HISTORY OF WATER SUPPLY IN GHANA

The first public water supply system in Ghana, then Gold Coast, was established in Accra just before World War I. Other systems were built exclusively for other urban areas among them the colonial capital of Cape Coast, Winneba and Kumasi in the 1920s.

During this period, the water supply systems were managed by the Hydraulic Division of the Public Works Department. With time the responsibilities of the Hydraulic Division were widened to include the planning and development of water supply systems in other parts of the country.

In 1948, the Department of Rural Water Development was established to engage in the development and management of rural water supply through the drilling of bore holes and construction of wells for rural communities.

After Ghana's independence in 1957, a Water Supply Division, with headquarters in Kumasi, was set up under the Ministry of Works and Housing with responsibilities for both urban and rural water supplies.
During the dry season of 1959, there was severe water shortage in the country. Following this crisis, an agreement was signed between the Government of Ghana and the World Health Organisation for a study to be conducted into water sector development of the country.

The study focused on technical engineering, establishment of a national water and sewerage authority and its financing methods. Furthermore the study recommended the preparation of a Master Plan for water supply and sewerage services in Accra-Tema covering the twenty-year period 1960 to 1980.

In line with the recommendations of the WHO, the Ghana Water and Sewerage Corporation (GWSC), was established in 1965 under an Act of Parliament (Act 310) as a legal public utility entity. GWSC was to be responsible for:

- Water supply and sanitation in rural as well as urban areas.
- The conduct of research on water and sewerage as well as the making of engineering surveys and plans.
- The construction and operation of water and sewerage works,
- The setting of standards and prices as well as collection of revenues.

**DECLINE IN EFFICIENCY OF GWSC**

By the late 1970s and early 1980s, the operational efficiency of GWSC had declined to very low levels mainly as a result of deteriorating pipe connections and pumping systems. A World Bank report in 1998 stated that: “The water supply systems in Ghana deteriorated rapidly during the economic crises of the 1970s and early 1980s when Government’s ability to adequately operate and maintain essential services was severely constrained.”

GWSC experienced operational difficulties because of inadequate funding. From its inception, GWSC depended solely on government subvention to meet both operational and development costs. However, the annual government subvention was inadequate to meet operational and development needs of the Corporation over the period. In addition, the annual subvention was, often, either not released on time or in most cases not released at all before the end of the budgetary year.

GWSC therefore met its operating costs at a level constrained by unavailability or inadequacy of funds. The lack of funds to meet operational costs resulted in the poor state of the existing infrastructure at the time, especially the distribution system.
Before 1957, there were 35 pipe-borne water supply systems in the country. In a bid to promote rapid national development after Ghana’s Independence, the government launched a crash programme for urban water expansion and accelerated rural development. As a result, by 1979 there were 194 pipe-borne and 2,500 hand pumped borehole systems in the country. By 1984, additional 3000 boreholes had been drilled and fitted with hand pumps. However by the late 1980’s and early 1990, 33% of the water supply systems had either deteriorated greatly or completely broken down due to inadequate funding to carry out maintenance and rehabilitation works.

**INTERVENTIONS TO IMPROVE EFFICIENCY**

To reverse the decline in water supply services, various sector reforms and improvement projects were undertaken in 1970, 1981 and 1988 by the World Bank, IDA, donor countries and other external support agencies including the Austrian Government, Italian Government, Nordic Development Fund, the African Development Bank, CIDA, DFID, KfW, GTZ, OECF, ECGD and CFD/ADF.

Though some gains were derived from these interventions, their general impact on service delivery was very disappointing. Due to the failure of these interventions to achieve the needed results, several efforts were made to improve efficiency within the water supply sector in Ghana especially during the era of the Economic Recovery Programme from 1983 to 1993.

During that period, loans and grants were sought from the World Bank and other donors for rehabilitation and expansion programmes, training of personnel and procurement of transport and maintenance equipment.

In 1986, subvention for operations and maintenance was withdrawn although funding for development programmes continued. User fees for water supply were increased and subsidies on water tariffs were gradually removed for GWSC to achieve self-financing. The government at that time approved a formula for annual tariff adjustments to enable the Corporation generate sufficient funds to cover all annual recurrent costs as well as attain some capacity to undertake development projects.

For political reasons, this tariff formula was not applied. Although there were intermittent tariff increases during the period, they were always below cost recovery levels. This resulted in heavy corporate deficit financing and ineffective service delivery.
WATER SECTOR REFORMS IN GHANA

In 1987, a “Five-Year Rehabilitation and Development Plan” for the sector was prepared which resulted in the launching of the Water Sector Restructuring Project (WSRP). Multilateral and bilateral donors contributed $140 million to support the implementation of the WSRP.

The WSRP was aimed at reduction of unaccounted for water, rationalization of the workforce, hiring of professionals and training of staff. A strong focus of the WSRP was also on improved management and increased efficiency through organisational changes in the water sector. Accordingly, a number of reforms within the Ghanaian water sector were initiated in the early 1990s.

As a first step, responsibilities for sanitation and small town water supply were decentralized and moved from Ghana Water and Sewerage Corporation to the District Assemblies in 1993.

The Environmental Protection Agency (EPA) was established in 1994 to ensure that water operations would not cause any harm to the environment.

The Water Resources Commission (WRC) was founded in 1996 to be in charge of overall regulation and management of water resources utilization.

In 1997, the Public Utilities Regulatory Commission (PURC) was established and charged with the responsibility of setting tariffs and quality standards for the operation of public utilities.

Community Water and Sanitation Agency (CWSA) was established in 1998 to be responsible for management of rural water supply systems, hygiene education and provision of sanitary facilities. After the establishment of CWSA, 120 water supply systems serving small towns and rural communities were transferred to the District Assemblies and Communities to manage under the community-ownership and management scheme.

Finally, pursuant to the Statutory Corporations (Conversion to Companies) Act 461 of 1993 as amended by LI 1648, GWSC was, on 1st July 1999, converted into a 100% state owned limited liability, Ghana Water Company Limited, with the responsibility for urban water supply only.
PRIVATE SECTOR PARTICIPATION IN URBAN WATER DELIVERY IN GHANA

On 22 November 2005, GWCL signed a Management Contract with Vitens Rand Water Services BV of Netherlands, a consortium of Vitens International BV of the Royal Netherlands and Rand Water Services Pty of South Africa.

Under the Management Contract which commenced on 6th June 2006, Vitens Rand Water Services BV, through its subsidiary, Aqua Vitens Rand Limited, operated the urban water systems for five years. The Management Contract set out for the Operator specific standards and targets in respect of raw and treated water quality, pressure and flow rates, non-revenue water, treatment plants operations, customer response time, customer accounts receivable, interruptions and emergency actions, customer collections, reduction in chemical usage, reduction in power consumption, and public sector consumption.

At the end of the management contract period on 5th June 2011, all the performance indicators showed that private involvement in the operations of GWCL had failed to bring about the expected positive improvement in urban water supply in Ghana.

Review of technical, financial and audit reports of GWCL, AVRL and other independent institutions such as Fichtner/Hytsa/Watertech and State Enterprises Commission proved that during the management contract period, the level of performance in almost all the systems was poor especially with regard to reduction in non-revenue water, treatment plant operations, customer accounts receivable, customer collection, chemical usage, power consumption and public water consumption.

Following the expiration of the Management Contract and the exit of AVRL, a new company, Ghana Urban Water Limited (GUWL), was formed by government, on 9th June 2011, to take over temporarily the management of urban water systems in the country. According to the Ministry of Water Resources Works and Housing, ‘the move is the most attractive short term option to allow government to take stock and seamlessly manage the operations of the urban water systems for a period of only 12 months’.

On 1st August 2013, Cabinet approved the merger of Ghana Water Company Limited and Ghana Urban Water Limited. With the merger, the company is now operating as one entity under its original name Ghana Water Company Limited.
RESPONSIBILITIES OF GHANA WATER COMPANY LIMITED

Responsibilities of Ghana Water Company Limited, in general, cover the following:

- Abstraction, treatment and supply of potable water to urban communities;
- The planning and development of water supply systems in urban communities in Ghana;
- The conduct of research and engineering surveys relative to water and related subjects;
- Contracting out the design, construction, rehabilitation and expansion of existing as well as new water supply infrastructure;
- The provision of quality service delivery to consumers in respect of quantity and quality of water supplied;
- Periodic submission of proposals to the Public Utility Regulatory Commission for tariff review.

Commercial Services

- Management of applications for new service connections, new subscriptions and customers’ files;
- Definition and establishment of commercial procedures;
- Signing of contracts with customers for the supply of potable water;
- Issuance of bills water bills to customers;
- Revenue collection from customers;
- Disconnection and or prosecution of customers for non-payment of water bills and or other offences;
- Identification and removal or regularization of illegal connections.

CURRENT URBAN WATER REFORMS

After the expiration of the Management Contract, the Ministry of Water Resources Works and Housing (MWRWH), with the support of the World Bank procured the services of a Consultant to assess a number of reform options for the Ministry to consider for proper management of the urban water sector.

The Consultant analyzed eight (8) management options which the Ministry reviewed and shortlisted three (3) for detailed analysis by another Consultant in May 2012. The Consultant selected for the detailed analysis considered a fourth option, Performance Contract, which was, a variation of one of the three shortlisted by the Ministry.

Subsequently, an Advisory Committee was constituted by the Ministry to supervise and review the work of the Consultant and advise the Ministry accordingly. The Advisory Committee, upon
review, endorsed the fourth option recommended by the Consultant. The selection of that option had the support of the Boards of Directors, Managements and staff of both GWCL and GUWL.

The Ministry approved the recommendation of the Advisory Committee and then constituted a 14-member Implementation Committee in **October, 2012** with membership from Parliament, Private Consultancy Services, the State Enterprises Commission, the World Bank, Public Services Commission, the MDPI, the Ministry of Water Resources Works and Housing, the Public Utilities Workers Union and the Coalition of NGOs in Water and Sanitation to set the reform process in motion.

**In February 2013**, the Government of Ghana and the World Bank engaged a Transaction Advisor, Messrs 2ML Consulting, a Uganda-based firm to facilitate the implementation of the performance based reform which was christened **Performance Improvement Programme**. The Consultant and his team undertook a number of consultative and stakeholder engagements before the implementation of the programme and the following activities were carried out internally before the programme started:

- Key positions such as Regional Chief Managers and District Managers were all declared vacant;
- The vacant positions were all advertised internally;
- Shortlisted applicants submitted detailed business plans and were rigorously interviewed for the vacant positions;
- Applicants were made to set performance targets, based on seven (7) key performance indicators proposed by Management;
- All Head Office Departments were also made to prepare business plans and set targets for their operations.

**On 1\(^{st}\) April, 2015** the programme was launched in a grand ceremony in which performance contracts were signed at all the management levels of the Company’s operation. While the Sector Ministry signed a performance contract with the GWCL Board of Directors, the Board of Directors signed one with the Management of GWCL. The Management of GWCL also signed a contract with its Regional Management who in turn signed with their District Managers.

**Although the overall objective of the reform is to bring improvement in the urban water sector, the specific object is to** turn GWCL into a profitable utility company in the shortest possible time while meeting the demands of customers.
The current performance-based reform is seen as a long term intervention but is being rolled out in tranches with different names. The first programme which took place between 1st April and 30th June, 2015 was known as the **100-day High Performance Improvement Programme (HIPIP)**. A successor programme named **Sustaining High Performance in 180 days (SHiP 180°)** followed in **August 2015 and ended in January 2016**.

The two programmes were highly successful. Revenue collection rose to an all-time best, customer service improved tremendously, staff members became highly innovative and arrears collection also improved drastically.

Currently, GWCL is running a nine-month (April – December, 2016) programme dubbed **‘PUSH UP’** (People centered, effective Utilization of resources, improved Supervision, High performance. The word ‘UP’ was added to urge workers to up their game in the programme).

A lot of attention is being given to Non-Revenue Water (NRW) reduction in the current programme.