



REPUBLIC OF GHANA

MINISTRY OF SANITATION AND WATER RESOURCES

ANNUAL PROGRESS REPORT

FOR THE PERIOD

JANUARY - DECEMBER 2018

SUBMITTED TO

THE NATIONAL DEVELOPMENT PLANNING COMMISSION

IN

**RESPECT TO THE STATUS OF IMPLEMENTATION OF
THE MINISTRY'S SECTOR MEDIUM TERM
DEVELOPMENT PLAN 2018 – 2021**

MARCH 2019

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CHAPTER 1

1.0 INTRODUCTION

The Annual Progress Report outlines the Implementation, Monitoring and Evaluation (M&E) arrangements of the Ministry's programmes and projects as stated in the Medium-Term Development Plan (MTDP), 2018–2021. This year's Annual Progress Report (2018) for the Ministry of Sanitation and Water Resources has detailed performance of the sector, its achievements and progress and some key challenges.

The Ministry's M&E plan spells out among other things, the indicators needed for tracking programme and sub-programme, outputs and outcomes for the sector. This involves the progress of key policies and interventions undertaken from 2nd January 2018 to 31st December 2018, to ascertain whether intended objectives are being achieved. The sector during the year under review had effective collaboration with its stakeholders in the implementation of its programmes and projects in the area of the water and sanitation sub-sector, to achieve the stated goal, vision, mission and objectives.

1.1 Purpose of M&E for the stated period

The purpose of the 2018 M&E plan is to measure progress made in the implementation of the sector's programmes and projects' objectives in a structured way. The Plan enables the Ministry to align its programmes and projects to the objectives for the desired result, or otherwise and what/how corrective measures would (could) be applied to ensure the achievement of the desired results

Furthermore, the Sector M&E plan provides Management with the necessary information for decision making, identify challenges regarding the implementation of programmes and projects and propose suitable

recommendation towards achieving the specific goals and objectives of the SMTDP.

1.2 Summary of Achievement for The Sector

1.2.1 Proportion of the Annual and SMTDP Implemented in 2018

Table 1: Proportion of Annual and SMTDP Implemented

	Indicators	Baseline	Target	Actual
		2017	2018	2018
1. Proportion of the annual action plans implemented:				
a.	Percentage completed	NA	75%	27.55%
b.	Percentage of ongoing interventions	NA	75%	50.00%
c.	Percentage of interventions abandoned	NA	0%	1.02%
d.	Percentage of interventions yet to start	NA	25%	21.43%
2. Proportion of the overall medium-term development plan implemented		NA	25%	19.38%

1.3 Processes involved in conducting M&E

The processes involved in conducting M&E include data collection, collation, analysis and communication of results on performance and outcomes through an effective communication strategy. The results of the M&E plan feed into policy reviews and are also shared with all relevant key stakeholders both nationally and internationally, in order to feed into policy reviews. Another process is the communication strategy designed to arrive at an outcome to ensure that all relevant stakeholders (internal, external, local and international) are familiar with the results.

1.4 Status of implementation of SMTDP

The four (4) - year Sector Medium Term Development Plan covers programmes, projects and activities of the Water and Sanitation sub-sector under the Infrastructure Sector of the Economy.

The operationalization of the Plan encompasses aspects of Social Development, and Infrastructure, Environment and Human Settlements, which relates to the mandates and functions of the Ministry. The Plan specifically targets the Promotion of sustainable Water Resources development and management; improvement of access to safe and reliable water supply services for all; enhancement of access to improved and reliable environmental sanitation services; and promotion of efficient and sustainable wastewater management.

The status of the implementation for the year under review marks the initial implementation of the 2018-2021 Sector Medium Term Development Plan. Accordingly, the Sector has successfully chocked some progress with regards to its policy objectives.

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The Ministry's M&E plan spells out the indicators needed for tracking programme and sub-programme, outputs and outcomes for the sector. This involves the progress of key policies and interventions undertaken from 2nd January 2018 to 31st December 2018 to ascertain whether intended objectives are being achieved. The sector during the year had effective collaboration with its stakeholders in the implementation of its programmes and projects in the area of water and sanitation sub-sector to achieve the stated goal, vision, mission and objectives.

1.5 Difficulties or challenges encountered

The sector faces many challenges, inter alia, the need to preserve our water bodies, eliminate open defecation and manage our waste in these times of shrinking resources. There's always the challenge of finding the money to support our projects.

Key challenges encountered include but not limited to:

- Pollution of Water Resources
- Untimely releases of Resources
- Inadequate Budget provision
- Water Safety Challenges
- High Indebtedness of Water Systems to Electricity Providers
- High Non-Revenue Water among Piped Water Systems
- High Indebtedness by Customers to the Water Systems
- Huge Investments required on Poorly Managed Water Systems
- Inadequate Capacity of Communities to Manage Complex Water Systems
- Poor Attitude of Citizenry towards Environmental Management
- Theft of Solid Waste Infrastructure (Dust Bins)
- Damage of Pipe Routes
- Encroachment on Water Supply Systems and River Bodies

CHAPTER TWO

2.0 Monitoring and Evaluation of Activities Report Programme (Status for 2018)

2.1 Water Sub Sector

2.1.1 Urban Water Sub Sector – Ghana Water Company Limited

No.	Name of Project	Description	Contract sum (b)	Location	Contract or	Source of Funding	Start and End Date	Status of Implementation
1	GAMA Sanitation & Water Project – Component 2	Improvement of water supply within low income communities with the Greater Accra Metropolitan Area	\$48,100,000	Greater Accra Metropolitan Area	Various	World Bank	August 2015– May 2020	The Urban Water Supply Master Plan has been updated to guide the distribution infrastructure improvement works. At total of 250 km of pipelines laid.
2	Upper East Region Water Supply Project	Construction of 2MGD water supply system based on the Tono reservoir to serve Bolgatanga, Paga, Bongo and Navrongo)	€37,683,266	Navrongo and surrounding communities	DENYS ENGINEERS & CONTRACTORS B.V., NETHERLANDS	ING Bank of Belgium and Grant through ORIO from the Netherlands Bank	September 2018 – September 2021	Contractor has mobilised to site and the project is at the design stage which is 90% completed.
3	Services for Enhancement of Nationwide Water Network Management	Supply of GIS/NRW/HYD Hardware and Software equipment. Establishment of GIS offices in 9 Regions. Supply and installation of Leak Repair Material and water meters	€8,000,000	Nationwide	TBD	UNICREDIT OF AUSTRIA	December 2018 – July 2021	The loan agreement for the project has been signed. Cabinet and Parliamentary approvals for tax exemptions have been granted and the project is currently at the design stage

No.	Name of Project	Description	Contract sum (b)	Location	Contract or	Source of Funding	Start and End Date	Status of Implementation
4	Tamale and Damongo Water Supply Project	Development of a new water supply system based on the white Volta at Yapei to provide 11MGD of water to the people of Tamale, Damongo and its environs.	\$272,287,979.56	Tamale, Damongo and surrounding communities	TBD	Deutsche Bank AG (London Branch) and UK Export Finance	30 months after signing of contract	Cabinet Approvals received.
5	Yendi Water Supply Project	Rehabilitation and expansion of the Yendi Water Supply system to improve water supply within Yendi and surrounding communities	\$30,000,000	Yendi and surrounding communities	TBD	Indian Exim Bank	30 months after signing of contract	Parliamentary and Cabinet Approvals received. Ministry of Finance has signed a contract with the Indian Exim Bank to initiate the loan disbursement process.
6	Feasibility studies of Sogakope Lome Transboundary Water Supply Project	The Governments of Ghana and Togo have identified the need to abstract water from the Volta River to treat and supply to their respective citizens. The headworks of this project will be located at Sogakope and will supply water to Lome, and all communities in Ghana along the transmission pipeline.	€2,071,000	Sogakope, Lome and communities along the pipe route	FICHTNER GmbH, IGIP GmbH and CHADB OURNE & PARKE LLP	African Development Bank, Governments of Ghana and Togo	2015-	Project feasibility studies, Preliminary Design and Environmental and Social Impact Assessment reports completed and approved by the Steering Committee.
7	Akwatia, Winneba and Akim Oda Water Supply Project	Construction of Water Treatment Plant at Akim Oda including interconnection of the Akim Oda and Akwatia systems and rehabilitation of WTP at Winneba.	US\$164,935,602.55	Akim Oda, Winneba and Akwatia	Arda Group of Turkey	Turkish Exim Bank	April 2013 -July 2018	The Project is completed and was commissioned by H.E the President on November 23, 2018.

2.1.2 Rural Water Sub Sector – Community Water and Sanitation Agency

No.	Name of Project	Description	Contract sum (b)	Location	Contract or	Source of Funding	Start and End Date	Status of Implementation
1	Sustainable Rural Water and Sanitation Project-Additional Financing (SRWSP-AF)	This project will help expand access to and ensure sustainability of water supply and sanitation services in rural and small-town communities in six regions of Ghana.	US\$ 45.7million	Six regions (Upper East, Upper West, Northern, Brong Ahafo, Western, Central)	Various	World Bank	June 2017 – December 2019	<ul style="list-style-type: none"> Contracts for Water Supply Consultants for five (5) Regions have been signed. Consultancy services started in September 2018. Contracts for contractors for works have been awarded. Construction of 23 systems ongoing.
2	Water Supply Improvement Project (WSIP) of the Ghana-Spain Debt Swap Development Programme (GSDP) in the Volta Region	Construction of pipe water schemes within selected communities in the Volta Region	US\$3.78 million	Volta	Various	Spanish Government	January 2017 – December 2019	Construction of 12 fully reticulated small towns pipe systems and 6 Limited Mechanized Systems are at various stages of completion.
3	The Four Constituencies Water Supply Scheme, STRABAG Phase III	The project will involve the construction of distribution networks to supply water to Central Tongu, North Tongu, Adaklu and Agotime-Ziope Districts, and Ho Municipality.	€11.5 Million	Volta	Various	Government of Austria	TBD	Cabinet Memorandum to Cabinet for consideration and approval.

2.2 Sanitation Sub Sector

No.	Name of Project	Description	Contract sum (b)	Location	Contract or	Source of Funding	Start and End Date	Status of Implementation
1	GAMA Sanitation & Water Project – Component 1	The project seeks to increase access to improved sanitation services to low income beneficiaries in the GAMA and improve the planning and management of environmental sanitation.	US\$ 101.9 million	Greater Accra Metropolitan Area	Various	World Bank	August 2015– May 2020	<ul style="list-style-type: none"> 19,917 household toilets constructed. 251 out of a total of 406 School Sanitation facilities, including girls changing rooms have been completed. The remaining 155 facilities are on average at 92% completion. Preparation of an Integrated Urban Environmental Sanitation Masterplan for the GAMA which will provide strategic direction for managing solid waste, liquid waste and drainage for the short, medium and long terms.
2	Greater Accra Sustainable Sanitation and Livelihoods Improvement Project (GASSLIP)	The project seeks to increase access to safe and sustainable sanitation to the residents of the Greater Accra Metropolitan Area (GAMA), targeting the urban and peri-urban low-income residents.	US\$48.85 million	Greater Accra Metropolitan Area	Various	African Development Bank	January 2017 – December 2019	<p>Project Implementation Unit and Steering Committee established.</p> <p>Baseline survey and community engagements ongoing</p>

2.3 Update on Funding Source and Disbursement

SOURCE	TOTAL APPROVED BUDGET 2018 (GH¢)	ACTUAL RELEASE 2018 (GH¢)	ACTUAL EXPENDITURE 2018 (GH¢)	VARIANCE
GOG				
Compensation for Employees	9,081,535.00	6,600,156.44	6,600,156.44	2,481,378.56
Goods & Services	1,613,900.00	943,267.15	943,267.15	670,632.85
Assets	60,000,000.00	1,646,000.03	1,646,000.03	58,353,999.97
Total GOG	70,695,435.00	6,515,788.90	6,515,788.90	64,179,646.10
Donor	110,757,383.00	72,955,734.63	72,955,734.63	37,801,648.37
IGF	2,182,759.00	765,585.81	765,585.81	1,417,173.19
Non-Road Arrears	-	13,521,421.05	13,521,421.05	13,521,421.05
Contingency	-			
GRAND TOTAL	183,635,577.00	96,432,165.11	96,432,165.11	87,203,411.89

2.4 Update on Indicators and Targets

2.4.1 Update on Policy Outcome Indicators and Targets

Outcome Description	Indicator	Unit of Measurement	Baseline		Targets for the period 2018		Actuals for the period 2018		Remarks
			Period	Value	Period	Value	Period	Value	
Percentage of population with basic access to drinking water sources ¹		Share of population with access to basic drinking water, expressed as a percentage of total population	2017	66.97%	2018	67.51%	2018	67%	Target not met
Percentage of distribution losses		The difference between total volume of water treated and that distributed, expressed as percentage of the total amount of water produced at the treatment point	2017	51.5%	2018	45.4%	2018	52.8%	Target not met
Percentage of population with access to safely managed drinking water sources		Share of population with access to safely managed drinking water sources (pipe or point source within the premises or compound), expressed as a percentage of total population	2017	27%	2018	29.5%	2018	19%	Target not met
Billing & Collection ratio		Share of bills collected	2017	75.3%	2018	95.0%	2018	85%	Target not met

¹ Data captured here is the provider-based figures. That is figures as captured by the Ghana Water Company Limited and Community Water and Sanitation Agency. It only applies to the services and facilities provided by the two institutions.

Outcome Description	Indicator	Unit of Measurement	Baseline		Targets for the period 2018		Actuals for the period 2018		Remarks
			Period	Value	Period	Value	Period	Value	
		from the total number of bills distributed							
Proportion of metered customers	Share of customers metered		2017	78.0%	2018	90.0%	2018	70%	Target not met
Percentage of population with access to improved liquid waste management	Percentage of population with access to improved toilet facilities		2017	14.00%	2018	17.00%	2018	28.5%	Target met
Number of communities achieving open defecation-free (ODF) status	Proportion of communities achieving open defecation-free status expressed as a percentage of all communities		2017	8%	2018	12.00%	2018	16%	Target met
Proportion of solid waste properly disposed of (major towns/cities)	Percentage of solid waste collected and disposed of in sanitary landfills in the five largest cities – Accra, Tema, Kumasi, Takoradi, and Tamale.		2017	80%	2018	80%	2018	75%	Target not met
Proportion of liquid waste (faecal matter) safely disposed on site or properly collected, transported and treated off site	Percentage of population whose liquid waste (faecal matter) safely disposed on site or properly collected, transported and treated off site, expressed as a percentage of all the population		2017	3.90%	2018	7.00%	2018	45%	Target met
Proportion of bodies of water with good	Measures the reduction in pollution of water bodies		2017	52%	2018	55%	2018	55.9%	Target met

Outcome Indicator Description	Unit of Measurement	Baseline		Targets for the period 2018		Actuals for the period 2018		Remarks
		Period	Value	Period	Value	Period	Value	
ambient water quality (Water quality index) (SDG 6.3.2)	(water quality)							
Level of Water Stress	Freshwater withdrawal as a proportion of total available freshwater resources	2017	1928	2018	1700	2018	1922	Target met
Extent to which integrated water resources management (IWRM) is implemented. It takes into account the various users and uses of water to promote social equity, economic efficiency and environmental sustainability at all levels (SDG 6.5.1)	Degree of integrated water resources management implementation (%)	2017	49%	2018	51%	2018	49%	Target not met

2.4.2 Update on Sector Output Indicators and Targets

National Objective: <ol style="list-style-type: none"> 1. Improve access to safe and reliable water supply services for all 2. Promote Sustainable Water Resources Development and Management 3. Enhance access to improve and reliable environmental sanitation services 								
Programme 1 Objective: To conduct the overall management of the Ministry in terms of formulation of policies and ensuring the appropriate administrative support service to all other programmes with regards to Planning, Budgeting, Monitoring, Evaluation, Finance, Human Resource, Research, Statistics and Information Management and Internal Audit of the Ministry.								
Sub-Programme Objective: To effectively and efficiently provide logistical support to the directorates, units and agencies and departments within the Ministry for the implementation of their various activities								
1.1 General Administration	Outcome 1: Improved institutional sector management and oversight							
	Type of Indicator	Description of Indicator	Unit of Measurement of Indicator	Baseline 2017	Period JAN – DEC 2018			Remarks
					Target for 2018	Actual Performance	Variance	
	Output	Organisation of Management meetings	Number of management meetings organized	-	12	4	8	Management decided to hold quarterly meetings instead of meeting monthly
	Output	Organisation of Ministerial Advisory Board Meeting	Number of Advisory Board meetings organized	-	4	-	4	The Board was not in existence

	Output	Organisation of Audit Report Implementation Committee (ARIC) meeting	Number of ARIC meetings organized	-	4	-	4	The Board was not in existence
	Output	Organisation of Staff durbars	Number of staff durbars meetings organized	1	4	3	1	
Sub programme Objective: To improve resource mobilization, financial management and reporting								
1.2 Finance	Improved Public Financial Management							
	Output	Preparation of Quarterly financial reports	Quarterly financial reports Prepared by	4 Quarterly financial reports prepared and submitted 30 days after end of quarter	4 Quarterly financial reports prepared and submitted 30 days after end of quarter	4 Quarterly financial reports prepared and submitted 30 days after end of quarter	-	
	Output	Preparation of Annual financial reports	Annual financial reports Prepared by	31st March the following year	31st March the following year	31st March the following year	-	
	Output	Preparation of Monthly bank reconciliation	Number of monthly bank reconciliation completed	12	12	12	-	

Sub programme Objective: To enhance capacity development for improved service delivery								
1.3 Human Resources Development and Management	Improved Manpower Skills Development							
	Output	Training of staff in performance management	Number of staff trained	-	45	-		This activity was deferred to 2019
	Output	Training of staff in training needs assessment	Number of staff trained	20	30	20		Funds were not released in full
	Output	Training of HR and Personnel Officers in Civil Service Code of Ethics	Number of staff trained	10	10	7		Training deferred to 2019
	Output	Participation in international training programmes	Number attended	5	10	5		Exceeded target
	Output	Training of staff in Public Procurement Process	Number of staff trained	3	8	3		Training deferred

		(Procurement Act)						
Sub programme Objective: To improve planning, policy analysis, budgeting, monitoring and evaluation in the WASH Sector								
1.4 Policy Planning, Budgeting, Monitoring and Evaluation	Enhanced capacity for policy formulation and coordination							
	Output	Preparation of Annual Budget estimates	To be prepared by	2018 Annual Budget Estimates completed by December, 2017	2019 Annual Budget estimates prepared and Presented to MoF and Parliament by 30 th November	2019 Annual Budget estimates prepared and submitted to the Ministry of Finance and consequently approved by Parliament		
	Output	Review of Annual Budget Performance	To be completed by		Review of 2017 Annual Budget Performance to be completed by February	Budget Performance review completed and was incorporated into the Preparation of the 2018 Budget Estimates		

	Output	Annual Review of the SMTDP	To be completed by		Final Draft of the Revised Sector Medium Term Development Plan prepared by November 2018	Development of the Sector Medium Term Development Plan (SMTDP) completed in November 2018 in collaboration with the NDPC		
Sub programme Objective: To strengthen the Research, Statistics and Management Information System of the sector								
1.5 Research, Statistics and Information Management	Strengthened Research, Statistics and Information Management System of the sector							
	Output	Participate in Meet-the-Press series/local and international Exhibitions	Number of Meet-the-Press series/local and international Exhibitions participation	-	2	2		
	Output	Develop / Review Administrative Data Collection Tools	Number of Administrative Data Collection Tools developed		To develop draft data collection tools with the support of Ghana Statistical Service and Sector Agencies by	Draft data collection tools developed.		

					December 2018			
	Output	Generate and Publish Annual Statistical Report on Water and Environmental Health and Sanitation	Annual Statistical Report on Water and Environmental Health and Sanitation Generated and Published	-	To develop and publish the 2017 WASH Sector Performance Report by June 2018	WASH Sector Performance report developed by October 2018		
Sub programme Objective: To provide an independent, objective assurance and consulting activity that is guided by a philosophy of adding value to improve the operations of the Ministry								
1.6 Internal Audit Unit	Improved transparency and accountability							
	Output	Preparation of Audit reports	Number of Audit Reports prepared	5	4	4		
	Output	Development of Audit Plans	Audit plan to be completed by	Audit plan prepared by 31st December, 2017	Audit plan to be completed by 31st December, 2018	Audit plan completed by 31st December, 2018		
	Output	Project monitoring	Number of ongoing and completed projects verified and physically inspected	5	12	10	2	
Programme 2 Objective: Improve access to safe and reliable water supply services for all as well as ensure efficient management of water resources								
Sub Programme Objective: The water sector management sub-programme seeks to coordinate and manage the operations and activities of the								

water sub-sector.								
2.1 Water Sector Management (Water Directorate)	Improved coordination of programmes and activities of sub sectors							
	Output	Organisation of the Annual Ghana WASH Forum	Annual Ghana Water Forum organized	N/A	Programme to be held by December 2018	Programme not held		
	Output	Review of the National Water Policy	National Water Policy reviewed	N/A	Develop Concept Note for the revision by December 2018	Draft concept note developed, and stakeholder consultations carried out		
	Output	Celebration of the Annual World Water Day	Annual World Water Day celebrated	Held	Celebration of the day by March 22, 2018	Celebration held		
	Output	Attend International and Regional Seminars, workshops, meeting and conferences	Number of International and Regional Seminars, workshops, meeting and conferences attended	5	6	5	1	
Sub-Programme objective: To regulate and manage the sustainable utilization of the country's water resources, including shared resources with her								

riparian neighbours								
2.2 Water Resources Management (Water Resources Commission)	effective management and utilisation of the Country's fresh water resources							
	Output	Water Registration Permitting and Licensing	Number of new permits and licenses	38	90	46	44	
	Output	Water use and drilling license monitoring	Number of permit and license holders monitored	15	70	28	42	
	Output	Water quality Assessment	Number of stations assessed with good water quality	28	45	55	-	
	Output	Ground Water Assessment	Number of monitoring boreholes assessed	34	34	0	34	
	Output	Public Awareness and Education	Number of workshops/media programmes	8	35	42	-	
	Output	Ecological Monitoring and	Number of monitoring visits	20	25	27	-	

		Hotspots						
	Output	Buffer zone enrichment	River banks protected-hectares	12	15	6.2	8.8	
	Output	Basin offices established and made functional	Number of new offices	1	0	0	0	
Sub-Programme objective: Improve access to safe and reliable water supply services for all								
2.3 Urban Water Management (Ghana Water Company Limited)	Accelerate the provision of affordable and safe water to urban dwellers							
	Output	Water production	Million gallons /year	64,910.00	67,480.00	66,140	340	
	Output	Water sales	Million gallons / year	34,880.00	40,490.00	35,060		
	Output	Billing and collection ratio	Percentage collection	100%	100%	80%	20	
	Output	Water supply coverage	Percentage of coverage	74.0%	70%	71%		
Sub-Programme objective: Improve access to safe and reliable water supply services for all								
2.4 Rural Water	Provide basic WASH services to rural communities, small towns and institutions that are willing to contribute towards the normal							

Management (Community Water and Sanitation Agency)	operation, maintenance and repair cost of the facilities							
	Output	Construction of boreholes	Number of boreholes successfully drilled with hand pumps installed	19,739	250	17	233	The Agency fell short of targets due to inadequate funding for investments
	Output	Construction of small community's pipe systems	Number of systems completed	70	20	10	10	
	Output	Construction of Small Towns Pipe systems	Number of small towns pipe systems completed	493	10	2	8	
Programme 3 Objective: Enhance access to improve and reliable Environmental Sanitation Services								
Sub –Programme Objective: To ensure sustainable sanitation services and facilities, evidence-based advocacy, public sensitization and campaigns								
3.1 Environmental Health and Sanitation Management	Improved coordination of programmes and activities of sub sectors							
	Output	Review National Sanitation	National Sanitation Policy reviewed	N/A	National Sanitation Policy and Action Plans	Concept Note Developed and request for funding		

		Policy			reviewed by December 2018	from DPs and other collaborators made.		
	Output	Consolidate existing National Sanitation Plans	National Sanitation Plans consolidated	N/A	National Sanitation Plans consolidated by December 2018	Activity Undertaken		
	Output	Awareness creation activities	Number of awareness raised activities undertaken	75	100	75		
	Output	Practicing Basic Hygiene behaviour change	Percentage of population with knowledge in HWTS	15%	22%	18.5%		
	Output	Facilitate the establishment of the National Sanitation Authority	National Sanitation Authority established	N/A	National Sanitation Authority established by December 2018	Cabinet stood down the decision of the establishment of the Authority.		
Sub –Programme 3.2 Objective: To provide basic sanitation and infrastructure for liquid waste management								
3.2 Liquid Waste Management	Improved Liquid Waste Management							
	Output	Population with access to	Share of Population with	14%	18.00%	28.5%		

		improved Household Toilets	access to improved Household Toilets					
	Output	Number of communities achieving open defecation-free (ODF) status	Proportion of communities achieving open defecation-free status expressed as a percentage of all communities	8%	12%	16%		
	Output	Proportion of liquid waste (faecal matter) safely disposed on site or properly collected, transported and treated off site	Percentage of population whose liquid waste (faecal matter) safely disposed on site or properly collected, transported and treated off site, expressed as a percentage of all the population	3.90%	7%	45%		
Sub-Programme 3.3 Objective: To improve on solid waste collection rate in all major cities in Ghana								
3.3 Solid Waste Management	Improved Solid Waste Management							
	Output	Proportion of solid waste	Percentage of solid waste	80%	80%	75%		

		properly disposed of (major towns/cities)	collected and disposed of in sanitary landfills in the five largest cities – Accra, Tema, Kumasi, Takoradi, and Tamale.					
	Output	Number of Integrated Material Recover/landfill facilities constructed	Number of functioning waste management sites (landfill)	N/A	4	0		
	Output	Number of Transfer stations constructed across the country	Number of functioning Transfer stations	N/A	3	0		
Sub-Programme Objective: To identify Environmental Health needs and develop skills for the protection, prevention and promotion of health								
3.4 Environmental Health and Hygiene Education	Outcome: To produce competent Environmental Health Officers, Occupational Health and Safety Officers and Occupational Therapy Professionals.							
				2017	2018 Target	2018 Actual Performance	Variance	Remarks
	Output	Admission of students	Number of students	55	60	95%	5%	

			admitted					
	Output	Organise students' field practical	Number of student's field practical organized	3	4	4		
	Output	Conduct end of semester examination	End of semester examinations conducted	2	2	2		Students performance was very good
	Output	Preparation of annual budget	Annual Budget prepared	1	1	1		
	Output	Attend quarterly financial validation workshops	Number of financial validation workshop attended	4	4	4		
	Output	Rehabilitation of existing hostels	Percentage of work done					

2.5 Update on Critical Development Issues

2.5.1 Water Sub-Sector

2.5.1.1 Urban Water Sub Sector – Ghana Water Company Limited

Urban water coverage today stands at 71%. The national demand for urban water currently stands at 310.3MGD while production is 217.5MGD. The Ministry in collaboration with the Ghana Water Company Limited is working assiduously to close the current deficit of 92.8MGD.

AKIM ODA, AKWATIA & WINNEBA WATER SUPPLY PROJECT

In order to improve access to safe and reliable water supply services for all the project was designed to add about 6.58MGD of water to the supply systems at Akim Oda, Akwatia and Winneba Water Supply Project. The progress of works was 95% as at 2017. The Akim Oda and Akwatia water supply components was completed and taken over by GWCL on 3rd July 2018.

The new Treatment Plant was commissioned by His Excellency, the president of Ghana, Nana Addo Dankwa Akufo-Addo on 23rd November 2018 at Akim Oda.



The scope of works done under the Akim Oda and Akwatia components included the construction of the following;

- 400MG (1,800,000m³) Off-river reservoir on the Birim River in Akim Oda
- 7.8MGD (35,400m³/d) Water Treatment Plant in Akim Oda
- 6,000m³ groundwater reservoir at Asene, 4,000m³ ground level reservoir at Bamanase
- 212.6 km Distribution network in Akim Oda
- 18 km Distribution network in Akim Manso and 11.9km in Akim Amantem
- 10.8 km Transmission mains from WTP to GLR at Asene
- 33.7 km Transmission mains from GLR in Asene to Akwatia
- 250m³ elevated water tank at Manso, Amantem, No.4 Camp and Winneba.
- 26No. Standpipes in Akim Oda, 7No. in Manso, 5No. in Amantem, and 40No. in Akwatia
- Residential and District Administration buildings

WINNEBA REHABILITATION WATER SYSTEM

The Winneba rehabilitation water system component under the project was practically completed on 8th February 2018 and taken over by GWCL on 19th February 2018. The scope of works done under Winneba water system included;

- Rehabilitation of Flocculation Unit (replacement of existing baffles with GRP type)

- Supply and laying of transmission and distribution pipelines
- Supply and installation of 4No New Finnchain Scraper System
- Rehabilitation of Rapid Sand Filter
- Rehabilitation of Alum Dosing System including installation of 2No pumps
- Construction and installation of new Lime Dosing System including installation of pumps
- Construction of 2No 250m³ Elevated Water Tanks (EWTs)
- Construction of 2,000m³ Ground Water Tank (GWT)
- Construction of 1No Technical Building at Winneba
- Construction of 2No 4-Storey 2-Bedroom Residential Apartments at Winneba
- Construction of 2No 3-Storey 3-Bedroom Residential Apartments at Cape Coast
- Construction of 1No Administration Office Building at Winneba
- Construction of 1No District Office at Elmina



UPPER EAST REGION WATER SUPPLY PROJECT

This is a regional water supply scheme meant to improve upon the reliability and sustainability of water supply in Bolgatanga, Navrongo, Paga, Zuarungu, Bongo and surrounding communities. The project is sourcing its raw water from the Tono IDA reservoir with a new water treatment plant built in Tono. It will transport the water to Navrongo, Paga and Bolgatanga while the

existing WTP on the Vea will be rehabilitated to supply water to Bongo and Zuarungu.

The Cabinet and Parliamentary approval for the loan agreement was given in November 2017. The project duration is 36 months. The project cost is €37,683,266.00. The Project commenced on 1st September 2018.

Progress made so includes:

- Cabinet Approval granted for Credit facility
- Parliamentary approval granted for credit facility
- Cabinet approval given for tax exemption
- Parliamentary approval given for tax exemption
- Design of the system is 90% complete



1. Preparation of a Mat Foundation for the Contractor's office



1. Clearing of Site for the construction of WTP @ Tono

SOGAKOPE - LOME WATER SUPPLY PROJECT

The preparation phase of the Sogakope-Lome Transboundary Water Supply Project is being funded by the African Development Bank (AfDB) under its African Water Facility (AWF) and the African Legal Support Facility (ALSF). The total cost of the services is estimated at € 2,195,000 [€1,405,000 (64%) from the AWF, €666,000 (30%) from the ALSF and Governments' contribution (Ghana and Togo) is €124,000 (6%) in equal halves].

The objective of the project is to sustainably improve water access rates of both countries. The project preparation phase involves Technical Advisory services, the updating of the 2005 feasibility study, preparation of preliminary designs and Environmental and Social Impact Assessment as well as the preparation of institutional, legal and financial structuring and the signing and activation of a concession contract under which the project which will be executed on a Public Private Partnership (PPP).

A joint Project Management Unit comprising of officers from Togo and Ghana has been established.

A joint PMU technical meeting was held on 20th November 2018 at Sogakope to review all the submitted reports which includes;

- Draft final feasibility study and preliminary design (Fichtner)
- Draft final Environmental and Social Impact Assessment (IGIP/Maple Consult)
- Draft final Communication strategy and implementation plan (CorpComm)
- Draft final Participatory consultative process (GLOWDEP)
- Diagnostic report (Transaction Advisor).

GAMA WATER SUB PROJECT

The Government of Ghana is implementing the Greater Accra Metropolitan Area (GAMA) Sanitation and Water Project (GAMA) Project through the Ministry of Sanitation & Water Resources. The cost of the project is US\$ 150 million, and the funding is from the International Development Association (IDA).

The aim of the project is to increase access to improved sanitation and water supply in the GAMA, with emphasis on low income communities; and to strengthen management of environmental sanitation in the GAMA.

GWCL is responsible for the implementation of Component 2 of the under-listed four (4) components of the project;

- Provision of environmental sanitation and water supply services to priority low income areas in GAMA (US\$ 34.40 Million);
- **Improvement and expansion of the water distribution network in the GAMA (US\$ 48.10 Million);**
- Planning, improvement and expansion of GAMA-wide environmental sanitation services (US\$34 Million); and
- Institutional Strengthening (US\$ 18.40 Million);



The project seeks to increase access to improved sanitation and water supply in the GAMA, with emphasis on low income communities. It is also required to strengthen management of environmental sanitation in the GAMA.

Works undertaken under the component two (2) of the project includes:

- Laying 252 of pipeline;
- Effect 4,495 New Service Connections;
- Improvement in water supply to a population of 250,000 (equivalent to 50,000 Households)



2.5.1.2 Rural Water Sub Sector - Community Water and Sanitation Agency

The rural water coverage currently stands at 62.06%. To enhance the delivery of Water, Sanitation and Hygiene (WASH) facilities to the remaining 37.04% of the unserved rural population, a number of strategies were embarked upon.

ADDITIONAL FINANCING – SUSTAINABLE RURAL WATER AND SANITATION PROJECT

The implementation of the Additional Financing of the Sustainable Rural Water and Sanitation Programme (AF-SRWSP) is funded by the World Bank with a loan of USD45.7million.

The project seeks to construct 250 boreholes; 8 Small towns piped water systems; rehabilitate 11 GWCL connected systems; connect 9 communities to GWCL lines; establish sources for 30 boreholes for small towns piped systems; and provide support for the construction of 20,000 household latrines and 1,000 basic school teachers' latrines.

In addition, there will be the rehabilitation and construction of twenty-one (21) small towns piped water system which are at various stages of completion. The project is expected to be completed in December 2019.

Projects completed during the period under review were the construction of 526 household VIP latrines in the Six (6) AF - SRWSP regions.

DIRECT MANAGEMENT OF RURAL WATER SYSTEMS

CWSA is embarking on a reform to transform the Agency into a Utility Organization under the WASH Sub-sector. This will enhance the efficient delivery of safe, reliable, affordable and sustainable water, water-related sanitation and hygiene services to rural communities and small towns in Ghana.

In line with the reform, CWSA will expand its mandate to cover the direct management of piped water systems, a shift from the community management model.

It is expected that the Establishment Act of Parliament 1998, Act 564 will be reviewed and the structure of CWSA modified to enable it to perform the expanded functions.

To this end, CWSA has employed 783 professional water system management staff and 279 auxiliary staff to enable them effectively and efficiently manage these water systems. In addition, the Agency is currently rehabilitating and expanding a number of piped water systems including the New Kweiman Water Scheme in the La Nkwantanan Madina Municipality in the Greater Accra Region, Seniagya Water Scheme in the Sekyere East District in Ashanti Region, Mim in the Goaso Municipality in the Ahafo Region, Vakpo in the North Dayi and Taviefe in the Ho Municipality both in the Volta Region.

AQUA AFRICA WATER SUPPLY PROJECT

CWSA, in conjunction with a United Kingdom private sector entity, Aqua Africa Limited, have worked together on a market-based approach to provide sustainable safe drinking water to 282,000 people in rural communities and small towns in four regions namely, Ashanti, Eastern, Volta and Greater Accra.

The project will provide point-source Nano-filtration systems to 150 communities at 450 locations, serving 90, 000 people in areas where the water source is contaminated. It will also provide 12 small towns piped water systems with household connections and public standpipes.

Cabinet has approved a loan agreement of €30million Euros by United Kingdom Export Finance and HSBC Bank for the implementation of the project.

2.5.1.3 Water Resources Management – Water Resources Commission

The fulfilment of our basic human needs and our environment is essentially dependent on adequate clean water. The country's total natural endowment of renewable freshwater resources is currently estimated to be 53.4 billion cubic meters/year, of which only 14% is currently being abstracted for various uses.

The quality of water resources is deteriorating due to natural and human factors, such that, of the 16 major river basins, 65% had water quality indexes of less than, 50% and, therefore, were of poor quality, with 15% of these being critical at the end of 2016. Available results indicate that overall ambient water quality improved from an index of 51.5 in 2017 to 55.9 in 2018 (which is fairly a good quality).

In response to the degradation along the Black Volta River, the Commission, with support from the International Union for Conservation of Nature (IUCN), initiated a buffer zone restoration scheme in selected communities in the Nandom District. Activities completed include training of seedling-nursery attendants and raising/nursing of 5,000 seedlings; and about 2,600 tree seedlings planted within 1.2 km buffer zone.

A Drought Early Warning System (DEWS) has been developed and tested for drought forecasting in the Northern Region to ensure the effective management of droughts in Ghana. This is as a result of climate change and its negative impacts on the environment. Additionally, baseline assessment and gap analysis of drought management and forecasting was completed

and a Climate Vulnerability Assessment of the agricultural section focusing on dry season management and planning was developed.

2.5.2 Sanitation Sub Sector

2.5.2.1 Solid Waste Management

The management of solid waste, especially within the MMDAs over the years has been plagued with a number of challenges. One of the key challenges is inadequate treatment and final disposal facilities. For example, Ghana can boast of only four public engineered landfill facilities which are located in Tamale, Kumasi, Sekondi-Takoradi and Kpone, near Tema. Unfortunately, all the four major facilities have been poorly managed over the years, resulting in serious environmental concerns.

As part of the measures to overhaul the waste management infrastructure regime in Ghana, extensive engagement with prospective local and foreign investors are being undertaken to transform the existing poorly-managed landfill facilities. The new direction of the Ministry is to pursue the development of more sustainable waste treatment options such as Waste-to-Energy, Composting and Recycling.

In line with the above, the Ministry is leveraging the sanitation component of the Sinohydro facility to construct the following sanitation infrastructure:

- One No. 1,800 metric tonnes per day Incineration Plant for Accra West
- Three No. 200 metric tonnes per day Transfer Stations for Accra East
- Two No. 200 metric tonnes per day Transfer Stations for Kumasi
- Two No. 100 metric tonnes per day Transfer Stations for Sekondi-Takoradi
- Two No. 100 metric tonnes per day Transfer Stations for Tamale

Towards this goal, the Ministry is creating Land-Banks at strategic locations to be utilised as equity to support the private sector in the development of waste management infrastructure.

2.5.2.2 Liquid Waste Management

The most recently released Multiple Indicator Cluster Survey (MICS) report of 2017/2018 by the Ghana Statistical Service, indicates that access to improved sanitation has increased from 15% to 21% nationally.

This is as a result of a multifaceted approach that was adopted to rapidly increase access to improved household toilets.

DONOR ASSISTED INTERVENTIONS

One of the such approach is the Community Led Total Sanitation (CLTS) which is more applicable in the rural communities. Currently, the CLTS approach is taking place in 4,500 Communities in 130 Districts of the 16 Regions, to achieve Open Defecation Free (ODF) status.

The Ministry has launched through the support of USAID and Global Communities, Guidelines for Targeting the Poor and Vulnerable for Basic Sanitation Services in Ghana. The Guideline is aimed at guiding Government and other sector partners to ensure equity and inclusion in the delivery of sanitation services.

Additionally, the Ministry, with the support from UNICEF and the Netherlands Embassy has launched a social revolving fund to enable low income households to access soft loans to facilitate the acquisition of household toilets.



THE GAMA SANITATION SUB PROJECT

The Greater Accra Metropolitan Area Sanitation and Water Project (GAMA-SWP) has also played a significant role towards the provision of household toilets.

19,917 Number of household toilets have been constructed, thereby benefiting 159,336 low income target population.

Additionally, 251 out of a total of 406 School Sanitation facilities, including girls changing rooms that were targeted under the project have been completed and handed over to the beneficiary schools. The remaining 155 facilities are on average at 92% completion.

Another significant achievement under the GAMA Project is the improvement in drainage at the Mallam Junction thus significantly reducing the perennial flooding which had bedeviled the area. The project intervention involved the construction of box culvert across the Kaneshie-Kasoa section of the road. A similar intervention is also ongoing at the Kaneshie First-Light at 70% completion, which is expected to reduce the incidence of flooding.





Institutional Latrines under the GAMA water and Sanitation



Project

Household Toilet under the GAMA water and Sanitation Project

THE GASSLIP PROJECT

The African Development Bank (AfDB) has approved a loan facility to the Government of Ghana to finance the implementation of the Greater Accra Sustainable Sanitation and Livelihoods Improvement Project (GASSLIP). The project is part of the interventions by the sector to expand and build on the success of the previous African Development Bank-funded Accra Sewerage Improvement Project (ASIP) and the on-going World Bank funded, GAMA

Project to better deliver and manage climate resilient sanitation services within GAMA.

The Project which was launched in September 2018 has the full complement of project staff, and implementation is underway.

This project will undertake the following:

- Construct Faecal Sludge Treatment facility
- Construct Solid Waste infrastructure to support improved solid waste collection and disposal.
- Provide improved solid waste collection systems in low income neighbourhoods (i.e. Waste bins, motor driven tricycles, skips, etc.)
- Construct 7000 household toilets
- connect 500 houses to the existing sewerage system
- Strengthen the three Schools of Hygiene to fulfil their mandate.
- Train 1,000 Artisans/Entrepreneurs in WASH sector to better deliver services and generate income.

CHAPTER THREE

3.0 Key issues addressed and those yet to be addressed

Ghana Water Company Limited

(a) Non – Revenue Water

- Ghana Water Company Limited records non-revenue water of 48%, considered to be too high. Management identified non-metering and over-age meters as one of the reasons for the high non-revenue water and they are putting in measures to address the situation. The company is about to procure over five hundred thousand (500,000) smart meters to ensure a 100% efficient metering .
- Another factor accounting for high non-revenue water is the over-aged mains and fittings on our distribution system. These pipelines (mains) which are over fifty years (50) old, leak and management is putting in place measures to replace major over-aged pipelines covering a distance of about 4,000 kilometers.

(b) Capacity Expansion & Rehabilitation of The Following Existing Facilities:

- Kpong Headworks Expansion
- Weija Headworks expansion and rehabilitation of filters.
- Hohoe Headworks Expansion
- Damongo Headworks Rehabilitation

(c) Improvement of Water Resources – (Dredging of Dams)

Management is considering dredging some dams. The list of dams to be dredged are as follows:

- Weija Dam – (Greater Accra Region)
- Barekese Dam – (Ashanti Region)
- Owabi Dam – (Ashanti Region)
- Nawuni Dam – (Northern Region)
- Biaso Headworks - (Brong-Ahafo Region)
- Dai Dam – (Volta Region)
- Bosomase Dam – (Western Region)

Community Water and Sanitation Agency

- *Water Safety Challenges*

Water quality is critical to the attainment of the Sustainable Development Goal 6. To address the issue, water quality experts are being employed in all ten (10) regions to address water quality issues. Water Safety Plans also being develop for all regions to serve as a guide for water quality interventions.

- *High Indebtedness of Water Systems to Electricity Providers*

CWSA has negotiated with the electricity providers to pay the debt on the systems the Agency is managing in installment whiles those disconnected have been reconnected. The Agency is also exploring the option of Solar energy to power the piped water systems.

- *High Non-Revenue Water among Piped Water Systems*

Bulk metres have been installed in all Piped Water systems managed by CWSA and household metres are being provide for household connections to ensure that quantity of water produced is determined and water consumed is billed to reduce non-revenue water.

- *High Indebtedness by Customers to the Water Systems*

Community Relations officers in the various systems are leading engagement process with indebted customers to get them to pay their bills. After the engagement stage, the next stage will be to disconnect customers who fail to pay after an agreed period.

- *Huge Investments required on Poorly Managed Water Systems*

Most of the Piped Water Systems are either partially functional or non-functional and needs huge investments to get the system to perform optimally. Contracts have been awarded to rehabilitate most of the systems under CWSA management and work is currently on-going.

- *Inadequate Capacity of Communities to Manage Complex Water Systems*

Professionals have been employed by CWSA know as Water Systems Management Staff (WSMS) to manage Small Pipe Water Systems under the Agency's reform agenda.

Water Resources Commission (WRC)

WRC in furtherance of ensuring the efficient regulation of water resources will continue to initiate programmes and develop appropriate legislative instruments and tools to manage extreme events and the utilization of fresh water resources to ensure the sustained availability of good quality water for all uses.

Consequently, the following have been planned to be undertaken to ensure the effective and efficient management of water resources within the country;

- Finalise and adopt Legislative Instrument to enforce the Buffer Zone Policy and begin the development of regulations on effluent discharge.
- Make the Dam Safety Unit functional as a vital institutional arrangement for the effective administration of the Dam Safety Regulations, 2016 (LI 2236) to ensure safety of all dams in the country.
- Publish the reviewed Communication Strategy (2018-2022), produce documentaries for the Ankobra and White Volta Basins and organise targeted nationwide workshops/media programmes to enhance public awareness and education.
- Complete and initiate implementation of the Integrated Water Resources Management (IWRM) Plans for the Black Volta and Oti basins, and the revised plans for the White Volta and Ankobra basins.
- Continue monitoring the water quality status of all rivers and the characteristics of aquifers for comprehensive water resources assessment and decision-making.

- Strengthen technical collaboration with Burkina Faso and facilitate the ratification of the United Nations Convention on the Law of the Non-Navigational Uses of International Watercourses (1997) and the UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes (1992).

Liquid Waste Management

- *High Open Defecation Rates*

The current MICS report indicates that 22% of Ghanaians still practice open defecation. This situation is worrisome as it impedes the efforts towards the attainment of the SDG target 6.2.

The Ministry is partnering with Development Partners to create the demand for the uptake of household toilets through the CLTS programme. Sanitation laws and courts will also be strengthened to punish recalcitrant landlords who fail to provide toilets within their house after several warnings.

Solid Waste Management

- *Weak Enforcement regime*

Additionally, in our efforts to ensure strict adherence to the various national and local environmental sanitation laws and regulations in Ghana, the Ministry has initiated the process of putting together a comprehensive consolidated National Sanitation laws. It will serve as the primary reference document for the preparation of local bye-laws as well as enhancing successful prosecution of sanitation offenders.

- *Inadequate Infrastructure for sanitation in Ghana*

The management of solid waste, especially within the MMDAs over the years has been plagued with a number of challenges. As part of the measures to overhaul the waste management infrastructure regime in Ghana, extensive engagement with prospective local and foreign

investors are being undertaken to transform the existing poorly-managed landfill facilities. The new direction of the Ministry is to pursue the development of more sustainable waste treatment options such as Waste-to-Energy, Composting and Recycling.

- *Lack of prioritization of sanitation by MMDAs*

As part of the service monitoring mechanism, the Ministry has introduced a system of performance monitoring and ranking to incentivize the MMDAs to up their game and also sanction non-performance.

CHAPTER FOUR

4.0 Recommendations and Way Forward

- The fulfilment of our basic human needs and our environment is essentially dependent on adequate clean water, there is the need for government and the general populace to support the fight against Galamsey. Additionally, education and punishment should be heightened to help sustain the fight against illegal mining and pollution of water bodies.
- Sanitation is among the powerful drivers of the national economy which impacts on health, education, tourism and human development.
- According to a study by the Water and Sanitation Programme of the World Bank, poor sanitation costs Ghana USD 290 million annually. This amount is equivalent to USD12 per person per year in Ghana which translates to 1.6% of the national GDP. It makes a lot of economic sense to invest in sanitation; every Dollar invested in sanitation yields USD 5 dividends. Therefore, government should create an enabling environment that will attract the private sector to invest in the provision of waste management infrastructure.

4.1 Conclusion

The Promotion of sustainable Water Resources development and management; improvement of access to safe and reliable water supply services for all; enhancement of access to improved and reliable environmental sanitation services; and promotion of efficient

and sustainable wastewater management is at the core of human development and can act as catalyst for socio-economic growth.

Projects in the WASH Sector are capital intensive and in order to attain and fulfil the Sustainable Development Goal 6, sustainable and timely releases of resources should be made available to the Ministry to ensure the delivery of these critical social.