A photograph of children in Ghana washing their hands at a public tap. The children are wearing orange school uniforms. The tap is a brass faucet with a handle, and water is flowing from it. The background shows a dirt ground and some greenery.

Report

How to reduce inequalities in access to WASH

Urban water in Ghana

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Cover photo: School children washing hands in Ghana. © Mac-Gbathly

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All quotations from interviewees are anonymous. Any errors or omissions are our own.

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Acronyms

AMCOW	African Ministerial Conference on Water
AVRL	Aqua Vitens Rand Limited
CBOs	community-based organisations
CONIWAS	Ghana Coalition of NGOs in WASH
CWSA	Community Water and Sanitation Agency
DPs	Development Partners
GAMA	Greater Accra Metropolitan Area
GDP	gross domestic product
GOG	Government of Ghana
GSGDP	Ghana Shared Growth and Development Agenda
GWCL	Ghana Water Company Limited
GWSC	Ghana Water and Sewage Corporation
IMF	International Monetary Fund
IWRM	Integrated Water Resources Management
JMP	Joint Monitoring Programme
LIUCs	Low-Income Urban Communities
MDGs	Millennium Development Goals
MIC	middle-income country
MMDAs	Metropolitan, Municipal and District Assemblies
MoF	Ministry of Finance
MoWRWH	Ministry of Water Resources, Works and Housing
NGOs	non-governmental organisations
NRW	Non-Revenue Water
NWP	National Water Policy
PEA	political economy analysis
PPPs	Public-Private Partnerships
PURC	Public Utilities Regulatory Commission
SDGs	Sustainable Development Goals
SWG	Sector Working Group
UNICEF	United Nations Fund for Children
WASH	Water, Sanitation and Hygiene
WB	World Bank
WD	Water Directorate
WDR	Water Development Report
WHO	World Health Organization
WRC	Water Resources Commission
WSS	Water Supply System
WSSDP	Water Sector Strategic Development Plan

Executive summary

The Millennium Development Goals (MDGs) embedded water and sanitation as fundamental pillars of development. Their successors, the Sustainable Development Goals (SDGs) went a step further and shifted the focus from service delivery to service delivery ‘for all’, thereby adding a fundamental concern with equity. Despite significant progress, however, huge disparities in access to and use of improved water and sanitation facilities between the richest and the poorest, as well as between quintiles, remain.

This report is part of a global study commissioned by WaterAid, aimed at understanding plausible pathways of change to promote broad-based and equitable access to water, sanitation and hygiene (WASH) services. We conducted a political-economy analysis exploring the incentives, constraints and opportunities for change, with a focus on the poorest fifth of the population. Two other country case studies and a synthesis report are available.

We selected Ghana as a case study considering its good progress in recent years in reducing inequalities in access to urban water within a context of overall impressive economic growth and poverty reduction. Over the past 20 years, Ghana has successfully transitioned from authoritarian rule to democracy; achieving middle-income status in 2010, its poverty rate has fallen significantly and it ranks among the highest-performing countries in terms of human development in sub-Saharan Africa. However, poverty reduction has not gone hand in hand with inequality reduction. The serious external and internal macroeconomic shocks that have affected Ghana since 2012 contributed to a sharp rise of the price of non-food items, hitting urban households particularly hard and raising concerns about the country’s future growth prospects.

These trends for the overall economy are reflected in trends in the WASH sector. According to the World Bank, the poverty reduction achievements of the 1990s and 2000s have been accompanied by a substantial improvement in access to basic household services, such as sanitation, electricity and clean drinking water. Between 1990 and 2015, access to improved water sources increased from 84% to 93% in urban areas, and from 39% to 84% in rural areas. Ghana’s sustained economic growth and development process in the 1990s and 2000s have contributed to this progress, stimulating infrastructure investments aimed at improving service delivery in many sectors, including water. Influenced by the international agenda, donors have supported an institutional reform of

the sector, which is open to the private sector in increasing efficiency in service delivery. Finally, Ghana’s civil society has played an active role in the water sector, joining arms with non-governmental organisations (NGOs) focusing on the urban poor, to ensure that water service expansion and delivery remained inclusive.

However, this is not the whole story. While access to improved water sources in Ghana’s urban centres has increased overall, this is largely due to access to bottled/sachet water and public taps or standpipes, rather than piped water. From the data, progress has only partially been driven by government’s investments in infrastructure and utilities, and other (private, informal) service providers may have played a critical role, too. Large pockets of urban areas where the poorest live remain largely unserved by the Ghana Water Company Limited (GWCL). There are several reasons for this.

First, there is a disconnect between water service delivery and urbanisation. Expansion of water service delivery has not happened alongside rapid urbanisation. Water strategies and investments have remained sector-specific, and have occurred outside of broader considerations related to urban expansion and the need to serve the rapidly expanding informal and peri-urban settlements.

Second, water investments have been ‘politicised’. While the Government of Ghana, with the support of development partners, has made impressive advancements in the creation of the enabling environment for advancing water and sanitation and meeting the MDGs, plans have seldom been matched with concrete actions. This is due to the ‘political culture’ and leadership structure of Ghana, characterised by top-down decision-making despite commitments to decentralisation; preference for highly visible investments to gain electoral votes; and dependency on international finance to implement projects.

Third, the management model for urban water has perpetuated the system’s inefficiency. The outstanding problem of non-revenue water is the major obstacle facing the GWCL in expanding its coverage to reach the poorest. Its past and current focus on expanding water production has left behind efficiency issues.

Through our analysis, we identified several pathways for change towards more inclusive access to water services, and provided specific recommendations on how organisations like WaterAid could support progress. First and foremost, WaterAid is well positioned to seek and build coalitions of interest outside the WASH sector,

particularly linking WASH with urban planning and housing. WaterAid could also push towards collaborative behaviours between and within the government and donors, that have a clear focus on addressing inequalities, for example by identifying and sharing positive examples from other sectors and/or contexts. ‘Buy-in’ at the national level remains critical for pushing pro-poor reforms, especially in the context of Ghana where investment decisions tend to be politicised and linked to the electoral cycle, rather than long-term considerations. NGOs and civil society organisations have a key role to play in informing extensive stakeholder engagement to hold government to account.

Organisations like WaterAid should also highlight the ‘business case’ for investing in urban water in low-income settlements, presenting the poor as customers, while reminding the authorities about the existence of pockets of inequalities and supporting the development of strategies to address them. The case of the poor can also be pushed by other interest groups with more power in support of reforms that ultimately benefit all. WaterAid can play an important role in carefully considering who needs to be mobilised, and crafting strategies to facilitate engagement with these actors that other NGOs, civil society organisations and even municipal and government authorities can replicate. Finally, WaterAid could support a better understanding of how local and national authorities working with small-scale entrepreneurs who already

operate in low-income urban settlements, can contribute towards finding market solutions that work for the poorest.

Key messages

- In the past 20 years, Ghana has made good progress in reducing inequalities in access to urban water in a context of overall impressive economic growth and poverty reduction.
- Progress has been driven by investments in water infrastructure to increase supply, donor-driven institutional reform of the sector, and the active role of Ghana’s civil society to ensure a pro-poor focus.
- However, while access to improved water sources in Ghana’s urban centres has increased overall, piped water connections have decreased, and large pockets of urban areas where the poorest live remain unserved.
- Lack of integrated urban planning, political incentives prioritising vote-winning investments, fragmented pro-poor interventions, and asymmetric information on inequalities and access to water services have slowed progress down.
- Organisations like WaterAid have a key role to play in building coalitions of interest outside of the water sector, encouraging collaborative behaviours with a pro-poor focus, and building citizens’ voice to hold their government and service providers to account.

1. Introduction

1.1. Understanding inequalities and WASH services: general overview of the study

It is often argued that investments in water supply and sanitation (WSS) generate wide-ranging economic benefits, and are, therefore, a key tool for poverty reduction (see e.g. Slaymaker et al., 2007; Howard and Bartram, 2003). The Millennium Development Goals (MDGs) had already embedded water and sanitation as fundamental pillars of development. Their successors, the Sustainable Development Goals (SDGs) went a step further and shifted the focus from service delivery to service delivery ‘for all’, thereby adding a fundamental concern with equity. Relevant actors in the water, sanitation and hygiene (WASH) domain now accept, albeit to different degrees, that various forms of social and economic inequalities mediate access to WASH services. The World Bank’s World Development Report 2004, *Making Services Work for Poor People* provided landmark analysis of why countries still fail to deliver services to their citizens, focusing on access to quality services in education, health, water, sanitation and electricity (World Bank, 2004). Since 2010, the Joint Monitoring Programme (JMP) of Unicef and the World Health Organization (WHO) has introduced wealth quintile analyses to understand trends of inequalities in access to drinking water and sanitation between rich and poor in rural and urban areas. However, heterogeneity among ‘the poor’ is significant.

In this study, we chose to focus on the poorest quintile of the population, to highlight the challenges of service delivery for the ‘poorest of the poor’. As data from the 2015 JMP report show, there are still huge disparities between the richest and the poorest in the use of improved water and sanitation facilities (especially for sanitation, while the disparity is equally pronounced in urban and rural too). There are also significant gaps between quintiles. In many countries, access to improved water and sanitation for the bottom wealth quintile is significantly lower than that of the second wealth quintile. This is true, for example, in the case of urban sanitation in Ethiopia, where access for the lowest quintile has increased only by 26%

between 1990 and 2010, versus an impressive increase of 70% for the second quintile (UNICEF and WHO, 2015). Besides income, other inequalities, reflecting geographic location, gender, ethnicity, age, disability/health conditions can also mediate access to water and sanitation services, but are often more difficult to monitor and, hence, address (Stewart et al., 2011; Stewart, 2002; Cobham, 2014). Our research aims to understand what plausible pathways of change exist and what actions could support that change. Findings will be applied to inform the approach of WaterAid and others to support governments, and their partners, to ‘pull the levers’ towards achievement of SDG 6, particularly target 6.2.¹

1.2. Research approach and methodology

Our approach built on previous Overseas Development Institute (ODI)-led political economy analyses (PEA), highlighting the interplay between the technical and political dimensions of specific sectors to understand service delivery outcomes (Harris, 2013; Mason et al., 2013; Mason et al., 2014). These used a selection of sector characteristics as a structured entry-point to explore incentives, constraints and opportunities for introducing change. This study added a focus on drivers and patterns of social and economic exclusion to shed light on the policy and institutional changes and investments that are required to promote broad-based and equitable access to WASH services. We asked:

- What are the main drivers of inequality in access to WASH, and how do they affect and are affected by broader patterns of inequality and poverty at country level?
- To what extent have countries that have made the most progress in terms of achieving broad-based and equitable WASH access also made progress in terms of achieving broad-based and equitable growth?
- What are the sector-specific (e.g. technical characteristics) structural and systemic factors (policies, regulations and informal rules) that have driven and/or

¹ Sustainable Development Goal 6 aims to ensure availability and sustainable management of water and sanitation for all by 2030. It has six targets specifying the need to improve water quality, increase water-use efficiency across all sectors, implement integrated water resources management, and restore water-related ecosystems. Sub-targets 6.a and 6.b focus on international cooperation and capacity-building support to developing countries, and supporting the participation of local communities in improving water and sanitation management. For more information, see: <https://sustainabledevelopment.un.org/sdg6>.

hindered progress towards achieving broad-based and equitable WASH access?

- What incentives, behaviours and power relations (and combinations thereof) drive or hinder progress towards achieving broad-based and equitable WASH access?

We adopted a problem-driven approach to PEA. This consisted of identifying a specific problem – in the case of this study, the progress or lack of progress in improving access to WASH for the poorest. We then analysed the structural features that characterise the problem, or the formal and informal policies and regulations and informal rules, as well as how formal rules are informally applied in practice. We also considered power, incentives and behaviours; thus, going from what formal and informal rules maintain the status quo, to a deeper interrogation of why those rules, and therefore the problem, persist. Data for the agency diagnosis were primarily gathered through key informant interviews during fieldwork, and following the six categories of incentives proposed by Harris and Wild (2013) (see Box 1).²

Box 1: Six categories of incentives

- **Oversight:** The extent to which oversight systems effectively link actors along the service delivery chain, expose them to incentives and sanctions set by others, and permit them to deploy incentives and sanctions for others.
- **Coherence:** The degree of coherence in policies and processes for implementation – in terms of whether they are applied (or can be expected to be applied) in a uniform and integrated manner across time, space and groups of people.
- **Autonomy:** The capacities and scope to come together to solve shared problems locally, or act individually.
- **Rents:** The availability and distribution of rents i.e. the potential for actors to derive a benefit without contributing productively.
- **Credibility:** The extent to which competitive advantage, political or otherwise, can be obtained by making and fulfilling commitments to an electorate or another power base.
- **Moral hazard:** The degree to which risk-takers are insulated from the consequences of their decisions.

Source: Harris and Wild (2013)

1.3. This report: Ghana case study

This report presents the case study of Ghana. We selected Ghana considering its good progress in recent years in reducing inequalities in access to urban water within a context of overall impressive economic growth and poverty reduction. Over the past 20 years, the country has successfully transitioned from authoritarian rule to democracy, achieved middle-income country (MIC) status in 2010, and reduced its poverty rate from 52% in 1991 to 24.2% in 2013 (Cooke et al., 2016). Ghana is one of the few non-OECD countries that provides universal health insurance, and surpasses the MIC average for primary school enrolment. As a result of such progress, Ghana ranks among the highest-performing countries in human development in sub-Saharan Africa (Lenhardt et al., 2015).

Improvements in service delivery have also been noted in the water sector: expanded network coverage and investments in water production have eventually benefited some of the poorest and most marginalised Ghanaians. Ghana achieved the MDG target of halving the proportion of the population without access to safe water in 2015. Only 21% of the population did not have access to safe water against the target of 22%, which started from a base of 44% in 1990 (World Bank, 2016). Ghana is often presented as a success story for its progress on improving water access, but has this been the case for all, and, if not, why? In this case study, we look at the real story behind Ghana's progress in the water sector, what has driven it, who has benefited from it, and who is still excluded from it, at what costs and with what consequences.

² For Ghana, fieldwork took place in the week 15-19 August 2016. During this period, the researcher conducted key informant interviews with 15 expert interviews who were identified purposively in consultation with WaterAid Ghana. One focus group with water users in low-income communities in Accra was also organised (see Appendix 1).

2. Understanding the problem



Sanitation campaign in Ghana. Photo: © IDEO.org

2.1. Ghana: a story of economic growth but persistent inequalities

According to the 2016 Ghana Poverty and Inequality Report (Cooke et al., 2016), Ghana's national level of poverty fell by more than half – from 56.5% to 24.2% – between 1992 and 2013. The World Bank's (WB) Poverty Reduction in Ghana report (2015) confirms that 'the country has achieved dramatic gains in living standards, public health and educational attainment, and it has enjoyed a stout increase in consumption among the bottom 40% of the consumption distribution'. These achievements have been accompanied by strong economic performance, leading to Ghana's landmark achievement of lower-middle income status in 2010 – a decade earlier than anticipated (Molini et al., 2015).

As early as in the 1980s, Ghana underwent a series of economic reforms, strongly influenced by the Bretton

Woods institutions (e.g. the deregulation of the cocoa sector, efforts to control inflation through public sector spending cuts, the opening of capital markets, etc.). These kick-started strong and sustained economic growth –with its GDP per capita almost doubling between 1990 and 2012, Ghana became the 'poster-child' for economic reform (Lindberg, 2010 in: Lenhardt et al., 2015).

The rapid growth in average consumption, especially among those households with consumption levels close to the poverty threshold, has been the driving force behind this impressive poverty reduction (Molini et al., 2015). Other drivers included the structural transformation of the economy out of agriculture into services and industrial sector, a more skilled workforce due to improvements in education, and urbanisation and agglomeration, which have facilitated the process of structural transformation (ibid.).

Ghana has also made progress in reducing extreme poverty.³ The annual rate of poverty reduction slowed substantially from an average of 1.8 percentage points per year in the 1990s to 1.1 percentage points per year since 2006. However, the rate of reduction of extreme poverty has not slowed since the 1990s and impressive progress in cutting extreme poverty was registered, especially from 2006 onwards (from 16.5% to 8.4%). The reduction of extreme poverty was particularly marked in Ghana's urban areas, where households continue to have a much lower average rate of poverty than in rural areas (10.6% versus 37.9%) (ibid.).

Nevertheless, population growth has reduced some of these gains. While the proportion of people living in poverty has declined by a quarter since 2006, the number of people living in poverty has only declined by 10% (from 7 million to 6.4 million) (ibid.). In addition, large spatial disparities persist. What stands out for Ghana is that the highest levels of poverty and inequalities are registered between certain regions, such as the Upper West Region, especially in the north of the country.⁴ Greater Accra has enjoyed the lowest poverty rate in the country⁴ since at least 1991, also benefiting the surrounding Central and Eastern regions (ibid.).⁵

However, poverty reduction has not gone hand in hand with inequality reduction. Inequality has increased in Ghana since 1992 – the Gini coefficient has increased from 37 in 1992 to 41 in 2013. Between 1998 and 2005, inequalities in household consumption widened as the consumption share of the poorest quintile of the population declined steadily from 6.8% to 5.7%, while the share of the top 20 increased from 44.8% to 46.6% (ibid.). A recent analysis of the distributional changes that occurred in the past two decades in Ghana suggested that they hollowed out the middle of the Ghanaian household consumption distribution and increased the concentration of households around the highest and lowest deciles (Clementi et al., 2016).

In addition, since 2012, Ghana has suffered a number of serious external and internal macroeconomic shocks. One of the most significant was the rupture of the West African natural gas pipeline in 2012, which forced Ghana to increase oil imports for the generation of electricity. The increase in the cost of oil imports was partially offset by the rising export price for gold. However, by 2014,

global gold prices had tumbled and could no longer offset the higher cost of oil imports. The consequent increase of Ghana's current account deficit led to a depreciation of the Ghanaian cedi (by 35% against the US dollar and by 43% on the foreign market in 2014), and a sharp rise of inflation (from 8.8% in 2012 to 17% in 2014). Combined with the government's measures to reduce the fiscal deficit, which included the elimination of subsidies on fuel products and utilities, these macroeconomic changes have led to a sharp rise of the price of non-food items, hitting urban households particularly hard (Molini et al., 2015). The spike in prices in the regions that have been the backbone of Ghana's economic success raises concerns about the country's future growth prospects (ibid.).

2.2. Improvements in access to improved water, but not for all

2.2.1. Expanded access to improved water sources

These trends for the overall economy are reflected in trends for the WASH sector. According to WB, the poverty reduction achievements of the 1990s and 2000s have been accompanied by a substantial improvement in access to basic household services, such as sanitation, electricity and clean drinking water (Molini et al, 2015). For example, the striking expansion of coverage of garbage collection after 2005 (from less than 10% to about 60%) reflects the positive efforts of the government to provide such services to the urban poor through subsidies, coupled with sustained public investment in infrastructure, including roads, electricity grids, and solid waste management.

Similar positive trends can be seen in the water sector. According to the 2015 UNICEF and WHO's JMP data for Ghana, access to improved water sources has increased from 56% in 1990 to 89% in 2015. Coverage has increased from 84% to 93% in urban areas, and from 39% to 84% in rural areas (UNICEF and WHO, 2015). Despite these positive trends, a closer look at the figures reveal that while access to 'improved' water sources⁶ in Ghana's urban centres has increased overall, the percentage of households having water piped into their premises has fallen from 41% to 32% in the period 1990-2015 (see Figure 1, page 15).

3 WB set the global benchmark measure of extreme poverty at \$1.90 a day in 2011 PPPs. See: <http://data.worldbank.org/topic/poverty>.

4 According to Molini et al. (2015), while both the poverty rate and the absolute numbers of the poor have declined in the more populous southern and central regions, the number of the poor has risen in the Northern Region and Upper West since 1991. Because of these divergent trends, nearly 40% of the poor were living in the north in 2012, which accounted for only 17% of the population. See: Molini et al. (2015), p.10.

5 Other regions have benefited from sustained poverty reduction, too. In the Ashanti region, the decline in poverty rates has been stable over the last 20 years. The Brong Ahafo and Western regions enjoyed the most rapid poverty reduction in the country (from 60% in 1998 to 25% in 2012) thanks to the boom of cocoa production. See: Molini et al. (2015).

6 We define piped water on premises as piped household water connection located inside the user's dwelling, plot or yard. Other improved drinking sources include public taps or standpipes, tube wells or boreholes, protected dug wells, protected springs, and rainwater collection. Definitions from: UNICEF and WHO (2015) at: http://www.wssinfo.org/fileadmin/user_upload/resources/JMP-Update-report-2015_English.pdf.

Data from the latest Demographic and Health Survey (GSS et al., 2014) in fact show that the most common source of drinking water in urban areas is sachet water (43%), followed by public tap or standpipe (23%). The decline in water piped into dwellings has been higher in terms of percentage of households served (from 27% in 2008 to 7.9% in 2014) than for the population (from 27% in 2008 to 8.4% in 2014). This suggests that population growth has not been a significant cause for this decline. From the data, progress has only partially been driven by government's investments in infrastructure and utilities, and that other (private, informal) service providers may have played a critical role, too.

In this context of overall decline of urban water coverage and services, some have lost more than others. Between 1995 and 2012, access to improved water sources for the lowest quintile in urban areas has improved by 21%. However, only 3% more people have received water into their houses; the remaining 18% had access to other improved sources of water. If we extend the analysis to the second quintile, while access to improved water sources has overall increased by 10%, the percentage of people with access to water in their houses has diminished from 24% to 15%. It is interesting to note that access to the water network has diminished for all other quintiles (see Figure 2, page 16).

2.2.2. Legislative and policy framework for urban water service provision in Ghana

2.2.2.1. Main strategies and actors for the urban water sub-sector

Water and sanitation have been important components of national policies and plans in Ghana. They have been understood and recognised as key pillars of its economic and social development. The latest national Medium-Term Development Programme (MTDP) and the Ghana Shared Growth and Development Agenda (GSGDA-II) for the period 2014-2017 are policy frameworks prepared by the Government of Ghana (GoG), which explicitly focus on rural and urban water provision through strengthening Public-Private Partnerships (PPPs) and measures for effective operation, maintenance and systematic upgrading of water facilities (GoG, 2014a).

Ghana's water and sanitation sectors have undergone major reforms since the 1990s, with the support of international multilateral and bilateral donors. Today, according to the 2011 assessment conducted by the African Ministerial Conference on Water (AMCOW), Ghana has appropriate institutional, legal and regulatory structures and frameworks in place particularly for the urban and rural water supply sub-sectors (World Bank, 2011). The Ministry of Water Resources, Works and Housing (MWRWH) has provided leadership around drinking water supply, through policy formulation and support to the agencies under the Ministry to perform their roles. There are clear lines of responsibility and all sub-sector

Box 2: The sanitation challenge in Ghana

Ghana achieved the MDG target of halving the proportion of the population without access to safe water, but poor sanitation remains pervasive. Of the total population of Ghana, 85% of Ghanaians do not have access to improved sanitation, compared to the target of 54% set by the MDGs (UNICEF and WHO, 2015). Poor sanitation is particularly the case in rural areas, where only 9% of households have access to improved basic sanitation, compared to 20% in urban areas. The 19% of Ghanaians, 34% of which live in rural areas, still defecate in the bushes, fields and beaches.

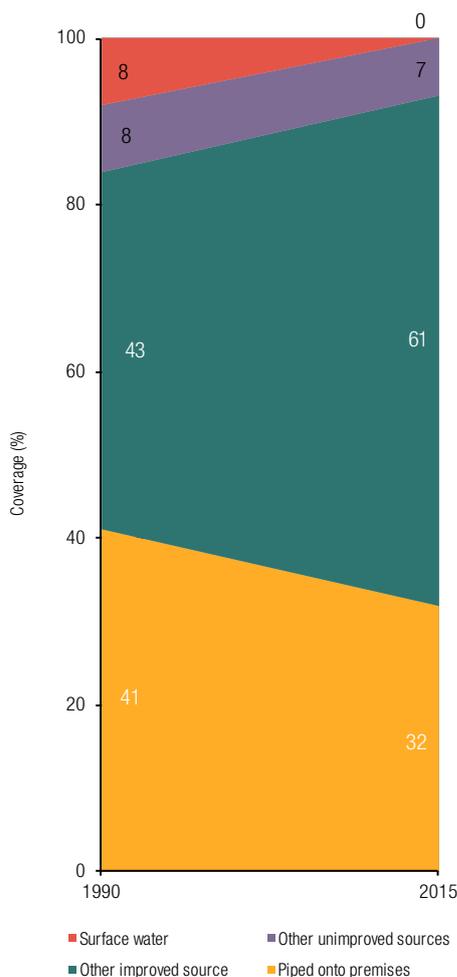
Improvements in accessing improved sanitation have been particularly low for the poorest quintiles of the population in both rural and urban Ghana. In rural Ghana, access to shared facilities for the bottom two quintiles (B20 and B40) of the population has decreased from 26% to 18% and 32% to 31%, respectively, for the period 1990-2015. Open defecation has increased astonishingly from 37% to 68% for the B20 and from 27% to 48% for the B40. While the situation is slightly less severe in urban areas, open defecation has also increased from 17% to 21% for the poorest. Their access to improved sources has remained the same (3% for the B20 and 5% for the B40). Their access to shared facilities has improved from 52% to 69% for the B20 and from 59% to 78% for the B40, but these are often poorly managed according to several reports (see, e.g. Verhagen et al., 2010).

This lack of adequate sanitation in urban areas, coupled with the lack of treatment capacity, cause serious problems of environmental pollution. In Accra, for example, a large volume of wastewater is evacuated from the city to the sea through the stormwater drainage system – however, these streams and rivers have become heavily polluted (ibid.). As especially the poorest people often still rely on unimproved water sources for consumption, this can also have consequences in terms of public health.

According to WB (2016), key challenges for sanitation include the unplanned expansion of settlements, low investment in sanitation delivery, weak environmental sanitation monitoring and enforcement systems, and unavailability of accurate and timely data on sanitation.

Source: Authors.

Figure 1: Estimated trends of access to water sources in urban contexts in Ghana between 1990-2015



Source: UNICEF and WHO, 2015.

policies have been consolidated into the National Water Policy (NWP) of 2007 (see Box 3) and the National Environmental Sanitation Policy of 1999 (revised in 2010).

The advent of the MDGs in 2000 galvanised efforts towards improving human development and quality of life through basic service delivery, with an accent on drinking water and sanitation. In 2010, the GoG released the Ghana Compact, a framework for action towards ‘sanitation and water for all’ (GoG, 2010). The Ghana Compact declared sanitation and water as priority sectors to achieve the MDGs, and endeavoured to prioritise institutional capacity building and investments in the sector through an integrated planning process and targeting the unserved (GoG, 2010).

To operationalise the Ghana Compact, the GoG approved the Water Sector Strategic Development Plan (WSSDP) for the period 2012-2025. The WSSDP illustrated:

‘the Government of Ghana’s commitment to operationalising the policy objectives and implementation strategies set by the National Water Policy and the Ghana Shared Growth and Development

Box 3: The National Water Policy of 2007

The National Water Policy (NWP) of 2004 (revised in 2007) provides a framework for the sustainable development, management and use of Ghana’s water resources to improve health and livelihoods, reduce vulnerability, and assure good governance for present and future generations. Fundamentally, it established the following principles:

- Principle of fundamental right of all people without discrimination to safe and adequate water to meet basic human needs;
- Principle of meeting the social needs for water as a priority, while recognising the economic value of water and the goods and services it provides;
- Principle of subsidiarity to ensure participatory decision-making at the lowest appropriate level in society;
- Principle of coordinating water resources planning with land use planning;
- Principle of ‘polluter pays’.

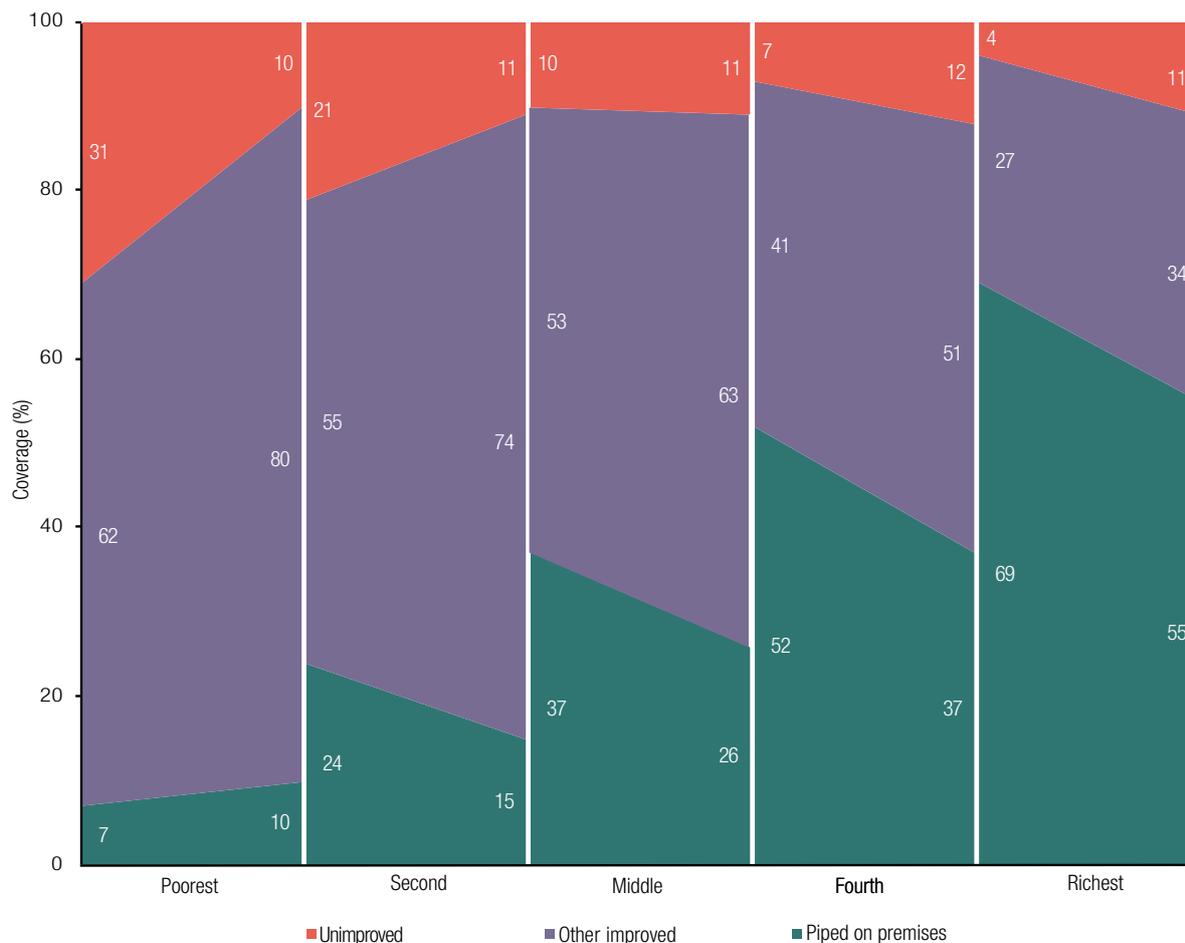
The policy also recognised the various cross-sectoral issues related to water use and the links to other sectoral policies such as those on sanitation, agriculture, health, transport and energy. It sought ways to address relevant issues under water resources management and supply, with emphasis on achieving equity in access to water supply for peri-urban and urban poor, and community water and sanitation.

Source: Authors, readapted from: WaterAid (2010).

Agenda (GSGDA), towards ensuring that all people in Ghana have access to basic levels of water and sanitation services by 2025’ (GoG, 2014b).

A complete list of the organisations with a role in terms of water management and service delivery in Ghana is provided in Table 1, page 17. In the urban water sector, key actors are the GWCL and the Public Utilities Regulatory Commission (PURC), introduced by the water reform of 1999. In the same year, the GoG launched a Water Sector Rehabilitation Project to repair the country’s major urban water supply systems, restore broken down smaller urban systems, and provide spare parts, plant and equipment to ensure sustainable operations. After this project, the GWCL elaborated and implemented a Water Sector Restructuring Programme (2003-2009), which aimed to increase urban water availability. This opened the door to a wave of projects, realised between 2010 and 2015 such as the Essakyir Water supply project, the Five Towns (Kibi, Kwabeng, Osenase, Apedwa and Anyinam) Water supply

Figure 2: Estimated trends of urban drinking water coverage by wealth quintile from 1995-2012



Source: UNICEF and WHO, 2015.

project and the Kumasi Water Supply Additional works (GoG, 2014b).

2.2.2.2. A private sector focus

In the 1980s and 1990s, WB and IMF sponsored several programmes and projects, providing loans to the GoG to rehabilitate the Ghana Water and Sewage Corporation (GWSC), the public utility established after independence to manage urban and water infrastructure (Adu-Ambong, 2014). These reforms essentially aimed at the decentralisation and de-bundling of the water sector. In practice, this resulted in the separation of the profitable urban sector from the unprofitable water sector, and the removal of sanitation from the water sector (Adu-Ambong, 2014). The GWCL was established in 1999 to replace the GWSC in 1999 for urban water, while the Community Water and Sanitation Agency (CWSA) was created for the rural water and sanitation sectors. All the major policies and strategies for the water sector since the 1990s have had a strong PPP orientation, which has also translated in the operation and management models sought for the GWCL.

In 2005, the GoG initiated a bidding process for a 5-year management contract of the GWCL with funding from the WB Urban Water Project Loan, later turned

into a Grant. Vitens/Rand Water operating in Ghana and Aqua Vitens Rand Limited (AVRL) won the bid for a management contract signed in 2006 and expired in 2011. AVRL was responsible for managing the commercial aspects of water provision (billing, meter reading, collection of revenues, etc.), while the GWCL monitored the performance of AVRL and sought investments in the water infrastructure (Adu-Ambong, 2014; key interviews). However, the management contract with AVRL was not renewed after 2011 as the performance was below expectations, especially around non-revenue water (NRW), which remained at 47% at the end of the contract period, though the management contract stipulated a 5% reduction per year over a 5-year period.

Following the expiration of the Management Contract and the exit of AVRL, a new company, Ghana Urban Water Limited (GUWL), was formed by government in June 2011 to take over temporarily the management of urban water systems in the country. On 1 August 2013, Cabinet approved the merger of GWCL and GUWL. With the merger, the company is now operating as one entity under its original name Ghana Water Company Limited. In February 2013, the GoG and WB engaged a Uganda-based consultancy firm to facilitate the implementation of a performance-based reform. Launched in April 2015,

Table 1: Key actors in the WASH sector in Ghana (as of December 2016)

Function	Sector	Actor	Role
Regulation	Water	Water Resources Commission (WRC)	Deals with permits for extraction and use of all natural water resources, including wetlands.
	Sanitation/rural	Metropolitan, Municipal and District Assemblies (MMDAs)	Responsible for sanitation in the areas under their jurisdiction (urban, peri-urban, rural)
	Other	Ministry of Health and Ghana Health Service	Are responsible for implementation of national policies on health, including water quality controls.
	Other	Ghana Education Services – under Ministry of Education	Provides directives for school health systems to promote integrated health education and health delivery including WASH.
Policy-making	Water	Ministry of Water Resources, Works and Housing (MWRWH)	Responsible for the formulation of policies and programmes for infrastructure with respect to public works and housing, water supply and sanitation, and hydrology.
	Water	Water Directorate of MWRWH	Responsible for policy/strategy formulation and technical advice for drinking water supply
	Water/rural	Community Water and Sanitation Agency (CWSA)	Responsible for coordination of National Community Water and Sanitation Programme.*
	Sanitation	Ministry of Local Government and Rural Development	Its Environmental Health and Sanitation Department is responsible for the development of national policies and strategies related to sanitation and environmental health, as well as rural development.
	Other	Ministry of Environment, Science, Technology and Information	Responsible for formulation and coordination of policies covering the environment and environmental sanitation (regulation and provision of technical standards and manuals).
Finance	Water/urban	Public Utilities Regulatory Commission (PURC)	Is the regulator for water supply, in line with its mandate to protect the interests of consumers and providers of utility services; it sets tariffs for urban water supply.
	Water and sanitation	Bilateral donors	Netherlands, Canada, US, Korea, Japan, France
	Water and sanitation	Multilateral donors	UNICEF, WB, African Development Bank
Operations	Water/urban	Ghana Water Company Limited (GWCL)	Semi-autonomous, limited liability company mandated with water treatment, production and distribution for domestic, public and industrial consumption in urban centres. Operates 85 urban water systems.
	Water/rural	Water and Sanitation (WATSAN) Committees	Rural water supply systems are community-managed with the District Assemblies approving tariffs (for small towns) and CWSA providing advice.
	Water and sanitation	Non-governmental organisations (NGOs)	Around 50 NGOs work in WASH in Ghana. The Ghana Coalition of NGOs in WASH (CONIWAS) acts as an umbrella organisation (NGOs can choose to register with it or not).
	Water and sanitation	Private actors	Mainly active in engineering, design and construction of infrastructure for water supply, drainage and wastewater, drilling of boreholes and waste management. Other local companies are engaged in bottling of drinking water and sachet water.

Source: Authors

* The National Community Water and Sanitation Programme (NCWSP), introduced in 1994 and reporting to the CWSA, addresses WASH at district levels, in rural communities and small towns. NCWSP promotes community ownership and management (COM) of WASH facilities. Source: WaterAid (2010).

the programme aims to turn the GWCL into a profitable utility company while meeting customers' demands.

Two performance improvement programmes were launched between April 2005 and January 2016 that led to improved revenue collection and customer service.

Currently, GWCL is running a nine-month programme (April-December 2016) aimed at reducing NRW.⁷

The focus on private sector participation in WASH service delivery in urban areas also translated in the emergence of private operators falling under a model dubbed 'Private Supply Delivery Models'. Included in this model are: tanker operators, small-scale independent producers, domestic vendors, self-providers, tiller cart operators (for water supply and house-to-house solid waste collection) and waste (solid and liquid) management operators (WaterAid, 2010).

2.2.2.3. A pro-poor focus

The existing legislative and strategic frameworks for the water sector have a strong pro-poor orientation. For example, the WSSDP 2012-2025 recommended to the MWRWH to commission a study to map out low-income urban and peri-urban communities which are currently unserved and under-served with potable water supply. It further highlights the need to develop a framework for targeting the poor, address the annulling effect of 'compound housing' (i.e. multi-habitation) on lifeline tariffs for the poor and improve water service delivery in low-income communities (GoG, 2014b).

Key actors towards realising this vision of pro-poor water service delivery in urban areas have been the GWCL and the PURC. Already in 2005, the PURC developed a social policy and strategy for urban water regulation and an urban water tariff policy (PURC, 2005). The social policy entails initiatives aimed at improving accessibility and affordability of potable water to the urban poor. More recently, PURC has started a pro-poor pilot project in selected communities in the Greater Accra Region, with the support of the World Bank. The World Bank has also initiated a 'Greater Accra Metropolitan Area (GAMA) Sanitation and Water Project', which aims to increase access to improved sanitation and improved water supply in the GAMA, with emphasis on low income communities (Lutalo et al., 2016).⁸ Other initiatives targeting the urban poor tend to be donor-driven and implemented by NGOs and community-based organisations (CBOs). Notable amongst these are WaterAid, as well as Ghanaian NGOs such as the People's Dialogue, Global Communities, ProNet and others.

2.3. The bottlenecks to pro-poor water service delivery in urban Ghana

Ghana has made good progress in reducing poverty thanks to a positive process of economic transformation and growth. However, inequalities have remained high – the wealthier have profited more than the poorest. Economic growth has also encouraged rapid, but largely unplanned urbanisation, resulting in the exclusion of certain areas from basic service delivery. These trends are reflected in the water sector. Ghana has registered good progress in improving water supply in urban areas, but gaps remain in terms of accessing improved sources of water, and especially water piped on premises. Paradoxically, and contrarily to the trend on income inequality, the gap between the poorest quintile and the rest has decreased. Although this is most likely due to the falling rates of water piped on premises for quintiles two to five, it is worth exploring what has driven progress for the poorest in accessing improved water sources.

We want to understand the drivers of progress in the urban water sector, as well as the bottlenecks that continue hindering service delivery especially to the low-income urban communities (LIUCs). Based on the structural analysis of the sector we conducted in Section 2, or the consideration of the formal policies and regulations, as well as the technical features of the sector, we formulated the following hypotheses:

1. The expansion of water supply 'for all' has been linked to the economic growth and development achievements of Ghana.
2. Water strategies and investments have remained sector-specific, and have occurred outside of broader considerations related to urban expansion and the need to serve the rapidly expanding informal and peri-urban settlements.
3. Water strategies and plans have not been implemented through correspondent investments in institutional capacity and resources and infrastructure due to the top-down decision-making model of Ghana and dependency on external funding.
4. The management and operational model of the GWCL in the past, focusing on expanding water production, but leaving behind efficiency issues, has resulted in its inability to reach the poorest.

In the next section, we present the results of our political-economy analysis testing these hypotheses based on the existing power, incentives and behaviours that underpin decision-making processes and investments in the urban water sector.

⁷ See: http://www.gwcl.com.gh/gwcl_history.pdf.

⁸ One of the project's component specifically includes the improvement and expansion of the water distribution network in the GAMA, by installing water meters and other equipment, as well as providing services for improving water demand management and reducing non-revenue water. See: Lutalo et al. (2016).

Box 4: The urban challenge in Ghana

Rapid GDP growth in Ghana helped create jobs, increase human capital, decrease poverty and expand opportunities for millions of Ghanaians. Like in many other countries at similar levels of development, it also coincided with rapid urbanisation. As Ghana's total population more than doubled between 1984 and 2013, urban population growth outpaced rural population growth, growing 4.4% annually, and the urbanisation rate rose from 31% to 51%. Over this period, Ghana's urban population more than tripled, rising from under 4 million to nearly 14 million people, or the 50.9% of Ghana's population, according to the 2010 population and housing census. While in 2000, Ghana still had a few limited metropolitan areas and many small towns, since then all city types have dramatically increased in number. The number of medium (20,000 to 50,000 people) and large-medium (50,000 to 100,000) sized towns has quadrupled and tripled, respectively. Urbanisation has been an important factor in Ghana's successful efforts to reduce poverty. The total poverty incidence has dropped below 11% in urban areas in 2013. Massive urban migration has taken place without generating excessive unemployment. Between 2000 and 2010, the urban unemployment rate fell by 1.5 percentage points; such decline was even higher in Kumasi (7.3%), Ghana's fastest growing large city.

However, the uncoordinated expansion of cities and the underdevelopment of job-creating manufacturing have contributed to unequal development and non-inclusive urbanisation. Despite efforts to improve urban infrastructure, demand for services and infrastructure has outstripped supply, leading to unplanned urban expansion and the creation of slums. Within Ghana's major cities, recent years have witnessed a trend toward diminished relative access to basic services such as piped water and toilet facilities as a share of the urban population. Even in areas of infrastructure and service provision that have seen more general success, regional and intercity inequality have increased. Moreover, the rapid population growth in peri-urban areas has outpaced the capacity of authorities to supply basic infrastructure. In Accra and Kumasi, for example, access to piped water, waste disposal and toilet facilities have decreased in relation to distance from city centres.

Source: Molini et al. (2015).

3. Results of PEA



Toilet facilities in Accra, Ghana. Photo: © Holly Pierce.

3.1. What has driven progress in the urban water sector?

Ghana's positive performance in terms of economic growth has 'set the pace' for reform and investments in the water sector. Water has been put at the centre of the development discourse and strategies of the government. Drinking water is a priority in instances of water scarcity: *'water supply, especially for cities and small towns, has been a priority of the Government of Ghana for the past 10-15 years; according to our regulations [Act 522 of 1996 establishing the WRC], in instances of scarcity, water supply takes precedence over all other water uses.'*⁹

Water is recognised as a pillar of the Ghana's Shared Growth Strategy, which encouraged renewed investments to meet the needs of the rising and politically relevant middle class, as well as of the increasing number of poorer people living in slums and peri-urban areas (GoG, 2014a).

Our interviews also revealed that progress in the water sector has been strongly tied to Ghana's economic growth and development process. The favourable economic context of the 1990s and 2000s has allowed investments in water infrastructure and improvements in water supply.

Since the 1990s, Ghana has invested in the creation of an enabling framework for the water and sanitation sectors through major institutional and policy reforms. In light of the mass urbanisation that Ghana experienced since the 1980s, the attention of the GoG and its development partners has focused on the urban water sub-sector, leaving behind (or, rather, leaving to development partners) much-needed investments in sanitation and rural water. Several respondents confirmed that investments in urban water *'have been a priority for the Government of Ghana as improving services in cities has been a way to improve the economic and development situation of the country'*.¹⁰ The international discourses and strategies for development of

⁹ Interview with WRC representative conducted in Accra on 15 August 2016.

¹⁰ Interview with representatives of government and civil society conducted in Accra between 15-18 August 2016.

the 1990s and 2000s also encouraged investments in urban water. Integrated Water Resources Management (IWRM) principles, and particularly the decentralisation of the water sector, have strongly shaped the way in which water supply and service delivery in both urban and rural areas have been rethought. Similarly, the GoG made significant efforts into putting in place processes and initiatives to achieve the MDGs, thus managing to attract donors' funding and assistance.¹¹

This enabling framework had a strong focus on serving the poor and those living in unserved areas, such as peri-urban areas and slums. The pro-poor focus of the government's strategy for urban water seems to have also been influenced by donors and development partners. For example, WB has provided support to the development of a pro-poor urban water service delivery strategy and a strategy for peri-urban water service delivery with the GWCL and the PURC (GoG, 2014b; Lutalo et al., 2016). These investments *'have had to do with the politics of*

development: now everyone aims at inclusive growth, and investing in urban water is an attractive idea, more than trying to reach the poor living in dispersed, rural areas'.¹² Ghana's civil society has played an active role in the water sector, joining arms with NGOs focusing on the urban poor, to ensure that water service expansion and delivery remained inclusive.

Therefore, access to improved water in Ghana has been improved by a combination of investments in infrastructure and institutions for service delivery. These, in turn, have been encouraged and permitted by the country's sustained economic growth and development process in the 1990s and 2000s. Water has been explicitly included in all major development strategies, and the government has prioritised investments in water infrastructure. Influenced by the international agenda, donors have also supported an institutional reform of the sector open to the introduction of the private sector to increase efficiency in service delivery.

Box 5: Poverty maps in Ghana

With the support of the UK Department for International Development and WB, the Ghana Statistical Service has produced two comparable poverty maps. One, issued in May 2005, is based on data of the 2000 Population and Housing Census and 1998-1999 GLSS and shows 110 districts. The more recent one has been computed based on data of the 2010 Population and Housing Census and the 2012-2013 GLSS and illustrates 215 districts. Both poverty maps have been created based on the small area estimation methodology that has been developed to allow accurate estimates of consumption-based poverty and inequality at lower levels of disaggregation by combining information from censuses and household consumption survey.

These poverty maps allow to understand fully the extent of the spatial inequalities in Ghana; they also allow a better focus on the spatial distribution of poverty at the local level. Although the number of districts differ across 2000 and 2012, these two maps also visualise how inequalities have changed through time. Several interviewees highlighted the innovativeness of Ghana in conducting this exercise (*'to my knowledge, not many other countries in the region have these maps'*) and their usefulness to targeted investments and interventions to improve the livelihoods of the poorest.

Source: Molini et al (2015); key interviews.

3.2. The disconnect between water and urban strategies and investments

3.2.1. A rapidly changing urban context

One of the biggest challenges faced by the water sector in Ghana is the fast rate of urbanisation that has been occurring throughout the country since the 1990s (see Box 4). Urbanisation causes increasing demand for water for domestic, industrial and commercial consumption. The unplanned expansion of settlements makes it difficult for utilities to keep pace with the changes (see also: WB, 2016). Data confirm these concerns. The proportion of residents in large metropolitan areas with access to piped water experienced a downward trend within a decade, from 2000 to 2010. Accra was the worst off: its population increased by 20.1%, but access to piped water decreased by 22.2%. Kumasi experienced a population growth of 42.4%, and experienced a decrease of access to water

11 Since 2000, Ghana has benefited from a range of international development assistance support, such as the Multilateral Debt Relief Initiative (MDRI), Multi-Donor Budget Support (MDBS) and the US-funded Millennium Challenge Account (MCA) programme, which has helped Ghana in its development efforts and to make progress on the MDGs. Programmes include interventions in basic education such as the School Feeding Programme¹ and the Capitation Grant, teacher training and education, public health care, poverty-focused agriculture, rural water and sanitation, transport, rural electrification and cash transfers to poor households. Source: Commonwealth Foundation (2013).

12 Interview with representative of civil society organisation conducted in Accra on 15th August 2016.

piped into network of 7.7%.¹³ System losses, lack of maintenance, and insufficient investments exacerbate the problem in the expanding urban space.

3.2.2. Political incentives skew investment priorities in favour of 'vote-winning' infrastructure projects

One problem contributing to this dynamic is that the government's strategy for the urban water sector has been skewed towards new infrastructure with little attention to post-construction and incremental costs by implementing agencies. A study of investments in the water sector showed that investments in new facilities accounted for 58% of investments as compared to 47% for rehabilitation works (WSMP, 2009). In part, this can be attributed to the political incentives for politicians to promote inclusive policy programmes. Ghana presents a democracy in which there are some signs of space for impersonal, inclusive policy programmes in other sectors. For example, there is evidence of electoral accountability and voter responsiveness to performance in health and education – with voters self-identifying as poorer than the average particularly likely to be swing voters (Lindberg and Weghorst, 2010). In Ghana's urban water supply, however, there was less evidence of policy or implementation programmes for service delivery fully owned by political elites, particularly ones targeted to low-income households.

Thus, the priorities of politicians are reported to err towards large infrastructure projects, as opposed to less visible concerns such as performance of the utility. Functionality has neither been prioritised in practice nor in sector monitoring/reporting (Duti et al., 2014). The unplanned and rapid expansion of cities has made it even more challenging for water utilities to reach potential customers in slums and peri-urban areas: *'Most of the settlements where the poorest live today started as illegal and expanded in an uncontrolled way, eventually encroaching areas that were not served by the water network and/or other public services'*.¹⁴ *'Often the pipes pass in front or behind these neighbourhoods; only a few households on the main road may get water, and then they sell it to their neighbours at high prices.'*¹⁵

3.2.3. Too much or too little autonomy?

Since its establishment in 1999, different models have been tried for GWCL, including the PPP one. One key issue is that, the GWCL is free from any control from the government. The responsible Ministry of Water and/or Water Directorate (WD) has been unable to provide incentives for improved performance or sanction inefficiencies. After the AVRIL contract was not renewed in 2011, the Government set up a committee to put forward options for a new management model for the GWCL. The committee was supported by WB and explored different models from different countries, including Uganda, Senegal and Ivory Coast. The Uganda model was finally selected as it was deemed to be the most appropriate to the Ghanaian context (see Baietti et al., 2006).¹⁶ *'When we discussed options for the new management model of the GWCL, we did not have a specific concern on serving the poor; you have to understand that at that time [2011] the NRW was up to 48% so the priority was to improve efficiency and reduce losses'*.¹⁷ There was a realisation that the priorities of the GWCL had to shift from a focus on production to one on NRW reduction, in order to keep tariffs low without compromising cost recovery objectives. Low or lower tariffs, besides supporting water access for the poorest, also have clear benefits for public institutions such as hospitals and schools, which helped maintain momentum for the GWCL's efficiency reform.

The new performance-based management model, put in place at the beginning of 2016, is supposed to encourage the formation of smaller units within the operational offices that are judged based on their performance. The GWCL has its own budget, which it uses for covering their operational costs and planning and implementing investments in infrastructure expansion as well as operations and maintenance. The Ministry of Finance (MoF) can procure loans for the water utility, but it is up to the water utility to then generate the capital to repay the loans. *'Utilities decide what investments they want to make and where; they need to consider investments for which they will be able to obtain a loan, and hence investments that pay off in the long-term'*.¹⁸ According to this logic, *'utilities do not have incentives to expand to poor areas where they will most likely not be able to recover their costs'*.¹⁹ Several respondents pointed out that this is a

13 Data on population from: Molini et al. (2015).

14 Information from interview with civil society representative conducted in Accra on 15 August 2016.

15 Information from interview with civil society representative conducted in Accra on 17 August 2016.

16 In the new model, key performance indicators are set at the system level, so that more profitable offices (such as the ones of Accra and Kumasi) can cover the losses of other offices. The committee that was put in place in 2011 to review the management arrangements of the GWCL suggested the possibility of disaggregating the system into smaller units and giving them out to contract. However, this idea was rejected by the government on the basis that it would have created too many redundancies.

17 Interview with respondent from the government conducted in Accra on 16 August 2016.

18 Information from interview with representative of water utility conducted in Accra on 15 August 2016.

19 Information from interview with representative of civil society organisation conducted in Accra on 15 August 2016.

misperception as poor people would be willing to pay for water (*'they are already paying for their water, nobody gives it to them for free'*²⁰), if only they received it on time, regularly, and in good quality. This finding was confirmed in our focus group discussion with several women in a low-income urban community of Accra: *'we spend a lot of money to buy water from street vendors; the water from the GWCL is cheaper, we would prefer buying it, but getting a connection is too expensive'*.²¹

3.2.4. Fragmented information on poverty and inequalities

The observation that utilities plan their investments based on cost recovery opportunities, thereby prioritising commercial and better-off clients and excluding poorer neighbourhoods also suggests that their decision-making process is not necessarily informed by actual data on their clients, *'otherwise they would see the business case of expanding their services to the poorest'*.²² The GoG, with the support of donors, has engaged in several poverty mapping exercises that should guide interventions for poverty reduction and service delivery (see Box 5). Several NGOs and international organisations in the country have also conducted projects to understand where the urban poor are located and what their needs are, as well as some studies on the willingness to pay and actual expenditure for water by the poor (see, e.g. Attafi, 2014).

*'Because most of these communities do not exist on city maps, they are excluded from infrastructure and service provision. First step is to make them visible, then understand the extent of this problem. We are mapping 260 slums in Greater Accra. This should tell city planners what and where to prioritise for their WASH spending.'*²³

In addition, interviewees suggested that data on inequalities beyond income-based ones are rarely collected. Instead, as our focus group discussions with water users revealed, there are *'inequalities within inequalities'*. For example, the high tariffs of GWCL water, or the lack of such water and the need to revert to water vendors, was having a particularly negative effect on poor women. These women often engage in small commercial activities like selling porridge or running small canteens. As water

costs increase, their revenue, and hence their ability to pay for things such as their children's school fees diminish substantially. These discriminations would not seem to be intentional, but result from the lack of understanding of the differential impacts of lack of access across groups resulting from livelihood strategies and social roles; *'there is no explicit discrimination of one group or another based on gender, age, disabilities, or other criteria; some areas are excluded from the service, and this affects certain groups more, others less, based on existing vulnerabilities.'*²⁴

3.3. Strategies and plans for urban water: the implementation gap

3.3.1. Clientelistic tendencies define policy commitments

While the GoG, with the support of its development partners, has put significant efforts in putting forward a pro-poor enabling framework for the urban sector, it has been less successful at implementing it in practice. From our interviews, it emerged that the urban water sector has suffered from the politicisation of projects and investments. While strategies and frameworks like the WSSDP set the development trajectory on paper, actual investments are decided at the Cabinet level, and tend to respond to *'vote-winning'* rather than actual citizens' needs and demands: *'people in the Ministries are technocrats, they do not take the decisions, they only execute them'*;²⁵ *'it is a matter of prestige: as a Minister, you need to be re-elected, and it is easier to be re-elected if you show that you have invested in big infrastructure projects like desalination plants.'*²⁶

These observations confirm the findings of Lindberg (2010), that politicians engage in supplying significant levels of clientelistic goods as an efficient means to achieve their end i.e. re-election. Even in the 1990s and 2000s, the efforts of the GoG to improve access to basic services have focused on visible outcomes and on meeting the MDG targets. This often meant leaving more challenging objectives related to the quality, affordability and sustainability of the service behind (Lenhardt et al., 2015). In reality, these investments have had lower returns than expected, but the government *'now thinks they have done enough on water'*.²⁷

20 Interview with key respondents from civil society organisation conducted in Accra on 16 August 2016.

21 Focus group with women in Accra neighbourhood conducted on 18 August.

22 Information from interview with representative of civil society organisation conducted in Accra on 17 August 2016.

23 Interview with representative of civil society conducted in Accra on 18 August 2016.

24 Information from interview with representative of civil society organisation conducted in Accra on 17 August 2016.

25 Interview with respondent from civil society organisation conducted in Accra on 19th August 2016.

26 Interview conducted in Accra on 18th August 2016.

27 Interview with respondent from civil society organisation conducted in Accra on 20th August 2016.

Table 2: Summary of water consumption and prices in Greater Accra Metropolitan Area (GAMA)

Water supply options	Consumption per person per day (litres consumed per day)	Monthly household consumption (m ³ per household per month)	Average tariff/cost (\$/m ³)	Monthly expenditure (\$) per household)
GWCL single meter	194	24	0.54	12.96
GWCL meter sharing	87	7	0.64	4.5
Neighbour	32	3	5.32	16.0
Standpipe	28	3	5.99	18.0
Self-supply	115	15	4.11	
Water tanker	52	6	15.67	94.0
Sachet	0.7	0.2	66.82	13.4

Source: Attafi (2014).

3.3.2. 'Islands of effectiveness' have not translated into systemic pro-poor reform

The failure to implement existing pro-poor water sector plans can be attributed to the lack of clear, government-owned policy programmes across the countries for addressing WASH inequalities and targeting underserved groups specifically and comprehensively. More isolated, donor-supported initiatives were apparent, and have helped to evolve 'islands of effectiveness'. The President committed to improving water supply and sanitation, respectively, in the capital city to attract investment and respond to wealthier residents' demands. However, the initiatives do not (yet) appear to amount to programmes of systemic policy reform, in favour of excluded groups.

One of the problems is the lack of collective vision for the sector. There is no master sector financing plan, and 'policy incoherence is a big problem; the government says and does different things to attract the attention of donors'.²⁸ Strong leadership both in terms of guiding and championing sector strategy as well as in securing commitments from other key actors – in particular, the MoF and the state Cabinet – has also been missing. Virtually all stakeholders perceive the WD as the institution leading on the coordination of sector activity. However, there are huge deficits in WD's capacity and resources: 'the budget we receive from the MWRWH is barely enough to cover our staff costs'.²⁹ The 'big chunk of MWRWH's budget is used for infrastructure investments in the urban water sector, as the rural water sector is covered by grants from donors, there are little investments in institutional building and capacity development'.³⁰ In

the budget of the MWRWH for 2016 only the 11% is allocated to the WD, while the Works Directorate gets 77% of the total finances.³¹ Financial resource allocations for water activities has also tended to be low at the district level. In a 2008 study of selected MMDAs in six regions, it was established that they only utilised between 0.01% and 5.4% of the District Assemblies Common Fund for interventions in water and sanitation together (GoG, 2008).

3.3.3. Incoherent policies and processes for planning and implementation

According to the majority of our respondents, the urban water sector in Ghana suffers from weak coordination. A multiplicity of platforms and arrangements exist for WASH in Ghana. The GoG/DP Sector Working Group (SWG) is the principal forum for routine policy dialogue around sector priorities, strategies and targets. However, too often SWG discussions get entangled with fine operational details, losing the bigger plot and the more catalytic issues in the process.³² Without sector coordination, interventions remain ad hoc and linked to project and donor's funding. This means that their sustainability in the long term is not guaranteed. For example, the GWCL has a low-income consumer unit, which was created in 2008 in the framework of the management contract with AVRIL and with support from the Dutch government. This unit is now integrated within the GWCL, but is made up of only one person: 'she gets support from other departments within GWCL, but yes we do need to recruit more staff'.³³ According to another interviewee, 'the unit is a receptacle

28 Interview with respondent from civil society organisation conducted in Accra on 20th August 2016.

29 Interview with respondent from government conducted in Accra on 19th August 2016.

30 Interview with respondent from government conducted in Accra on 19th August 2016.

31 http://www.mofep.gov.gh/sites/default/files/budget/2016/MDAs/Audit-Budget-Summary-Prog_22_MWRWH.pdf.

32 Information from key interviews with representatives of civil society organisations conducted in Accra on 15 and 16 August 2016.

33 Interview with representative of GWCL conducted in Accra on 17 August 2016.

for donors' money, it is the part of the utility that is tasked to go and work with NGOs, not to be an integral part of the GWCL and its actual operations'.³⁴

3.3.4. External factors impacting on investment priorities

The sector's dependency on donors' funding is proving problematic in the long term. Donor's investments '*had to do with the politics of development: now everyone aims at inclusive growth, and investing in urban water is an attractive idea, more than trying to reach the poor living in dispersed, rural areas*'.³⁵ The preference for '*quick fixes that exploit economies of scale and provide visible returns*' resulted in a project-based approach which sustainability is at stake '*as soon as donors change their priorities*'.³⁶ At present, many donors are also pulling out of the water sector, in some cases turning to the sanitation sector where gaps are more evident; '*donors' priorities have shifted: for example, the Canadian and Dutch governments used to be the biggest donors in the water sector, but both are now heavily focused on sanitation*'.³⁷

At the same time, Ghana's transition to lower-middle-income status is reducing the flows of Official Development Assistance (ODA), thus forcing the GoG to revert to loans to finance its infrastructure projects. Much of Ghana's investments in the 1990s have been through loans, which the government has not been able to repay yet; '*investments have not had the expected returns because of the energy crisis that has affected the country since 2013-2014*'.³⁸ In the water sector, the MoF is now insisting that all infrastructure investments come from the balance sheet of the GWCL. This limits further investments and requires increased tariffs to reach full cost-recovery. In December 2015, the PURC announced increases in utility tariffs of 67.2% for water to enable the utility provider to have a clean balance sheet to borrow from the financial market without recourse to the government to finance their operations.³⁹

3.4. Explaining the declining coverage of the GWCL

3.4.1. Disconnect between water service delivery and urban planning

The ability of urban water utilities to reach the poorest and most marginalised households, typically located in slums and peri-urban areas, is hampered by a set of technical and managerial constraints. In the previous decade, Ghana has directed large investments in the urban water sector, fuelled by a period of positive economic performance. These infrastructure projects have focused on increasing the production of water, but have not expanded the distribution network. In addition, the rapid urbanisation process that has occurred in Ghana has been largely unplanned. People have moved to peripheral areas of the city, where rents are more affordable, or even to informal settlements. These areas were not served by the water network; and it is difficult for the water utility to expand 'ex-post' to what have become very dense urban settlements.

'Has urban water been a success in Ghana? More or less. Water coverage has expanded, some poor people have gained access, but these efforts have been the result of very specific interventions, often driven by international actors, which will not be sustainable in the long-term. The real issue, that of the efficiency of the water utilities, is far from being resolved'.⁴⁰

Our interviews also highlighted that lack of tenure security hinders the expansion of the water services delivered by the GWCL in urban areas. Most the land in Ghana is still owned by traditional authorities – city authorities, the highest planning authorities at city level, can have access to land only if they can justify the project based on its 'public interest' (e.g. to build a school or a hospital). They rarely '*take advantage of this privilege role they have and relationship with the authorities to reclaim this land for settlements for the poorest*'.⁴¹ As a result of the decentralisation process that was started in 2010, while city authorities are responsible for obtaining the land for expanding services, it is local governments that are responsible for the assets and their management.

34 Interview with representative of civil society organisation conducted in Accra on 18 August 2016.

35 Interview with representative of civil society organisation conducted in Accra on 15 August 2016.

36 Interviews with representatives of civil society organisations conducted in Accra on 16 August 2016.

37 Interview with respondent from bilateral agency conducted in Accra on 19 August 2016.

38 Interview with representative of the government conducted in Accra on 18th August 2016.

39 Interview with representative of government conducted in Accra on 17 August 2016.

40 Interview with representative of government conducted in Accra on 18 August 2016.

41 Interview with representative of civil society conducted in Accra on 15 August 2016.

In addition, the poorest do not own the house they live in, and there are no guarantee mechanisms in tenure arrangements. Landlords can evacuate people with no or little notice if they fail to pay or if they find tenants that are willing to pay more; *'it is very expensive to connect to the GWCL network because you have to buy your own pipes and meters'*.⁴² When landlords invest in a connection, they generally do so to bring the value of their property up, so that they can ask for a higher rent. These characteristics of the rental market in cities like Accra mean that tenants are generally not willing to invest in getting a connection to the water network.

*'The question of tenure security is absolutely crucial in the context of Ghana. Without addressing it first, no issues related to water service delivery in urban areas can really be tackled.'*⁴³

3.4.2. Civil society and NGOs, key proponents of pro-poor approaches, but lack of a unified voice

The civil society in Ghana has played a vocal role in the reform process of the GWCL. At the heart of its advocacy strategy was the remark by NGOs in the sector that the GWCL had not been able to serve the urban poor effectively, even though there would be a strong business case for the utility to do so. Take the Greater Accra Metropolitan Area (GAMA), which is home to over 3.6 million people, of which 2.8 million or 63% of the total urban population, live in LIUCs (WB GAMA PAD, 2013). Following population growth, new settlements are spreading to the peripheries of Accra (Madina, Legon, Weija, etc.) which have gradually merged into the GAMA. Lower-income households thus constitute a large share of GWCL's consumers. A 2014 study revealed that only the 21% of low-income households in the GAMA had GWCL connections in their houses; 40% relied on connections in their neighbours' houses; while the great majority of them (86.1%) reverted to secondary suppliers like water vendors (69.9%), and private tanker services (16.2%) (Attafi, 2014). Because of the higher costs of these alternative forms of access, low-income consumers typically end up paying 10-20 times more for their water (see Table 2). Non-GWCL water, such as the one sold in water sachets or by water vendors, is also likely to be of lower quality as controls are not performed regularly.

The civil society and NGOs in Ghana have played an important role to check on government and advocacy. NGOs were also instrumental in raising awareness of the

fact that the lifeline tariff introduced in 2008 by the PURC was not benefiting the poor. In the LIUCs, people generally live in compound housing, comprising multiple households sharing one water meter. Consumption easily exceeds the lifeline threshold of 5,000 litres per month. Paradoxically, therefore, it is the wealthier consumers who have benefited from this pro-poor measure the most since they are more likely to live in a house with their own meter. Both the PURC and GWCL are aware of this problem but *'they do not have a solution; one option would be to provide each household with a meter, but generally there is not enough space in the compounds and people could not afford a meter anyway'*.⁴⁴

NGOs have also demonstrated to be able to overcome some of the sector siloisation that affects other governmental and development actors in the water sector. In the context of the GAMA, it was common to see NGOs with a service delivery focus successfully teaming up with NGOs with pro-poor and urban expertise towards drawing the government's attention to the needs of poorer people in peri-urban and slum areas. For example, the People's Dialogue on Human Settlements collaborated with the Ghana Federation of the Urban Poor to map access to water and sanitation in the Old Fadama and Sukura low-income settlements in the GAMA. This is evidence of civil society organisations implementing a project with municipal governments aimed at more inclusive urban development.⁴⁵

The capacity of civil society organisations to be part of the discourse on urban water is the result of a combination of factors. Interviewees cited the relative openness of the government to criticisms from NGOs (see also Lenhardt et al., 2015). The fact that they are Ghanaian, there is greater scope to criticise the government without fearing diplomatic incidents resulting in a reduction in funding from international donor. While they also work with international NGOs and benefit from international assistance that sustains their work.⁴⁶ However, their role has been limited to priority-setting and policy influence around pro-poor basic services, without being able to make the leap from discourse to actual service delivery improvements.

3.4.3. Inadequate oversight leads to low revenue collection

Respondents also reported a lack of effective oversight of service delivery, and the fact that decision-making at various levels is not transparent and excludes key stakeholders; *'by their very nature, water utilities are*

42 Interview with respondent in focus group discussion conducted in Accra on 18 August 2016.

43 Interview with respondent from civil society organisation conducted in Accra on 15 August 2016.

44 Interview with respondent from civil society organisation conducted in Accra on 17 August 2016.

45 Interview with representative of civil society organisation conducted in Accra on 18 August 2016.

46 Interview with representatives of civil society organisations conducted in Accra between 15 and 18 August 2016.

*politically relevant (they generate money and they provide services to voters). Every time a new government gets in power, a new executive director with different priorities gets appointed and starts a new agenda.*⁴⁷ There was no evidence of participation of consumer groups and local authorities in the decision-making process of the water utility. This means that people, and especially those living in the most disadvantaged areas, do not have the capacity to hold their providers and public authorities to account.

Related to inadequate oversight was the limited finances to support pro-poor programmes. In 2005, the PURC developed a social policy and strategy for urban water regulation and an urban water tariff policy, which entails initiatives aimed at improving accessibility and affordability of potable water to the urban poor (PURC, 2005). PURC is now implementing pilot projects in selected communities in the Greater Accra Region to test the viability of the social policy and strategy (PURC, 2005). However, *‘the implementation of our strategy can be hampered by the lack of resources; we received some support from donors [World Bank], but this has reduced in the last few years, so we can only rely on our own limited finances’*.⁴⁸

The problem of NRW is also linked to the illegal connections that are often made within slums and peri-urban areas. Utilities do not have the means to identify these instances; people see that these are happening but they do not complain. In addition to reducing the revenues

of the GWCL, illegal connections have severe implications in terms of the quality of water. Often these illegal connections are extensions to the network, not done by professionals and hence not deep enough and exposed to pollution. The reduced pressure of water flowing through the system also affects the quality of water. In turn, this also means that problems with water quality affect the poorest – who revert to this water ‘illegally stolen’ from the network – more.⁴⁹

3.4.4. Self-supply as a disincentive to collective action

The availability of self-supply solutions, including illegal ones, also acts as a disincentive towards collective action. Self-supply by developing private wells and boreholes may appear to households to be a lower cost option than connecting to the network – or at least, one in which they have greater control over the costs of failures and reliability problems (it’s easier to fix your own pump than persuade the utility to provide 24-hour water). Some users avoid the full costs of their choices by ‘externalising’ them, so they fall on others – those ‘free-riding’ by tapping the network illegally, or drawing down the groundwater table with private wells and boreholes. Where the costs associated with the status quo are perceived to be low, excluded groups face limited incentives to act on information and organise to lobby service providers and the government for better services.

47 Interview with representative of civil society organisation conducted in Accra on 18 August 2016.

48 Interview with representative of PURC conducted in Accra on 18 August 2016.

49 Interview with representative of civil society conducted in Accra between 15 and 17 August 2016.

4. Conclusions



Building dry toilet facilities in Ghana. Photo: © SuSanA/Wolfgang Berger.

4.1. Inequalities in accessing water in urban areas in Ghana: why do they persist?

Delivering water to all Ghanaians has been an important priority of the GoG, first in the framework of the MDGs and now as part of its commitments to meet the SDGs. The country's recent economic and social achievements have made resources available for investments aimed at expanding people's access to basic services, including water. Special attention has been given to rapidly growing urban areas. There, the GoG, with the support and guidance of donors and development partners, has invested in the rehabilitation and expansion of the water network. This has resulted in an expansion of water supply, so that Ghana's urban water story is often portrayed as a success story.

However, in the same way as economic development in Ghana has not delivered benefits for all, water supply in urban contexts has also come with challenges. The poorest, often living in informal settlements or at the outskirts of cities, remain excluded from access to the public water network, and are forced to buy water from

more expensive, and often less safe, secondary or tertiary providers. Income-based inequalities in access mask other 'pockets of inequality' based on one's gender, age, disability, geographical location. These 'inequalities within the inequalities' go largely unnoticed.

Looking at the data on water service coverage in urban areas for Ghana, we identified two important trends – a positive and a negative one. First, Ghana has made significant progress in expanding water access for all, including for the lowest quintile. Second, the coverage rate of the urban water utility, the GWCL, has decreased through time. On the first point regarding progress, our analysis identified the following 'drivers of success':

- Ghana's sustained economic growth and development process in the 1990s and 2000s have stimulated investments aimed to improve service delivery in many sectors, including the water one. Water has been included in all major development strategies and the government has prioritised investments in water infrastructure.

- Influenced by the international agenda, donors have supported an institutional reform of the sector open to the introduction of the private sector to increase efficiency in service delivery.
- Ghana's civil society has played an active role in the water sector, joining arms with NGOs focusing on the urban poor, to ensure that water service expansion and delivery remained inclusive.

On the second point of coverage, we identified three persistent bottlenecks to expanding the water utility's reach, especially in serving the poorest in urban contexts:

1. **There is a disconnect between water service delivery and urbanisation.** Expansion of water service delivery has not gone hand in hand with rapid urbanisation. Water strategies and investments have remained sector-specific, and have occurred outside of broader considerations related to urban expansion and the need to serve the rapidly expanding informal and peri-urban settlements.
2. **Water investments have been 'politicised'.** While the GoG, with the support of development partners, has made impressive advancements in the creation of the enabling environment for advancing water and sanitation and meeting the MDGs, plans have seldom been matched with concrete actions. This is due to the 'political culture' and leadership structure of Ghana, which remains geared towards top-down decision-making model despite commitments to decentralisation, preference for highly visible investments to gain electoral votes, and dependency on international finance to implement projects.
3. **Management models for urban water have perpetuated the system's inefficiency.** The outstanding problem of non-revenue water is the major obstacle that the GWCL faces in being able to expand its coverage to reach the poorest. GWCL's past and current management models have focused too much on expanding water production, leaving behind efficiency issues.

We explain the persistence of these 'bottlenecks' using the framework of analysis proposed by Harris and Wild (2013). This approach starts from the identification of some key governance factors, which in turn allow us to understand the incentives of key actors and how they play out in the decision-making processes and relationships that influence service delivery.

Oversight: Oversight systems are weak and have not been able to ensure the efficient performance of urban water utilities (the GWCL). Increasing performance is now the main objective of the GWCL – it is believed that this will also contribute to reducing tariffs and improving the coverage and quality of water services for the poorest. The newly introduced performance-based management and operational model is supposed to address the past limitations by disaggregating the system into

smaller units, each accountable for its own cost recovery. However, it is too early to judge whether this system will work in practice. Overall, there is a lack of effective oversight of water services: decision-making at various levels of government is not transparent and excludes key stakeholders. Lack of efficiency is compensated by maintaining higher tariffs and costs and impeding further investments in the expansion of the distribution network, thus continuing excluding the poorest.

Coherence: There is a low degree of coherence in policies and processes for implementation. Despite the existence of a strategic framework to drive investments in infrastructure to expand access to water services, with an explicit pro-poor focus, actual investments in water and other infrastructure and institution-building are decided and approved at the Cabinet level. They are political projects, conceived to win votes and hence embedded in a short-term perspective, which reflects the electoral cycle rather than a long-term vision of providing sustainable services to all. Donors and development partners exercise an important influence on the government's agenda and priorities, but the lack of coordination has resulted in a 'projectised' approach to water service delivery to the poorest. In addition, pro-poor initiatives have not addressed other pockets of inequalities within the LIUCs, such as those based on gender.

Autonomy: The 1999 water reform, which has pushed for the progressive privatisation of the urban water sector, has de facto freed the GWCL from any control from the government (Ministry of Water and/or WD). The latter has therefore been unable to provide incentives for improved performance or sanction inefficiencies. The GWCL's responsibility to recover the costs of investments has resulted in higher tariffs, which will affect the poorest most. Also to note is the substantial dependence of the government's pro-poor initiatives from external funding from donors.

Rents: The lack of access to water from the public utility has open the doors to secondary and tertiary water providers in the LIUCs. On the one hand, this represents a lost market opportunity for the GWCL. Illegal connections to the GWCL network also occur, and go largely unreported. In addition to damaging the network and causing losses to the GWCL, the quality of the water for the end consumers is often reduced. Therefore, as they are often the ones that resort to these means to secure the water they need for their personal and professional uses, poorer households are exposed to health risks. Because they buy water from secondary or tertiary sources, they also end up paying more than GWCL's customers. The lifeline tariff, which was introduced as a measure to subsidise public water for poorer households has not worked because of the housing structure that prevails in the LIUCs. This situation continues giving incentives to private water sellers to sustain an alternative market to the GWCL, offering services at higher costs and of a lower

quality to their customers – paradoxically, the poorest people and households that cannot afford a GWCL connexion.

Credibility: Ghana has a vibrant civil society which, especially in the case of urban water, has demonstrated an ability to influence the agenda and priority-setting of the government. However, serious questions about whether people in disadvantaged areas can articulate their voice effectively remain. Poorer and disadvantaged people lack proper representation and the channels of political voice that are available to them are less effective. Further still, people do not necessarily have the capacity to hold their providers and public authorities to account. This limits their effective voice and without that voice, it is hard to see how the quality of basic services can be improved. The fact that Ghana's inequities in service provision persist also casts doubt on the universalistic approach the country has taken in designing policies. It suggests that more targeting may be needed to reach disadvantaged groups. As a result, people in the LIUCs are gradually losing confidence in the capacity of the government, through the GWCL, to provide them with sufficient, quality and affordable water services. As they increasingly turn to informal, even illegal, service providers, the GWCL loses 'business opportunities' and create risks for public health.

Moral hazard: Another factor that hinders actual progress in moving the urban water sector forward is the centralised model of the country's political system. Key democratic institutions of voice and representation are weak and ineffective. While the state does have a formal administrative structure that is underpinned by the rule of law, accountability remains weak, both across different parts of the state and between the government and its citizens (see also: Lenhardt et al., 2015). Decisions on investments are taken at the Cabinet level. Ministries are populated by 'technocrats' who do not have a real say (and do not risk having it) into what happens on the ground/how a strategy gets implemented. This causes short-termism in the decision-making process, and leaves initiatives to address inequalities to individual projects often funded by external actors. Driven by accountability to domestic constituencies, donor governments emphasise short-term, easily enumerated results. In addition, accountability to the constituency – end users – that all parties ostensibly aim to serve, may be jeopardised.

4.2. Entry points for change

Our analysis highlighted that improving access to adequate water services in urban low-income communities needs to occur in the context of urban planning interventions, and first and foremost those aimed at addressing property rights and tenure security. Improving access to water services in LIUCs is not just a matter of expanding water production and building more pipes; it is also – and fundamentally – about improving houses. This involves

working with both tenants and landlords, finding technical options as well as financial packages and incentives that work for them. A more integrated planning process that brings together water utilities and decision-makers with those responsible for housing policies, regulations and enforcement is required. WaterAid would be well positioned to seek these forms of coalitions of interest outside the sector, for example acting as a platform that brings together the GWCL, MMDAs, as well as NGOs and civil society organisations working with the urban poor in the GAMA.

The case of Ghana also demonstrated that development partners can play an important role in shaping the debate and moving the issue forward nationally. However, international actors should be careful not to create parallel systems to national ones, supporting rather than fostering dependence. Therefore, organisations such as WaterAid have a key role to play in strengthening coordination mechanisms between donors and government agencies around a pro-poor agenda for water service delivery. Using and reinforcing existing institutional spaces, WaterAid should push towards collaborative behaviours that have a clear focus on addressing inequalities, for example by identifying and sharing positive examples from other sectors and/or contexts.

At the same time, 'buy-in' at the national level remains critical, especially in the context of Ghana where investment decisions tend to be politicised and linked to the electoral cycle, rather than long-term considerations. While the pro-poor unit of the GWCL is a first step in this direction, it deserves more institutional, technical and financial support from the government and development partners. NGOs and civil society organisations also have a key role to play in sustaining GWCL's pro-poor reform, by informing extensive stakeholder engagement – a key ingredient for success, according to recent research by WaterAid (WaterAid, 2016).

NGOs such as WaterAid should also highlight the 'business case' for investing in urban water in low-income settlements, presenting the poor as customers. While they can also remind the authorities about the existence of pockets of inequalities and support the development of strategies to address them. This could be done, for instance, by piloting new methods of data collection (e.g. social media/ SMS surveys for poor urban households), working with trusted entities and rights groups to help them use that information effectively, and allying with other service sectors to highlight wider gaps in service provision to poor and excluded groups. WaterAid is also well positioned to focus on and highlight the situation of some categories of exclusion. It can build on its research and experience at the international level, and apply it to the Ghana context in partnership with other local and international NGOs.

There may also be a case for mobilising the wealthier constituencies to ask for better services – these are more likely to impact on the government's willingness to act

given that decision-making in the water sector seems to be motivated by electoral prospects. Pro-poor outcomes are not necessarily reliant on interventions that target specifically or exclusively the poor. It may even be the case that second-best options, in which the poor gain absolutely, but lose in a relative sense, are politically feasible due to the support of the upper quintiles. While reforms that aim for relative pro-poor outcomes may fail if they rely only on the marginalised. The case of the poor can be pushed by other interest groups with more power in support of reforms that benefit all at the end of the day. WaterAid can play an important role in considering carefully who needs to be mobilised, and crafting strategies to facilitate engagement with these actors that other NGOs, civil society organisations and even municipal and government authorities can replicate.

Community-level initiatives need to be understood and studied to understand to what extent they can be supported and connected. Most of the urban poor have ended up building their own water and sanitation facilities which are often of poor quality due to lack of support from the local authorities. There are numerous small-scale models of successful sustainable community managed water and sanitation projects, but most remain models. Local groups collaborate to improve water and sanitation

services, often under very difficult circumstances. If these initiatives do not all follow the same reproducible blueprint, this may be because adaptability is a critical element of success. Authorities, especially at city level, and donors should support and link up to such initiatives. A first step in this sense is to understand them better – WaterAid could play a role in mapping these initiatives, with the support of and in collaboration with other NGOs working at community level. Secondly, WaterAid could provide support to existing initiatives and institutions to expand service coverage and ensure quality and affordability. Different mechanisms will likely be required, depending on context.

Some of these local-level solutions to address coverage in urban water utility is through small-scale, often informal, service providers. These should be complementary service provision solutions to the GWCL that need to ensure the quality and affordability of services through regulation. WaterAid could support a better understanding of how local and national authorities can contribute with these entrepreneurs who are already filling gaps, towards finding market solutions that work for the poorest. For instance, given its traditional focus on and reach in rural areas, WaterAid could study the replicability of the CWSA's model in urban areas.

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Appendix 1: urban poverty data

Table A1: List of interviews conducted for this study

Organisation	Date and place of interview
WaterAid	Accra, 16 August 2016
WSUP	Accra, 16 August 2016
Peoples' Dialogue	Accra, 15 August 2016
Water Directorate (2 people)	Accra, 19 August 2016
GWCL	Accra, 17 August 2016
SkyFox	Accra, 18 August 2016
IRC	Accra, 15 August 2016
Independent expert	Accra, 17 August 2016
Bilateral donor	Accra, 15 August 2016
PURC	Accra, 19 August 2016
ProNet	Accra, 16 August 2016
WRC	Accra, 15 August 2016
World Bank	Accra, 17 August 2016
Focus group discussion with women (users, water vendors) in low-income community of Accra	Accra, 19 August 2016
UNICEF	Accra, 18 August 2016
Global Communities	Accra, 17 August 2016

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