



GHANA WASH CONTEXT



West Africa Water Supply, Sanitation, and Hygiene Program (USAID WA-WASH)

Lakhdar Boukerrou

August 2017

WASH LANDSCAPE ANALYSIS

GHANA



Photo 1. A focus group on hygiene and sanitation with the USAID WA-WASH mission team in the village of Berwong. Source: USAID WA-WASH

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ACRONYMS AND ABBREVIATIONS

CONIWAS Coalition of NGOs in water supply and sanitation

CWSA Community Water and Sanitation Agency
CWSD Community Water and Sanitation Department

DMA District Meter Areas

EPA Environmental Protection Agency
FAO Food and Agriculture Organization
GPRS Ghana Poverty Reduction Strategy
GWCL Ghana Water Company Limited

GWSC Ghana Water and Sewerage Corporation

HDI Human Development Index

IWRM Integrated Water Resources Management

JMP Joint Monitoring Program

MDG Millennium Development Goals

MWRWH Ministry of Water Resources, Works and Housing NCWSP National Community Water and Sanitation Program

NGO Non-Governmental Organization
NTU Nephelometric Turbidity Units

NWP National Water Policy

PURC Public Utilities Regulatory Commission

PWD Hydraulics Department of Public Works Department

SDG Sustainable Development Goal SSH School Sanitation and Hygiene

UNESCO United Nations Educational, Scientific, and Cultural Organization

UNICEF United Nations Children's Fund

USAID United State Agency for International Development

WASH Water Supply Sanitation and Hygiene

WA-WASH West Africa Water Supply, Sanitation and Hygiene Program

WHO World Health Organization
WRC Water Resources Commission

WSD Water Supply Division

1. INTRODUCTION

ased on the indications in the WASH CONTEXT ANALYSIS REPORT in Ghana (USAID WA-WASH, 2016), access to potable water, adequate sanitation, and good hygiene behavior which are indispensable for life, remain out of reach for a large part of the population. They are also key drivers of greener growth and ensure economic development.

In Ghana, the USAID WA-WASH Program is one of the stakeholders supporting the government in the development of drinking water, sanitation, and hygiene sector policies through various activities and actions (Photo 2). Apart from its various planned activities, and in accordance with the Sustainable Development Goals (SDGs) requirements, since 2016, USAID WA-WASH has been performing drinking water quality analysis and

number of sanitation and hygiene's activities in Ghana every six months.

To support the Program's priorities in improving access to drinking water and sanitation in Ghana, this study was established. Also, to develop the necessary baseline, and to get a better understanding of the WASH landscape (social, economic, legal, institutional, technical, and environmental) in Ghana, the program deemed it necessary to commission this study.

Therefore, this study will proceed with an analysis of the WASH context in the targeted country. This will help formulate the problems in terms of the WASH sector's main strengths, weaknesses, opportunities, constraints, and challenges.



Photo 2. In the village of Tantuo, the USAID WA-WASH mission team organized a group focus on latrine maintenance.

Source: USAID WA-WASH

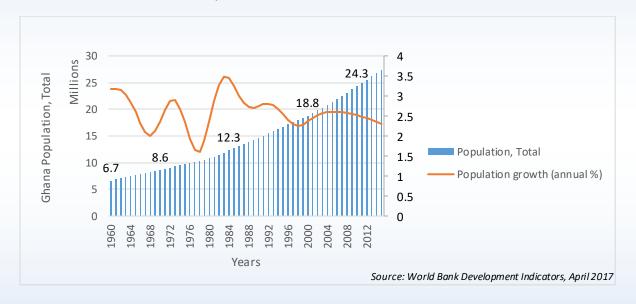
2. COUNTRY OVERVIEW

Ghana is a tropical country on the west coast of Africa, along the Gulf of Guinea and Atlantic Ocean. It has a total land area of 238,537 square kilometers, and it is bordered by three French-speaking countries: Togo on the east, Burkina Faso on the north and northwest, and Côte d'Ivoire on the west. The Gulf of Guinea lies to the south and stretches across the 560-kilometre coastline (GSS, 2015).

According to the World Bank demographic data (as for April 2017), the first census held in Ghana was conducted in 1960 and reported a population of 6.7 million. The 1970 census recorded 8.6 million people, and the 1984 census, 12.3 million. In 2000 a population of 18.8 million was recorded, while in 2010, 24.7 million were recorded. The growth rates over individual periods were 2.4 percent, 2.6 percent, 2.7 percent, and 2.5 percent during 1960-1970, 1970-1984, 1984-2000, and 2000-2010, respectively (Graph 1). This is to show that Ghana is a country with an important demography, and that it should therefore anticipate stress on water sources and lack of necessary related facilities.

The Ghana Water Company Limited (GWCL) was created in 1999 as an entirely state-owned

utility. Prior to its creation, municipal water in Ghana was under the responsibility of the Ghana Water and Sewerage Corporation (GWSC). The GWCL has a district office in Tamale that supervises the distribution system in Tamale as well as in Yendi, a city to the East. The water supply system for Tamale was first constructed in 1972. In response to the rapidly growing population, an expansion of the system was done in 2008 by a UK-based company in partnership with GWCL. upgrade increased the capacity of the treatment plant from 19 to 44 million liters per day. The project also included the maintenance of the existing distribution system, such as replacing pumps and pipes, and adding new distribution means to increase the service area. In addition, in response to problems with non-revenue water, District Meter Areas (DMAs) were created. A DMA is an area of the distribution system with a single inlet and outlet. Pressure and flow data for water through each DMA can be collected to determine how much water is being lost (Hansen, 2014).



Graph 1: Evolution of Ghana's population from 1960 (scale bar – million) and annual growth rate (right scale).

2.1 Current situation

This section provides a brief overview of the current water, hygiene, and sanitation situation in Ghana. Due to the rapid urbanization, the country has to build and develop new infrastructures, in order to meet the needs of its population in the WASH sector, safe and reliable access to drinking water, as well as improved sanitation and hygiene.

2.1.1 Water

Water—or the lack thereof—is one of the biggest issues facing urban Africa. By year 2050, the prospected population is expected to reach 2.5 billion people (United Nations, Department of Economic and Social Affairs, Population Division, 2015). Although water shortages have long plagued parts of the continent, they have become the potential slower killer of Africa's economic takeoff. Ghana, which has a \$35 billion economy, with an estimated growth of 8% in 2013, would outpace the sub-Saharan African average for a sixth straight year, cannot continue at that rate without a modern water network (Dzawu, 2013) (Box 1).

Prior to the Strategic Reforms' implementation to achieve the objectives set out in "Vision 2020" of Ghana (1995-2020), access to drinking water in rural areas was low (30%) and urban areas have to overcome number of obstacles (rapid urbanization, high growth rate of population, old and poorly maintained water works, high investment...).

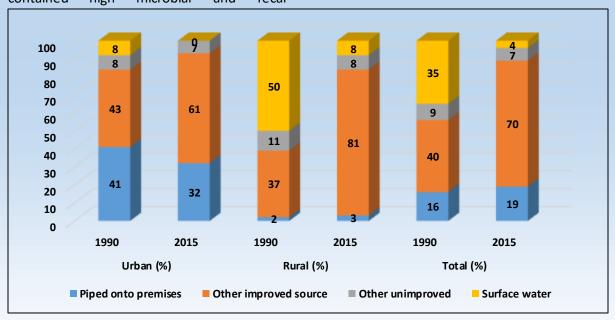
As shown in Graph 2, about 80% of the urban population in has access to safe drinking water. However, disparities exist between urban and rural safe drinking water access. In 1990 41% of the urban population had access to water piped on premises, a percentage that went down to 32% in 2015. There was an increase to 61% of the urban population with access to other improved sources of drinking water in 2015, compared to the percentage of 43% back in 1990. As for the population with access to other unimproved sources of water in urban areas, the percentage is slightly the same (8% in 1990, 7% in 2015). The percentage of the population in urban areas with access to surface water went from 8% in 1990 to 0% in 2015. In rural areas, water access type is predominantly from other improved sources of drinking water with 81% in 2015 against 37% in 1990 (Photo 3). Water access to pipes on premises is low and has not changed very much from 1990 (2%) to 2015 (3%). 11% of the rural population had access to other unimproved sources of drinking water in 1990,

Box 1. A Water Crisis Threatens Ghana's Economic Growth

Ghana has had peaceful, democratic elections since 1992, and derives its economic strength from gold, cocoa, and oil. Yet in a speech on March 6, 2013, Ghanaian President, John Dramani Mahama, acknowledged that Ghana is "burdened with a major energy and water crisis." The country's network of aging water pipes, some of which date back to 1914, does not reach Accra's expanding and crowded outer suburbs. "Supply cannot meet the increasing demand," says Kweku Botwe, acting managing director of the state-owned Ghana Water company. "Investment had stagnated so much over the past 40 to 50 years that you are no more dealing with the urgent situation, but with the emergency." Ghana Water cannot account for 55% of the water it produces, adds Botwe, because Ghanaians illegally siphon water from its pipes and, decrepit pipes damaged by erosion and construction often burst.

Source: Dzawu, 2013.

compared to 8% in 2015. 50% of the rural population relied on surface water in 1990, a percentage that dropped considerably to only 8% in 2015. According to the Ghana Multiple Indicator Cluster Survey of 2011, urban dwellers are more likely to have access to safe drinking water than the rural dwellers, at 91% and 69%, respectively (GSS, 2012). In rural areas, local surface water quality was characterized and analysis reported that the surface water turbidities were greater than 200 NTUs (Nephelometric Turbidity Units) and contained microbial high and fecal contamination, putting children, and the rest of the population, at high risk for water-related diseases (Mintz et al., 2001). Also, the country is confronted to the lack of clean drinking water in three Northern regions where one in ten children are dying before his/her fifth birthday, due to some water-related illnesses (WaterAid America, 2017). More specifically, in the main Northern Region alone, 32% of the 2.5 million residents do not have access to improved water sources and must often rely to contaminated drinking water (GSS, 2012).



Graph 2. Evolution of drinking water coverage in Ghana from 1990 to 2015 Source: WHO/UNICEF JMP, 2015



Photo 3. Rope pumps installed by USAID WA-WASH in the Biro Namuu village in Ghana. Source: USAID WA-WASH

2.1.2 Sanitation

Ghana has made significant progress providing access to improved water sources to 80% of the population, and eliminating Guinea worm from the country (awaiting certification in 2014). However, despite these successes, about 4,000 Ghanaian children die each year from diarrhea and pneumonia, and about 23% of them suffer from stunting (chronic malnutrition linked to poor water and sanitation). Besides, five million Ghanaians still use water from unsafe sources (UNICEF Ghana, 2017) (Box 2).

In 2013, UNICEF's rights-based approach to water, sanitation and hygiene addresses these challenges through support the Government of Ghana, for both field interventions and the creation of an enabling environment. As urbanization increases in Ghana, city authorities are finding it ever more difficult to provide basic water and sanitation services to everyone (WSUP, 2016). The country is currently ranked seventh at the bottom of the sanitation ladder, according to a recently published Joint Monitoring Program (JMP) report of the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) in 2015. As a matter of fact, more than 80% of communities within the country are still lacking sanitary facilities (Photo 5) and open defecation remains a major problem (USAID WA-WASH, 2016).

Graph 3 shows that the sanitation profile of the country has not really improved from 1990 to 2015. In 1990, 13% of the population had access to improved facilities in urban areas, compared to 20% in 2015. In urban areas we have 73% of population using shared facilities and on the rural side we have 45% in 2015. Note for the other unimproved sources, we had 31% in 1990 and an inexistence in 2015 for the urban side and 47% in 1990, decreased to 12% in 2015 for the rural area. Furthermore, the percentage of the population resorting to

open defecation decreased from 22% in 1990 to 19% in 2015.

Moreover, it should be mentioned that, open defecation rates increased in rural areas (from 29% to 34%), owing to the predominant use of collective latrines which are considered unimproved according the definitions used by the JMP (USAID WA-WASH, 2016).

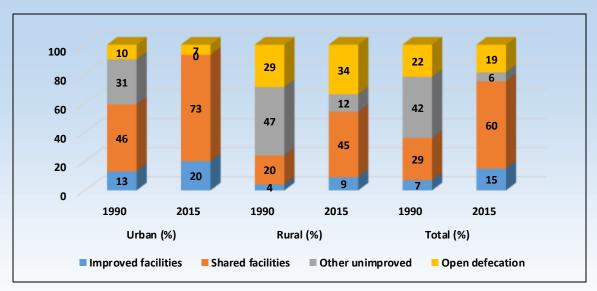
Box 2. Glance at Ghanaian Sanitary Habits

Hand washing can reduce diarrhea and pneumonia by up to 50%, yet less than 15% of Ghanaian households have hand washing facilities. Improved sanitation can reduce diarrhea rates by 36%, but only 15% of Ghanaians have access to improved sanitation, well short of the 2015 goal of 54%. One in five Ghanaians has no access to a toilet (Photo 4) and defecates in the nature, with open defecation rates over 70% in Northern Ghana, reflecting significant national inequalities.

Source: UNICEF Ghana, 2017.



Photo 4. Beneficiary of USAID WA-WASH sanitation facility. Source: USAID WA-WASH



Graph 3. Evolution of sanitation coverage in Ghana from 1990 to 2015. Source: WHO/UNICEFJMP, 2015



Photo 5. Example of dilapidated latrines in the village of Mettoh Yipal in Ghana.

Source: USAID WA-WASH

2.1.3 Hygiene

In Ghana, diarrhea contributes to about 25% of the under five year old child mortality. The underlying causes of diarrheal disease include inadequate access to hygienic practices.

Recent studies have revealed that hand washing with soap at critical times, along with point-of-use water treatment and safe excreta disposal are the three most effective water, sanitation and hygiene (WASH) interventions in the reduction of diarrheal morbidity and mortality. Most households in the WASH-UP target communities considered hand washing with water and soap after defecation as the most critical time for washing their hands. Numbers of people, who indicated that they wash their hands before food preparation, were over 80% in all project towns. The critical moments, where most respondents said they resort to hand washing according to field data, is after using the toilet (90%), before meals (86%), after meals (62%), after changing diapers (29%) and after visiting the urinal (23%). No household reported any hand washing before feeding a child. A significant majority wash their hands in bowls containing water (45%), and 30% washed under running water with soap. Almost all the public latrines in the communities project did not have hand washing facilities, and where they do existed, it was just a bowl and water. Only 2% were tap basins with soap, 5% had basins, water and soap and another 5% had basins and water for washing (MLGRD, 2011).

These existing hygiene behaviors are due to the low level of education (formal) among food handlers in Ghana and it strongly affects the food industry which is regulated by number of laws and standards (Box 3). As a result, high level of diarrheal cases of which a higher percentage are due to food and water bome infections were reported. The most recent study, conducted by Food and Drugs Authority – Ghana in 2013 revealed that 77% of all traceable food borne diseases resulted from improper handling in food establishments (Foriwa and Lovatt, 2015).

Box 3. Advices to Avoid Contamination

As a consequence of humans also containing microorganisms naturally or from the surrounding environment, it is important to maintain an appropriate personal hygiene.

Important hygienic aspects related to Personal Hygiene include:

- 1. Food vendors practicing hand washing before handling food and often during food preparation.
- 2. Food vendors washing hands after going to the toilet.
- 3. Food vendors' drying hands after hand washing procedure.
- 4. Food vendors wearing clean protective clothing.
- 5. Food vendors wearing head covering.
- 6. Food vendors avoiding wearing personal effects such as jewelry, watches, pins or other items in food handling areas.
- 7. Food vendors ensuring that cuts and wounds are covered by suitable waterproof dressings.
- 8. Food vendors avoiding personal behavior such as smoking, spitting, chewing or eating, sneezing or coughing over unprotected food.

Food vendors not handling food if you know or suspect to be suffering from or to be a carrier of a disease or illness likely to be transmitted through food.

Source: FAO, 2009.

2.2 Issues

This section provides a brief overview of water, hygiene, and sanitation issues in Ghana. To concentrate on that issues that potentially have the most impact a SWOT analysis of the WASH sector has been completed.

2.2.1 Water

As a country located in the humid tropics, Ghana has abundant groundwater resources with high charging rate of the groundwater table by rainwater. However, it is clear that these resources are vulnerable to climate change, pollution, population and urban growth...

In developing a SWOT analysis of the water sector (USAID WA-WASH, 2016), a host of issues were examined. The weaknesses that are key constraints to sustainable development were be identified. They include:

- High inequality in coverage between urban, sub-urban, low-income-urban and rural areas (Photo 7);
- Weak capacity of MMDAs (Metropolitan, Municipal and District Assemblies), regarding staff number, equipment and logistics;
- Low sustainability of facilities with high rate of non-functionality of water facilities (about 30%);
- Strong reliance on external assistance;
- Lack of collaboration/coordination and synergy between the sector stakeholders;

- Low appreciation of the policies by some stakeholders with implications on quality and sustainability;
- Poor commitment of municipalities to ownership and sustainability of WASH interventions;
- Weak M&E system resulting in lack of reliable and updated databases;
- Weak documentation and knowledge management;
- The technologies do not often meet the communities' needs.

Threats include a continuation of present trends and a deterioration of current conditions in the water sector. They consist of:

- Water safety / contamination with high level of fluoride, iron, and arsenic in some regions;
- Donor funding dwindling to the sector in addition to diversion of funds to other poorer countries;
- Hydro-geological problems as witnessed by the scarcer groundwater in some areas.



Photo 6. Visit of USAID WA-WASH team to take a sample of water from the rope pump in the village of Sampasayiri.

Source: USAID WA-WASH

2.2.2 Sanitation and Hygiene

Access to basic sanitation remains a challenge in Ghana with only a quarter of the population using improved sanitation facilities (GSS, 2015) (Photo 8).

Weaknesses that will keep the country from reaching its Sanitation and Hygiene Vision are:

- Low political will;
- Low profile of sanitation in the country with a national rate of 7%;
- High inequality in coverage between urban, sub-urban, low-income-urban and rural areas;
- Very weak capacity of MMDAs (staff number, equipment and logistics);
- Poor targeting due to political interferences and technological choices that do not often meet communities' needs;
- Low appreciation of the policies by some stakeholders;
- Low priority from government regarding the funding of the sanitation sector;
- No emphasis laid on behavior change;
- Inadequate funding for sanitation and hygiene by the state and partners;
- Failure to enforce sanitation and hygiene legislation;
- Low sustainability of community and public sanitation works and systems;
- Very strong reliance on external assistance;
- Equity & Inclusion issues with low inclusion of poor, vulnerable and geographically excluded groups (Box 4);
- Weak M&E systems resulting in insufficient or lack of reliable data;
- Poor commitment of municipalities to ownership and sustainability of sanitation interventions;
- Weak documentation and knowledge management;
- Weak linkages between policies and

- practices;
- Mismatch between promoted technologies and communities' needs;
- Hygiene is often overlooked in WATSAN programs.

Box 4. Gender in Ghana's WASH Context

In the WATSAN sector in general and particularly in household water supply, the national gender policy is clear: the burden of fetching water lies upon women or young girls. When the activity has a commercial nature, men are more involved in it. Women are also under-represented in the WASH management organizations to such an extent that their specific concerns and needs are not sufficiently reflected in the choice of related works and technologies.

Source: USAID WA-WASH, 2016

A review of Sanitation and Hygiene sectors threats that would lead to the stagnation, decline or demise of the sectors has been completed and indicated:

- Donor funding dwindling to the sector given the status of Ghana as a lower middle income country;
- Risks of overlapping roles and conflicts of interest due to the existence of several ministries involved in sanitation and hygiene sectors management;
- Frequent staff movements at local governments' level;
- Low progress in behavior change.

2.3 WASH Quality Challenges

This section provides a brief overview of water, hygiene and sanitation challenges in Ghana. The rapid urbanization pushes the country to overcome some challenges related to the access to drinking water, improved sanitation, and hygiene.

2.3.1 Water

In Ghana, according to AMCOW (2015), water companies meet many challenges as to:

- Set a clear roadmap on actions to be taken after expiry of management contract for urban water supply;
- Bring tariffs in line with full-cost recovery, in parallel with successful achievement of efficiency targets;
- Ensure greater participation of existing consumers and potential consumers in investment and supply decisions of the GWCL;
- Mainstream independent value-formoney studies in all loans/grants for urban water supply projects;

- Institute a system of incentives and penalties for management of urban watersupply;
- Give greater visibility to pro-poor unit within the urban utility;
- Close the funding gap for rural water supply;
- Revisit implications on sustainability of removing the 5% community contribution to capital costs;
- Identify innovative ways of providing drinking water to challenging hydrogeological areas (Photo 8).



Photo 7. A well-kept pump with the drainage channel in the village of Berwong Kpipag. Source: USAID WA-WASH

2.3.2 Sanitation and Hygiene

The sector of sanitation and hygiene in Ghana faces numerous challenges to:

- Prepare a national sanitation program to address the rural sanitation deficit if the MDG is to be achieved.
- Declare a clear policy direction on how to deal with the high proportion of shared facilities.
- Make vigorous efforts to establish microfinance schemes to support sanitation delivery.
- Develop innovative approaches to urban sanitation, including microfinance schemes, to support

- building of household sanitation facilities (Photo 9).
- Develop a clear policy for increasing access among peri-urban and low income communities in cities.
- Strengthen institutional capacity for the management of sewerage treatment system since metropolitan, municipal, and district councils as currently structured and staffed cannot do this (AMCOW, 2015).



Photo 8. Maintenance of the pump of Zambo Tanzu. Source: USAID WA-WASH

2.4 Laws and Regulations

Currently, a number of institutions exist to supervise and regulate water supply and sanitation. The policy framework is based on the Ghana Poverty Reduction Strategy (GPRS). There are several regulatory and control bodies acting in the WASH sector (USAID WAWASH, 2016):

- The Ghana Standards Authority (GSA): It sets drinking water standards for water services in Ghana and performs this duty within the implementation framework of the Water Sector Strategic Development Plan (WSSDP).
- **Public** Utilities Regulatory Commission (PURC): PURC responsible for regulating the energy and water sectors, the water supply tariffs and services, including water quality. PURC is also responsible for monitoring water quality standards in urban areas in line with standards set by the Ghana Standards Authority. In 2013, PURC began setting water tariffs to allow full cost recovery. This new regime is being improved with extensive awareness raising and public education on the need to recover the cost of providing urban water services. PURC is in the process of developing a framework for propoor water service delivery in urban areas.
- ✓ Water Resources Commission (WRC):
 The WRC Act, 1996 (Act 552) conferred on the Water Resources Commission to enact the regulations on the use of water, the procedures for allocating permits for various water uses including domestic, public, industrial, agricultural, power generation, water transportation, aquaculture, environment, water-related recreational activities.
- ✓ **Urban Water Services:** The operations of service providers in the urban sector shall be subject to the Government of Ghana's regulations regarding the

Box 5. Challenges in implementing existing policies and strategies

The two main agencies for the WASH sector are the CWSA, the GWCL. They all have regulator frameworks for the sector. The State Enterprises Commission (SECs) sets performance standards for them. The PURC then monitors standards and guidelines set to regulate the implementation of sector policies and strategies. Sector stakeholders were unanimous that there was no need for new policies and regulations as the main challenge was the implementation of the already existing policies and strategies.

USAID WA-WASH, 2016

provision of goods, services and works and the standards and operation guidelines set by PURC, Ghana Standard Board (GSB) and Ghana Water Company Limited (GWCL).

✓ Community Water Services: The operations of service providers and others under the National Community Program for Water and Sanitation (NCWSP) shall meet defined standards (Photo 10). They should ensure compliance in the implementation of their WASH programs.

The evolution of laws and regulations of water quality in Ghana underwent some reforms, starting way back in the precolonial era (Table 1). The reforms involved:

- (i) The Transformation of the role of the public sector from that of service provider, into a facilitator of decentralized (especially for rural and small town water supply and sanitation) demand driven service regulation;
- (ii) The establishment and strengthening of regulatory bodies for water supply;

- (iii) The entrenchment of community ownership and management;
- (iv) The highlighting of the role of water and sanitation services in poverty reduction;
- (v) The introduction of private sector participation into urban water supply (AMCOW, 2015).

Table 1. Reforms in WASH sector in Ghana from 1928 to 2009.

Year	Event		
1928	Hydraulics Department of Public Works Department (PWD) pioneers delivery of urban water supply		
1948	Rural Water Department created within PWD to deal with rural water supply		
1958	Hydraulics Department and Rural Water Department merged into Water Supply Division (WSD) of PWD		
1965	Ghana Water and Sewerage Corporation (GWSC) established to produce and distribute water in urban and rural areas		
1994	Kokrobite Conference endorses the National Community Water and Sanitation Program (NCWSP)		
1994	Separation of urban and rural water supply. Community Water and Sanitation Department (CWSD) created within GWSC		
1995	Study on Restructuring of the Water Sector; National Stakeholders Workshop endorses PSP in urban water supply		
1997	GWSC converted into a limited liability company, the Ghana Water Company Limited (GWCL) with responsibility for urban water supply		
1997	Public Utilities Regulatory Commission (PURC—economic regulation) and Water Resources Commission (WRC—management of water resources) established		
1998	Autonomous agency—Community Water and Sanitation Agency (CWSA) created by Act 564		
2003	Establishment of Coalition of NGOs in water supply and sanitation (CONIWAS)		
2005	Private operator (Aqua Vitens Rand) selected for a five-year management contract for urban water supply		
2009	Announcement of abolition of community contribution to capital cost of rural and small town water projects		
2009	1st Ghana Water Forum, an annual event to raise visibility of water security issues and place them on political agenda		

Source: Adapted from AMCOW, 2015

Ghana Water Company Limited (GWCL) was first established in 1999, following the conversion of Ghana Water and Sewerage Corporation, into a state - owned limited liability company under the Statutory Corporations (Conversion to Companies) Act 461 of 1993 as amended by LI 1648 (GWCL Website). The mission statement is: "We are committed to meeting the increasing demand for better service delivery through efficient management of our core business of

production and distribution of potable water and customer management in urban areas of Ghana". The company is responsible for potable water supply to all urban communities in Ghana. Currently the company operates 88 urban water supply systems, with an average production of 871,496m³/day. It also has 3,476 staff members and serves 550,654 customers with 74% of which are metered and only 26% unmetered (GWCL, 2017). Table 2 summarizes prices for water supplied by GWCL (note: 1GHp = US\$ 0.23).

Table 2. Ghana Water Company Limited Tariffs.

Ghana Water Company Limited Tariffs					
Category (1000L)	of service Monthly Consumption	Approved rates in GHp/1000L (Effective as of December 14, 2015)			
Metered	0-5	298.1720			
Domestic	5 and above	507.3948			
Comm	ercial	836.0166			
Indust	rial	1007.0200			
Public	Institutions / Govt. Departments	650.9074			
	ses without connection (Public stand per 1000 liters	334.6242			
Specia	l Commercial	5078.9159			
Sachet Water Producers		1121.0221			
GHAP	OHA (internal Usage)	836.0166			
GHAP	OHA (Ocean Going Vessels)	11400.2250			

Source: GWCL, 2017



Photo 9. USAID WA-WASH team in a focus group with villagers from Ngmangbile (left) and Tantuo (right).
Source: USAID WA-WASH

3. RECOMMENDATIONS

The main recommendations to enhance the population's life with regards to the issues and, challenges encountered by the water, sanitation and hygiene sector, are as follow:

- Develop the WASH sector;
- The government should play a more prominent role in sector governance, by conducting an assessment of existing institutional weaknesses of the sector and their possible impact on WASH service delivery within the sectoral approach. The national context is characterized by too many (more than 100) policies, strategies, guidelines, frameworks, protocols, creating confusion in the sector. Therefore, there is a need to analyze the overall environment, in order to reduce their number and harmonize them for greater efficiency and compliance in their enforcement.
- The sector development needs to be planned as part of a change program, which focuses on building active groups that can challenge poor governance and corruption practices. A thorough knowledge of the contexts, policies, and strategies is essential to the development of genuine policies and successful advocacy strategies focusing more on commitment. A platform, including citizens and representatives of the civil society, communities, donors, financial institutions, private sector, government, should be created to review, harmonize, and implement policies and strategies for the WASH sector with a view to achieving the SDGs.
- The District Assemblies' capacities should be built and their financial

- resources increased to allow them to fully play their roles in WASH service delivery and exercise their contracting authority mission in water governance at local level.
- There is a need to upgrade stakeholders' knowledge on country water resources, and promote better water resource management by focusing on sub-regional cooperation. In a context of climate change, urbanization, rapid population growth, pollution, man-made resource decay, a better knowledge of water resources will ensure proper planning to allow better adaptation to changing environments.
- The government of Ghana wants to meet the SDG challenge in the water sector. To achieve this objective, policies and programs should be framed in an environment of good governance, where transparency, participation, and accountability are values that will ensure efficient management of the resources mobilized. This also requires the development of policies to strengthen human resources capacities in the sector and local communities.
- In an environment where the private sector plays a key role in sector financing, the government will have to create an enabling institutional framework to promote PPP so to reduce sector strong reliance (vulnerability) on external funding.

4. CONCLUSION

The water, sanitation, and hygiene sector in Ghana encounters many issues. Very few sanitation and hygiene projects have been previously implemented in Ghana.

Nevertheless, those projects, succeeded to improve access to water and sanitation and to raise awareness on hygiene.

Besides the issues and the related achievements, more has to be done. Therefore, our recommendations are: (1) the government should play a more prominent role in sector governance by conducting an assessment of existing institutional

weaknesses of WASH sector, (2) to build the capacity of local people (Photo 12), (3) to allocate more funds in the WASH sector.

This will be done through adequate financing, capacity building, priority to scaling up the delivery and access to safe and accessible sanitation safe for all, especially to place a priority focus on marginalized and vulnerable groups that are neglected and reversing inequality. Otherwise it does not provide

Following those recommendations, it is sure that Ghana will be able to achieve the SDGs goals for water, sanitation, and hygiene.



 ${\it Photo 10. USAID WA-WASH team during a focus group in Nandom district.}$

Source: USAID WA-WASH

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