

Factsheet

Rural and Small Towns Water Services September 2015

Upper East Region



Area: 8842 km²

Number of districts: 13

Total population: 1,045,545

Rural population: 219,646

This fact sheet gives an overview of rural and small towns water services in the Upper East 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 potable water supply facilities in rural areas and small towns in the Upper East Region. As shown in Figure 2, almost two thirds of handpumps and piped schemes are fully functional. The most common type of handpumps in the region were AfriDev (67%) and Nira AF-85 (20%). The largest community-managed Piped Schemes are the Zebilla and Sandema Small Town Piped Schemes servicing a population of 12,000 and 5,000 respectively. Majority of the piped schemes are Limited Mechanised Piped Schemes.

Figure 1: Regional map

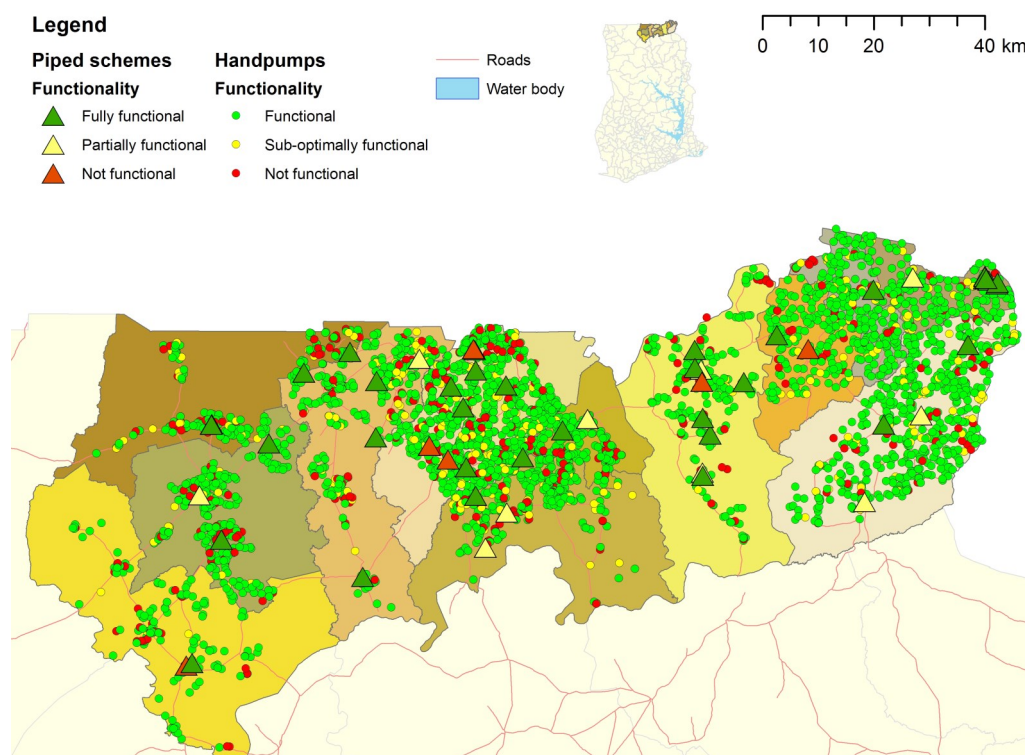
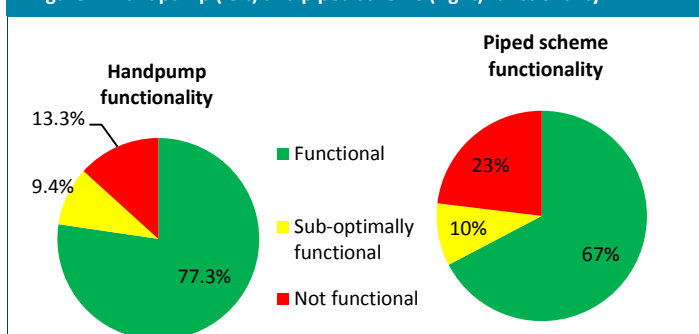


Table 1: Overview of water schemes

Rural and small town water coverage:			63.94%
Number of handpumps:			3,700
Type of piped scheme	Number	Number of standpipes	Number of hh connections
Limited mechanised piped schemes	28	77	21
Small community piped scheme	2	11	0
Small town piped scheme	22	308	2,716
Total piped schemes	52	396	2737

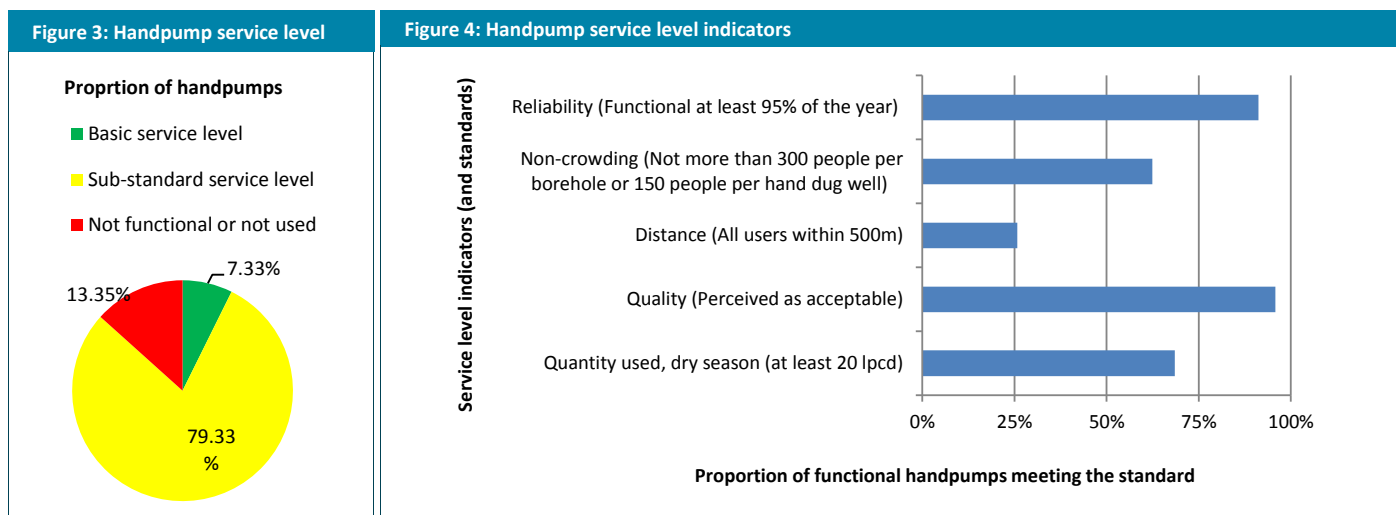
Figure 2: Handpump (left) and piped scheme (right) functionality



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

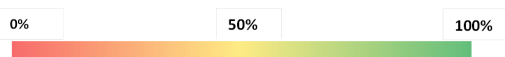
The level of service provided by handpumps has been assessed against the national standards for water **quantity**, and water **quality**, **distance** from users, the maximum number of people per handpump (as an indication for **crowding**), and the **reliability** of the water services. Handpumps which 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 handpumps meeting the standard on these service level indicators. An overview of handpump water services in each district is presented



Even though more than two thirds of handpumps are functional, only 7% provide basic services in line with the national guidelines. Whilst handpumps in Kasena Nankana West district were found not to provide any services, 25% in the Talensi district provided basic services representing the highest in the region. Out of the two thirds functioning handpumps, over 90% were found to be reliable and delivering the required 20 lpcd of water to the communities. However, less than half of handpumps provide services within the stipulated 500m from the facility to water users, except in the Talensi district where about 63% of handpumps met the benchmark for the distance indicator. This situation could be attributable to the dispersed settlement pattern which characterises the region. Overall, handpumps in the Talensi district are providing better services than any other district in the region whilst Bawku Municipal, Kasena Nankana West, and Bawku West districts require urgent improvements in service levels.

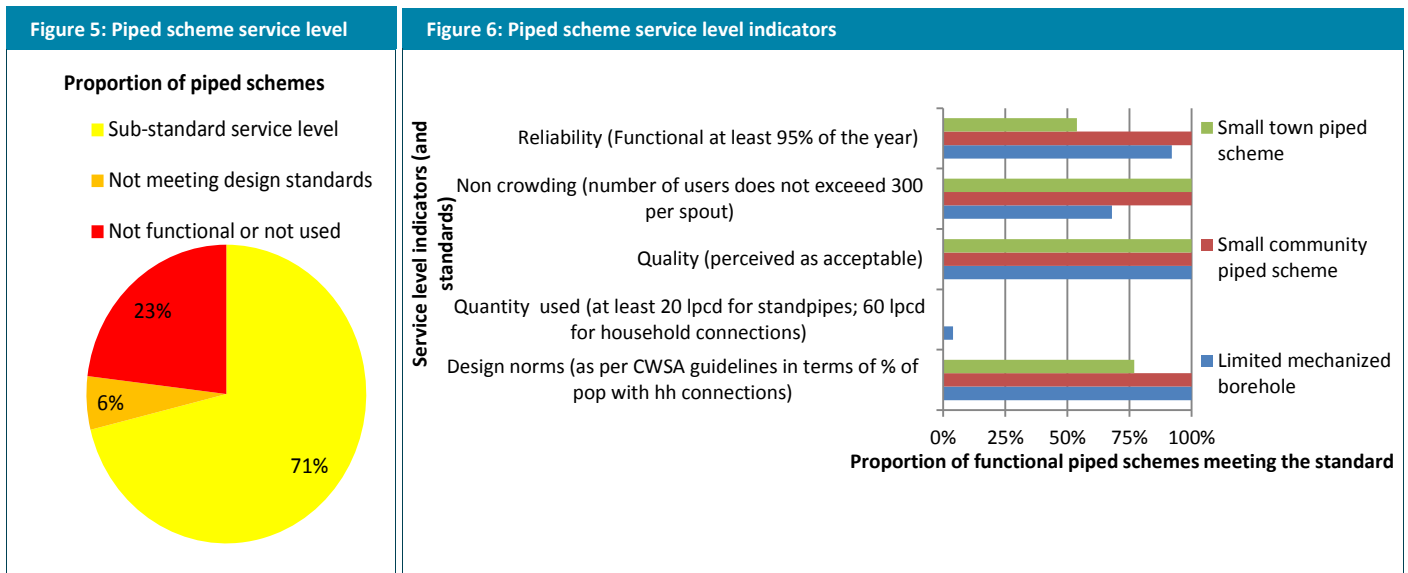
Table 2: District overview of handpump water services

District	Number of handpumps	Functionality	Providing basic services	Proportion of functional handpumps meeting the standard				
				Reliability	Non-crowding	Distance	Quality	Quantity used, dry season
Bawku	221	90%	1%	92%	51%	4%	97%	29%
Bawku West	215	82%	1%	90%	74%	2%	88%	34%
Binduri	165	90%	8%	88%	78%	18%	98%	93%
Bolgatanga	405	90%	2%	85%	72%	31%	98%	16%
Bongo	436	81%	15%	96%	63%	39%	96%	97%
Builsa North	284	88%	4%	97%	23%	39%	98%	54%
Builsa South	169	78%	3%	89%	46%	34%	97%	70%
Garu-Tempene	576	92%	9%	91%	77%	13%	99%	95%
Kassena Nankana	195	83%	2%	91%	69%	4%	96%	82%
Kassena Nankana West	346	84%	0%	93%	37%	8%	96%	53%
Nabdum	196	86%	9%	95%	45%	61%	98%	60%
Pusiga	174	93%	4%	92%	93%	13%	88%	93%
Talensi	318	85%	25%	86%	72%	63%	90%	98%
Grand Total	3700	87%	7%	91%	62%	26%	96%	68%



Piped Scheme Water Services

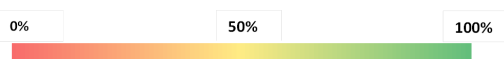
The level of service provided by piped schemes has been assessed against the national standards set for the rural water sub sector in Ghana on water quality and quantity (both for standpipes as well as household connections), the accessibility of the piped scheme in terms of maximum number of people 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.



Majority of the piped schemes are functional. Although most piped schemes are functional, non provide basic services to water users which raises serious concerns. Whilst all the piped schemes in the districts met at least 80% of the benchmark for reliability, accessibility and quality, the benchmark for quantity was noticeably very low in all districts implying that consumers get less than the required quantity of water per day. It is also worth noting that all piped schemes in the region have been designed in consonance with the national guidelines except in the Builsa North district.

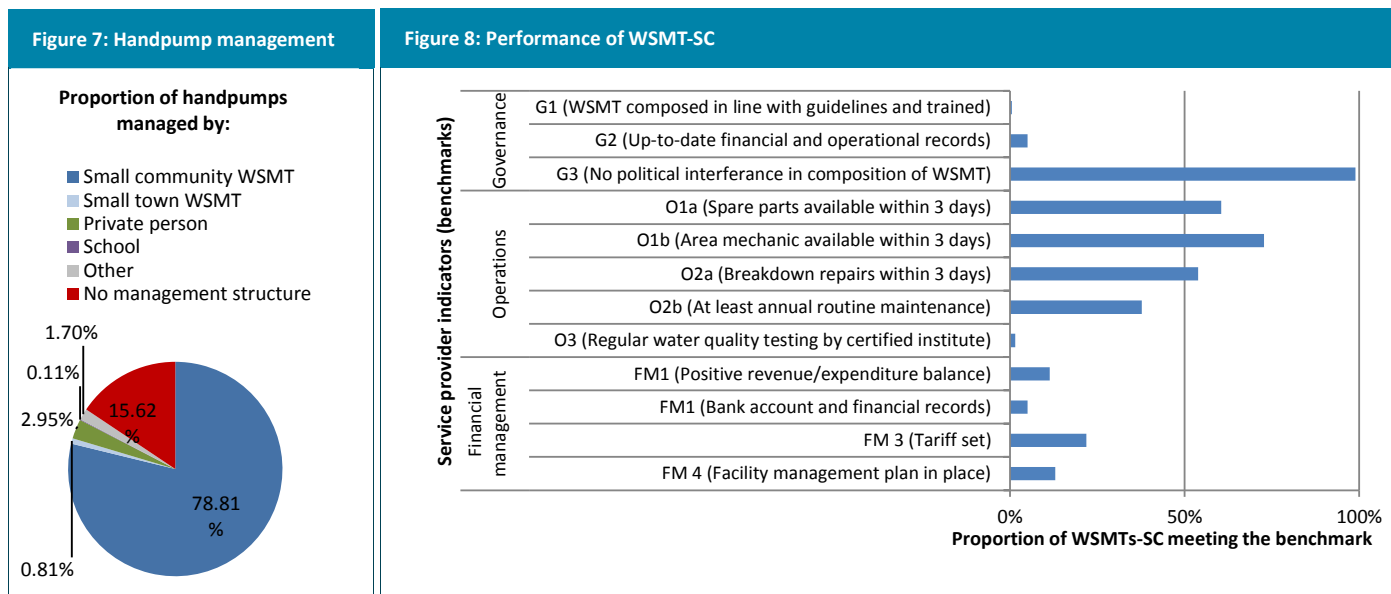
Table 3: District overview of piped scheme water services

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
Bawku	1	100%	0%	100%	0%	100%	0%	100%
Bawku West	8	75%	0%	67%	67%	100%	17%	100%
Binduri	2	50%	0%	0%	100%	100%	0%	100%
Bolgatanga	4	50%	0%	100%	50%	100%	0%	100%
Bongo	6	83%	0%	100%	60%	100%	0%	100%
Builsa North	3	67%	0%	50%	100%	100%	0%	0%
Builsa South	2	50%	0%	100%	100%	100%	0%	100%
Garu-Tempene	4	50%	0%	0%	100%	100%	0%	100%
Kassena Nankana	2	100%	0%	100%	100%	100%	0%	100%
Kassena Nankana West	7	71%	0%	100%	80%	100%	0%	80%
Nabdram	2	100%	0%	50%	100%	100%	0%	100%
Pusiga	8	100%	0%	100%	88%	100%	0%	100%
Talensi	3	100%	0%	67%	100%	100%	0%	100%
Grand Total	52	77%	0%	80%	80%	100%	3%	93%



Handpump Management

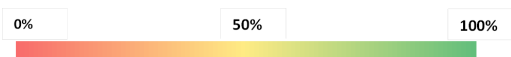
As shown in Figure 7, the majority of handpumps in the region are managed by Water and Sanitation Management Teams for Small Communities (WSMTs-SC). The performance of WSMTs-SC has been assessed against indicators and benchmarks related to governance, operations and financial management. Benchmarks have 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.



More than two thirds of handpumps in the region are managed by WSMTs-SC. Nearly more than half of WSMTs-SC met the benchmark for access to spare parts, area mechanic services and actually undertook repairs services which underscores the strong and well developed spare parts supply chain and repairs services in the region. However, just a quarter of WSMTs-SC carry out routine maintenance, set tariffs and have positive revenue/expenditure balance. The performance of the WSMTs-SC in districts in keeping up-to-date records, regular water quality testing, and having a facility management plan was low.

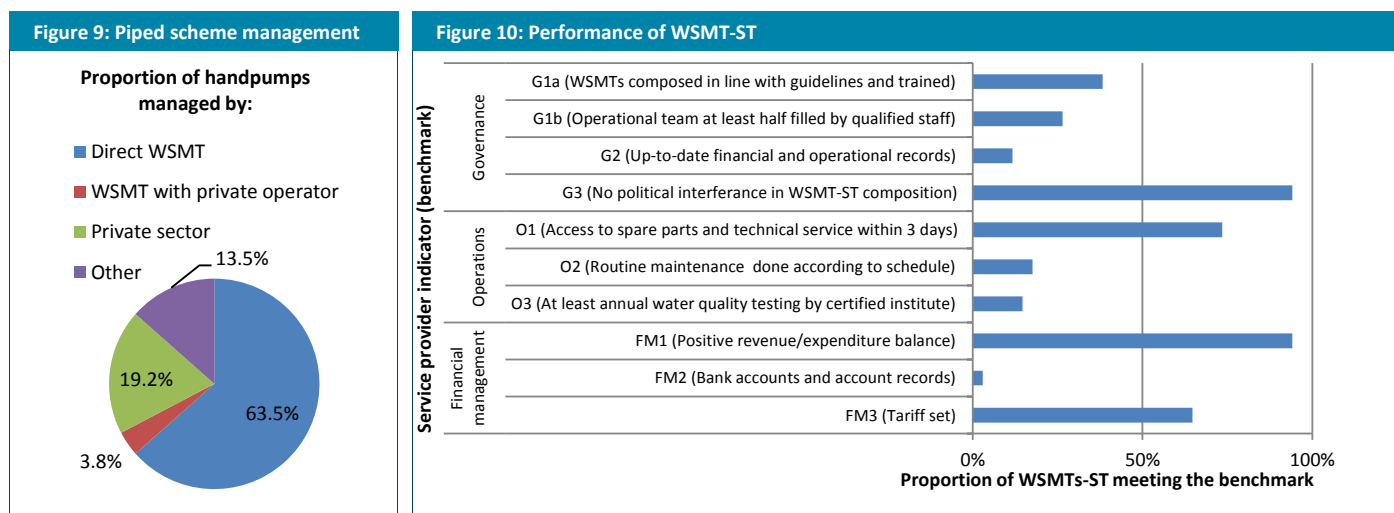
Table 4: District overview of WSMT-SC performance

District	Number of WSMTs-SC	Governance			Operations					Financial management			
		G1	G2	G3	O1a	O1b	O2a	O2b	O3	FM1	FM2	FM3	FM4
Bawku	190	3%	16%	98%	69%	91%	67%	41%	1%	9%	9%	34%	25%
Bawku West	190	1%	4%	98%	65%	92%	77%	72%	6%	4%	3%	75%	39%
Binduri	142	1%	1%	96%	58%	82%	65%	64%	3%	1%	4%	37%	32%
Bolgatanga	321	1%	7%	99%	52%	59%	56%	3%	1%	25%	6%	29%	27%
Bongo	363	0%	4%	100%	81%	87%	60%	35%	0%	10%	4%	12%	6%
Builsa North	107	0%	3%	99%	57%	70%	58%	77%	6%	5%	4%	4%	3%
Builsa South	102	0%	3%	100%	59%	69%	61%	70%	4%	14%	4%	1%	0%
Garu-Tempene	523	0%	4%	100%	51%	57%	49%	2%	1%	10%	5%	2%	1%
Kassena Nankana	137	0%	10%	99%	62%	72%	59%	49%	1%	17%	16%	58%	11%
Kassena Nankana West	231	0%	1%	99%	56%	71%	25%	10%	0%	11%	3%	9%	16%
Nabdram	96	0%	3%	95%	69%	86%	70%	77%	0%	20%	3%	24%	4%
Pusiga	82	1%	1%	100%	52%	61%	51%	30%	4%	6%	2%	27%	1%
Talensi	273	0%	5%	100%	57%	73%	34%	89%	0%	10%	4%	17%	6%
Grand Total	2757	1%	5%	99%	61%	73%	54%	38%	1%	11%	5%	22%	13%



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 (WSMT-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.



More than half of piped schemes are managed by WSMTs-ST as required by the national guidelines. At least half of the WSMTs-ST met the benchmark for 4 out of the 10 indicators. The WSMTs-ST generally performed better on the revenue/expenditure balance, tariff setting, access to spare parts and technical services, and absence of political interference in their composition and operations. However, only 3% of WSMTs-ST have the required bank accounts and accounts records. Similarly, financial and operational records are poorly kept (12%). The culture of routine maintenance and annual water quality test by certified institutions is low. The WSMTs-ST in the Garu-Tempene district performed well with more than one third meeting the benchmark for all the indicators. However, WSMTs-ST in Pusiga district failed to meet the benchmark for 7 out of 10 indicators making it the least performing in the region.

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
Pusiga	1	0%	100%	0%	100%	0%	0%	0%	100%	0%	0%
Kassena Nankana West	6	50%	33%	50%	83%	67%	17%	17%	100%	0%	67%
Binduri	2	0%	0%	0%	100%	100%	50%	50%	100%	0%	100%
Bawku West	6	33%	17%	0%	100%	67%	0%	17%	100%	0%	83%
Bongo	3	33%	0%	0%	100%	100%	0%	0%	100%	0%	67%
Talensi	2	50%	100%	0%	100%	50%	50%	0%	50%	0%	100%
Garu-Tempene	4	75%	75%	25%	75%	75%	25%	25%	100%	25%	25%
Bolgatanga	4	50%	0%	0%	100%	75%	25%	25%	100%	0%	25%
Builsa North	3	0%	0%	0%	100%	100%	33%	0%	100%	0%	100%
Nabdam	2	0%	0%	0%	100%	50%	0%	0%	50%	0%	50%
Kassena Nankana	1	100%	0%	0%	100%	100%	0%	0%	100%	0%	100%
Grand Total	34	38%	26%	12%	94%	74%	18%	15%	94%	3%	65%

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. As shown in Table 6, majority of the service authorities in the region have fully established units for WASH activities and at least 50% of NGOs inform them of their activities. However, budget allocation and disbursement for WASH activities was found to be low. In addition, all districts in the region surveyed showed that none of them have published and gazetted bye-laws in place for WSMTs nor did they provide any monitoring support visits to WSMTs in the communities.

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	
Bawku	1	1	1	0	1	0	1	71%
Bawku West	0	1	0	0	1	0	0	29%
Binduri	1	0	0	0	0	0	1	29%
Bolgatanga	1	0	1	0	1	0	0	43%
Bongo	1	1	0	0	1	0	0	43%
Builsa North	0	1	0	0	0	1	0	29%
Builsa South	0	0	0	0	1	0	1	29%
Garu-Tempane	1	1	1	0	1	0	0	57%
Kassena Nankana	1	1	1	0	1	0	0	57%
Kassena Nankana West	1	1	0	0	1	0	0	43%
Nabdram	1	0	0	0	1	0	0	29%
Pusiga	1	0	1	0	1	1	1	71%
Talensi	1	1	1	0	1	0	0	57%
Grand Total	10	8	6	0	11	2	4	

Summary of main findings

- More than two-third of the hand pumps and pipe schemes are functional
- Though the functionality of the water supply facilities in the Region was high the average level of services delivered were generally low. The less than a third (13%) of non-functional handpumps is estimated to be serving about 147,300 people.
- The majority of hand pumps (79%) are managed by WSMTs-SC. However, these WSMTs-SC perform poorly against the service provider indicators, with at least half of the WSMTs-SC meeting the benchmark for only 4 out of the 12 indicators. Similarly, at least half of the WSMTs-ST met the benchmark for 4 out of the 10 indicators.
- None of the MMDAs had published and gazetted bye-laws in place and also seldom provided monitor-

Acknowledgement

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