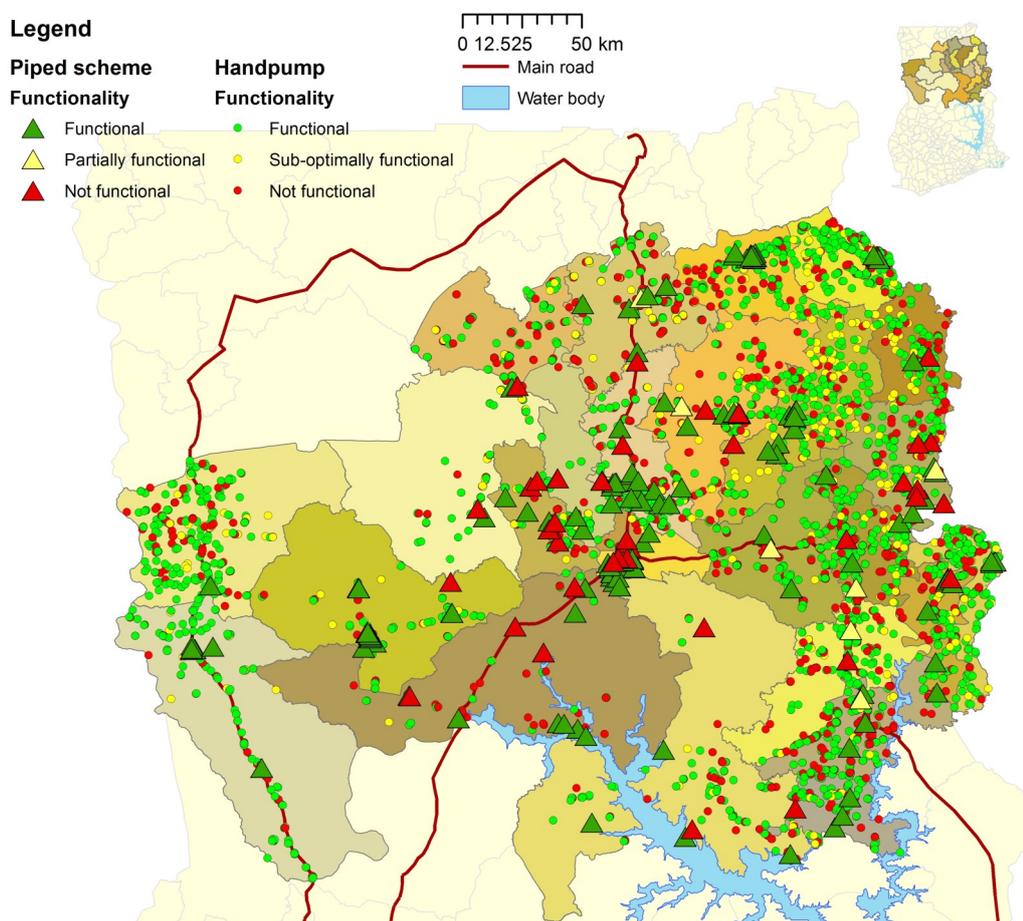
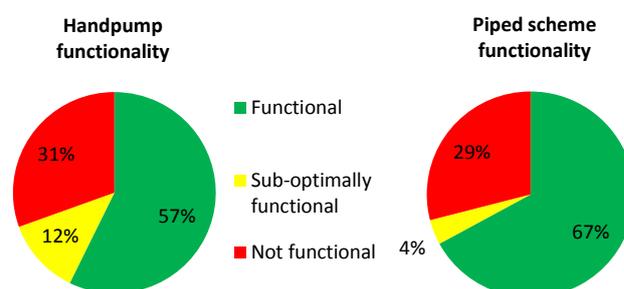


Table 1: Overview of water schemes

Rural and small town water coverage:		63.01%	
Number of handpumps:		4,657	
Type of piped scheme	Number	Number of standpipes	Number of hh connections
Limited mechanised piped schemes	106	301	66
Small community piped scheme	38	120	31
Small town piped scheme	47	649	4,848
Total piped schemes	191	1070	4945

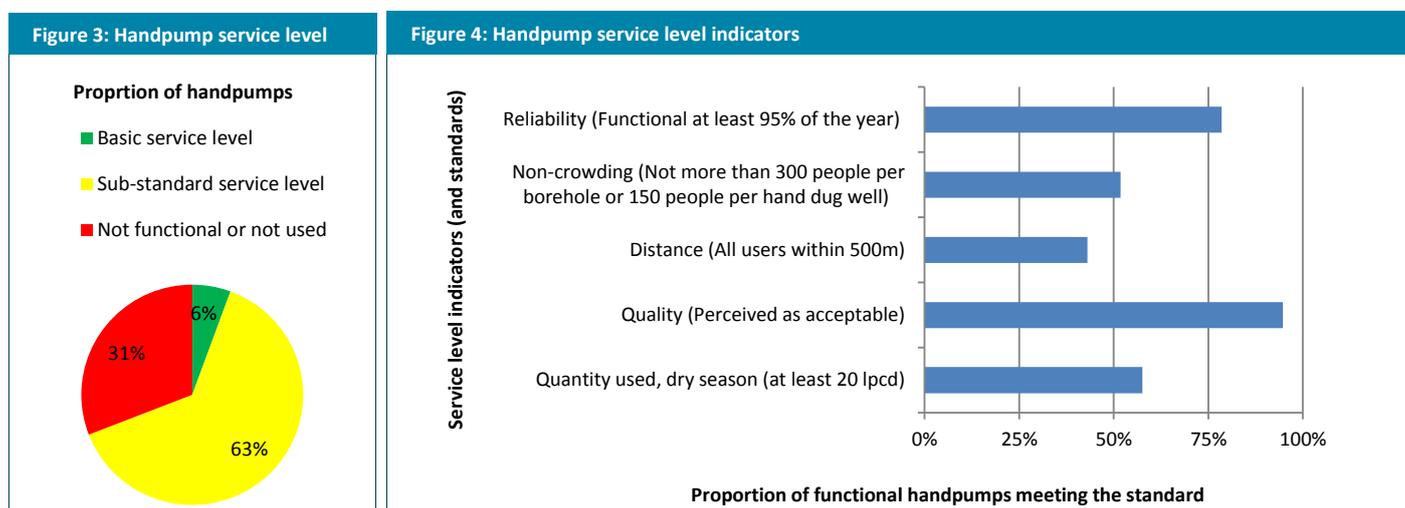
Figure 2: Handpump (left) and piped scheme (right) functionality



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 hand pumps meeting the standard on these service level indicators. An overview of handpump water services in each district is presented in Table 2.



As shown in Figure 3, only 6% of handpumps provided basic services. Majority of the handpumps provide water services all year round and are perceived to have acceptable water quality. Table 2, also shows that more than half of handpump facilities in Bole and Nanumba Districts met the benchmark for all five service level indicators.

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
Bole	166	84%	14%	57%	72%	66%	96%	86%
Bunkpurugu-Yunyoo	263	78%	6%	89%	54%	32%	98%	25%
Central Gonja	78	47%	1%	92%	65%	22%	92%	43%
Chereponi	144	72%	2%	71%	37%	44%	83%	58%
East Gonja	130	60%	6%	88%	44%	45%	99%	49%
East Mamprusi	197	70%	7%	58%	61%	45%	96%	93%
Gushegu	304	84%	3%	90%	62%	30%	91%	42%
Karaga	182	66%	8%	79%	48%	58%	97%	62%
Kpandai	174	71%	3%	81%	69%	60%	98%	27%
Kumbungu	79	77%	0%	85%	39%	31%	89%	31%
Mamprugu Moaduri	186	61%	5%	85%	38%	45%	94%	36%
Mion	162	60%	7%	86%	46%	45%	96%	81%
Nanumba North	256	69%	11%	73%	55%	64%	97%	86%
Nanumba South	166	59%	5%	69%	64%	24%	95%	90%
North Gonja	93	72%	3%	63%	51%	34%	90%	82%
Saboba	186	72%	2%	77%	29%	42%	95%	85%
Sagnarigu	10	30%	20%	100%	67%	67%	100%	67%
Sagnerigu	4	75%	0%	100%	0%	0%	100%	67%
Savelugu Nanton	347	67%	1%	85%	34%	33%	95%	28%
Sawla Tuna Kalba	301	74%	7%	75%	56%	36%	98%	66%
Tamale	10	80%	0%	38%	50%	13%	100%	50%
Tatale Sanguli	241	78%	11%	86%	51%	63%	98%	64%
Tolon	163	67%	18%	75%	49%	81%	92%	75%
West Gonja	130	74%	2%	82%	54%	47%	91%	39%
West Mamprusi	300	53%	0%	82%	54%	13%	94%	33%
Yendi	233	73%	4%	72%	54%	37%	98%	47%
Zabzugu	152	64%	6%	72%	51%	39%	91%	95%
Grand Total	4657	69%	6%	78%	52%	43%	95%	58%



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.

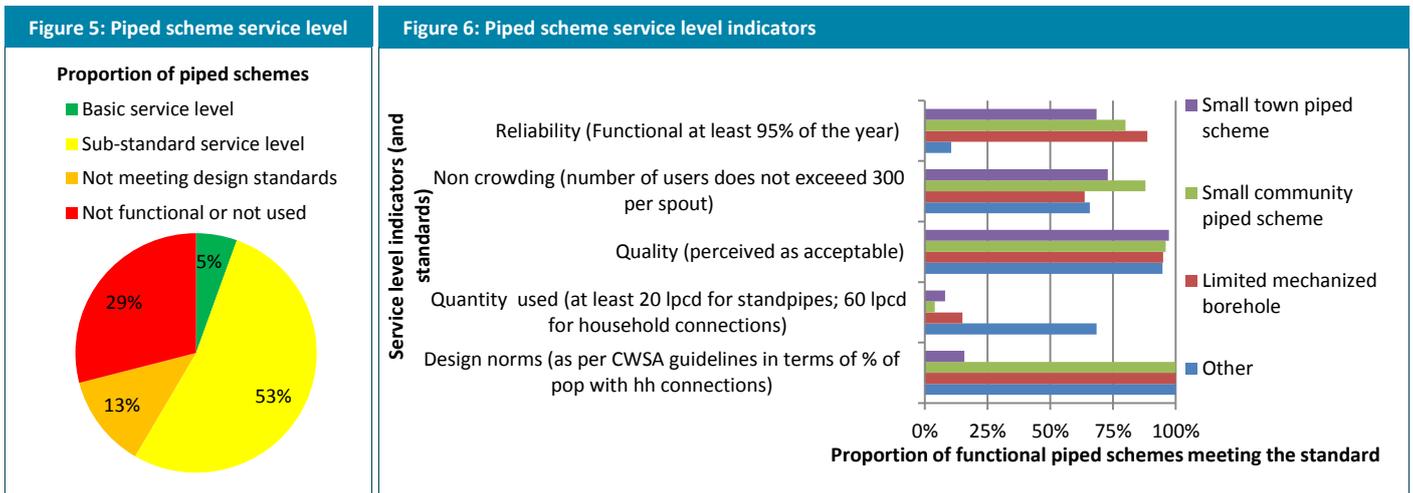
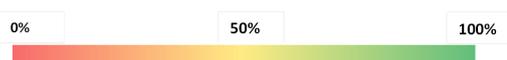


Figure 5 shows that majority of the piped schemes in the region did not provide basic services. As seen in Table 3, most piped schemes in the districts were delivering water less than the 20lpcd as required per the national guidelines. On the other hand, more than half of piped schemes in Sawla Tuna Kalba and Nanumba North districts met the benchmark for reliability, accessibility and quality indicators.

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
Bole	8	100%	0%	75%	25%	75%	0%	88%
Bunkpurugu-Yunyoo	6	83%	0%	60%	100%	100%	0%	0%
Central Gonja	12	67%	0%	88%	63%	100%	0%	100%
Chereponi	2	50%	0%	100%	100%	100%	0%	100%
East Gonja	10	80%	10%	88%	88%	100%	13%	88%
East Mamprusi	16	100%	6%	88%	38%	100%	13%	94%
Gushegu	11	91%	27%	70%	70%	100%	40%	70%
Karaga	12	67%	17%	88%	63%	100%	25%	88%
Kpandai	5	80%	0%	100%	50%	100%	0%	0%
Kumbungu	3	67%	0%	100%	100%	50%	50%	50%
Mion	3	100%	33%	100%	33%	100%	33%	100%
Nanumba North	4	75%	0%	33%	67%	100%	0%	67%
Nanumba South	2	100%	0%	100%	100%	100%	0%	50%
North Gonja	4	50%	0%	50%	100%	50%	0%	50%
Saboba	12	50%	0%	67%	80%	100%	0%	100%
Sagnarigu	3	67%	0%	50%	100%	100%	0%	100%
Savelugu Nanton	22	86%	0%	84%	95%	95%	0%	84%
Sawla Tuna Kalba	1	100%	0%	100%	100%	100%	0%	100%
Tamale	61	59%	7%	11%	64%	94%	72%	100%
Tatale Sanguli	4	75%	25%	100%	33%	100%	33%	67%
Tolon	14	29%	0%	100%	75%	100%	0%	75%
West Gonja	22	68%	5%	100%	93%	100%	7%	100%
West Mamprusi	6	100%	0%	17%	67%	100%	0%	50%
Yendi	4	75%	0%	67%	67%	100%	0%	67%
Zabzugu	8	75%	0%	83%	67%	83%	50%	50%
Grand Total	255	71%	5%	67%	69%	96%	23%	82%



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 (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.

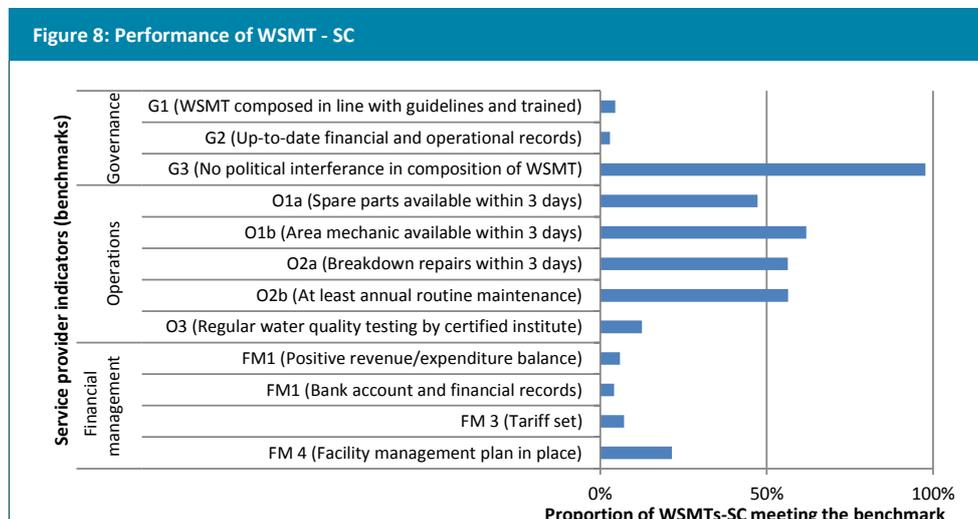
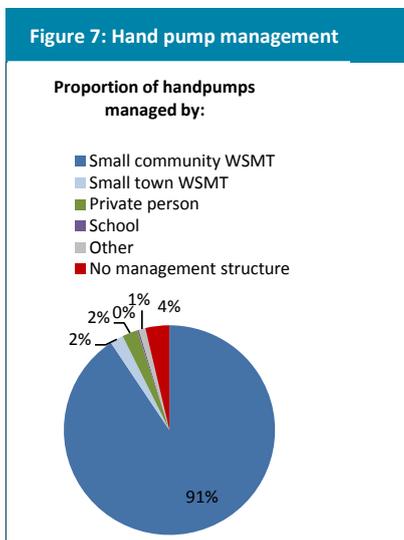


Figure 8 depicts that more than half of WSMTs-SC met the benchmarks for 4 out of 12 indicators. As shown in Figure 7, majority of handpumps are managed by WSMTs-SC. Generally, many WSMTs-SC did not do well on many of the indicators. However, good performance by WSMTs-SC in many districts were observed in non political interference, availability of area mechanics services, breakdown repairs and routine maintenance indicators as shown in Table 4.

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
Bole	76	3%	16%	97%	72%	78%	74%	30%	1%	12%	8%	8%	32%
Bunkpurugu-Yunyoo	224	0%	3%	100%	56%	62%	69%	74%	1%	13%	3%	0%	23%
Central Gonja	32	28%	3%	91%	53%	63%	38%	84%	6%	6%	9%	25%	34%
Chereponi	86	14%	0%	94%	31%	59%	38%	26%	10%	0%	0%	2%	8%
East Gonja	50	20%	20%	96%	36%	40%	30%	90%	8%	42%	18%	24%	30%
East Mamprusi	74	1%	3%	99%	55%	74%	66%	30%	7%	4%	15%	3%	34%
Gushegu	187	1%	0%	98%	63%	71%	58%	72%	23%	0%	0%	2%	11%
Karaga	73	4%	1%	97%	85%	90%	79%	95%	41%	7%	7%	10%	51%
Kpandai	96	7%	1%	98%	29%	46%	48%	52%	1%	0%	2%	9%	19%
Kumbungu	33	0%	3%	100%	70%	88%	73%	55%	48%	12%	6%	6%	9%
Mamprugu Moaduri	41	2%	2%	71%	20%	76%	68%	80%	29%	2%	2%	0%	32%
Mion	82	1%	1%	99%	45%	77%	63%	98%	16%	1%	2%	22%	51%
Nanumba North	134	2%	3%	97%	37%	53%	67%	40%	4%	4%	3%	1%	19%
Nanumba South	82	1%	5%	96%	29%	43%	40%	56%	7%	1%	2%	4%	29%
North Gonja	25	24%	4%	96%	12%	56%	56%	48%	24%	12%	4%	32%	28%
Saboba	111	1%	5%	99%	42%	72%	48%	35%	10%	6%	9%	1%	12%
Sagnarigu	9	11%	11%	100%	33%	78%	33%	22%	33%	0%	11%	44%	22%
Savelugu Nanton	124	10%	2%	98%	52%	83%	66%	73%	58%	6%	2%	17%	29%
Sawla Tuna Kalba	231	1%	0%	99%	20%	29%	41%	4%	3%	0%	0%	5%	1%
Tatale Sanguli	133	9%	6%	100%	55%	68%	60%	72%	0%	8%	9%	8%	38%
Tolon	51	14%	2%	96%	55%	76%	53%	53%	49%	24%	6%	27%	31%
West Gonja	41	12%	2%	95%	61%	88%	61%	34%	10%	22%	15%	22%	17%
West Mamprusi	84	0%	0%	100%	56%	64%	49%	49%	4%	0%	0%	2%	31%
Yendi	122	0%	2%	100%	48%	60%	52%	86%	5%	2%	1%	1%	8%
Zabzugu	75	8%	0%	100%	64%	41%	55%	77%	0%	1%	5%	12%	5%
Grand Total	2276	5%	3%	98%	47%	62%	56%	56%	13%	6%	4%	7%	22%

0% 50% 100%

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.

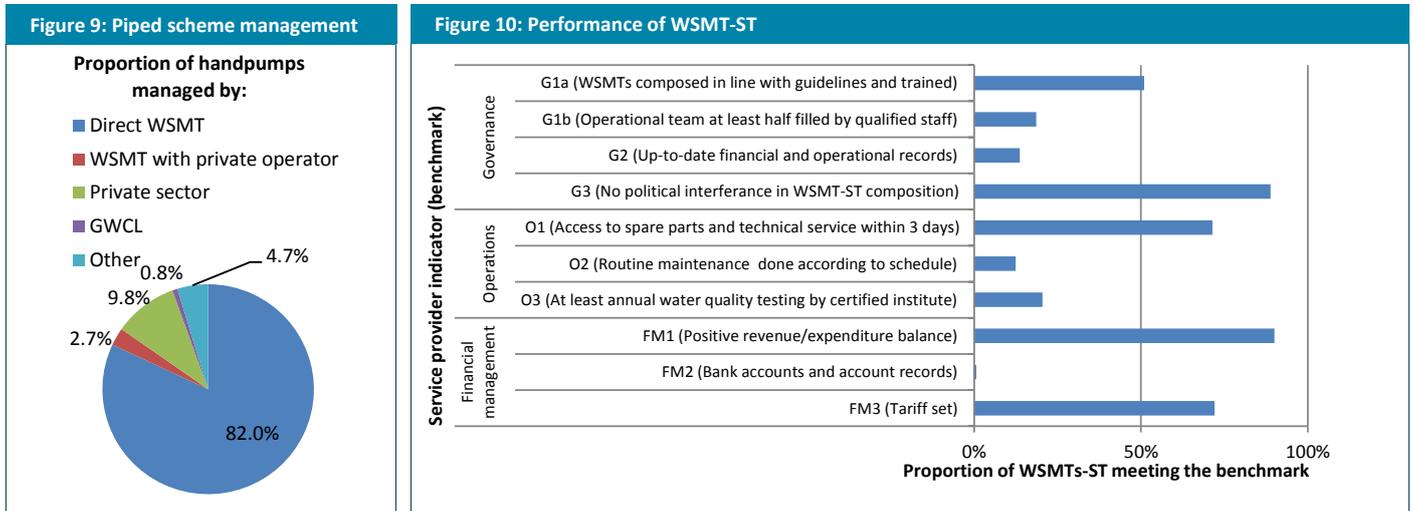


Figure 9 revealed that half of WSMTs-ST met the benchmark for 5 out of 10 indicators assessed. Majority of piped schemes are managed by WSMTs-ST. The performance of WSMTs-ST across all 26 districts was generally not satisfactory particularly in the area of bank accounts and records keeping, routine maintenance, and water quality testing as shown in Table 5. However, in Bunkprugu-Yunyoo district more than two-thirds of WSMTs-ST met the benchmark for 8 out of 10 indicators.

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
Bole	7	0%	0%	14%	100%	100%	0%	0%	100%	0%	29%
Bunkpurugu-Yunyoo	1	100%	100%	100%	100%	100%	100%	0%	100%	0%	100%
Central Gonja	11	27%	18%	18%	91%	55%	9%	27%	91%	0%	91%
Chereponi	2	50%	50%	0%	50%	50%	50%	50%	50%	0%	50%
East Gonja	8	25%	0%	13%	100%	63%	25%	0%	100%	0%	88%
East Mamprusi	2	0%	100%	0%	0%	0%	0%	50%	50%	0%	50%
Gushegu	9	67%	11%	0%	89%	89%	0%	33%	78%	0%	67%
Karaga	7	57%	14%	14%	71%	57%	14%	14%	86%	0%	86%
Kpandai	5	80%	40%	60%	80%	60%	40%	0%	80%	0%	100%
Kumbungu	3	33%	0%	0%	100%	33%	0%	33%	100%	0%	100%
Mion	2	0%	0%	50%	100%	100%	0%	0%	50%	0%	0%
Nanumba North	3	67%	100%	33%	100%	67%	33%	67%	67%	0%	67%
Nanumba South	3	67%	100%	33%	100%	67%	0%	0%	100%	0%	0%
North Gonja	4	50%	25%	0%	50%	0%	0%	25%	100%	0%	75%
Saboba	11	55%	0%	0%	100%	73%	18%	0%	100%	0%	9%
Sagnarigu	1	0%	0%	0%	100%	0%	0%	100%	100%	0%	100%
Savelugu Nanton	22	59%	32%	14%	95%	82%	18%	32%	95%	0%	91%
Sawla Tuna Kalba	1	100%	100%	100%	100%	0%	0%	0%	100%	0%	100%
Tamale	25	68%	0%	0%	100%	96%	0%	36%	92%	0%	80%
Tatale Sanguli	2	50%	50%	0%	100%	100%	0%	0%	100%	0%	50%
Tolon	14	50%	7%	7%	93%	79%	21%	14%	93%	0%	86%
West Gonja	2	0%	50%	0%	0%	50%	50%	0%	100%	0%	100%
West Mamprusi	7	29%	14%	14%	43%	57%	0%	14%	86%	0%	43%
Yendi	4	100%	25%	50%	100%	25%	25%	0%	75%	25%	100%
Zabzugu	5	60%	0%	40%	100%	80%	0%	0%	80%	0%	80%
Grand Total	161	51%	19%	14%	89%	71%	12%	20%	90%	1%	72%

0% 50% 100%

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.

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	
Bole	1	1	0	1	1	0	1	71%
Bunkpurugu-Yunyoo	1	1	1	0	1	0	1	71%
Central Gonja	1	1	0	0	0	0	0	29%
Chereponi	1	0	0	1	1	0	0	43%
East Gonja	1	1	1	0	1	0	1	71%
East Mamprusi	1	1	1	0	0	1	1	71%
Gushegu	1	1	1	0	1	0	0	57%
Karaga	1	1	1	0	0	0	0	43%
Kpandai	1	1	0	0	1	0	0	43%
Kumbungu	1	1	1	0	0	0	0	43%
Mamprugu Moaduri	1	0	0	0	0	0		17%
Mion	1	0	1	0	1	0	0	43%
Nanumba North	1	0	1	0	1	0	1	57%
Nanumba South	1	1	1	0	1	0	0	57%
North Gonja	1	0	1	0	1	0	0	43%
Saboba	1	0	1	0	0	0	0	29%
Sagnarigu	0	0	1	0	1	0	1	43%
Savelugu Nanton	1	1	1	0	1	0	0	57%
Sawla Tuna Kalba	1	1	1	0	1	0	1	71%
Tamale	1	1	0	0	1		1	67%
Tatale Sanguli	1	1	0	0	1	0	1	57%
Tolon	1	1	1	0	0	0	0	43%
West Gonja	1	1	0	0	0	0	1	43%
West Mamprusi	1	1	1	0	1	0	0	57%
Yendi	1	1	0	0	0	0	1	43%
Zabzugu	1	1	1	0	1	1	1	86%
Grand Total	25	19	17	2	17	2	12	1343%

Summary of main findings

- One third of handpumps were found not functional in the region. The 1,421 (31%) handpumps found not to be working, could have been serving an estimated number of 426,300 people.
- More than two thirds of Pipe Schemes are functional
- The proportion of handpumps meeting the benchmark on all service levels indicators was very low (6%)
- The proportion of pipe schemes that provided basic services is 5%
- The performance of service providers for both WSMT-SC and WSMT-ST were generally low especially in the area of availability of bank accounts and keeping of financial records
- Service authorities in the region performed fairly well with 9 MMDAs meeting the benchmark for 4 out of the 6 indicators

Acknowledgement

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