PUBLIC UTILITIES
REGULATORY COMMISSION

REGULATORY BRIEF

ISSUE 16

Towards A Unified Water Governance: Lessons from Sub-Saharan Africa for Harmonising Ghana's Regulatory Frameworks for Drinking Water

MAY 2025

1.0 Introduction

Ghana has demonstrated progress in expanding access to improved water sources for its fast-growing population[1]. However, a significant gap remains in the provision of safely managed drinking water services, which encompasses not only the source but also its accessibility, availability when needed, and freedom from contamination. As at 2020, only 41% of the population were estimated to have access to such comprehensive services, indicating that a substantial portion of the populace still face challenges in securing reliable and safe drinking water[1]. This situation underscores the need to examine the factors hindering the attainment of universal access to safely managed water in Ghana.

A critical aspect of this challenge lies in the existing regulatory framework governing drinking water in Ghana. This framework is characterized by fragmentation, involving a multitude of institutions with mandates that often overlap or lack clear demarcation[2]. This complexity can impede effective management, regulation, and ultimately, the efficient delivery of water services to all citizens. The presence of numerous actors, each operating under different legal instruments and with varying degrees of authority, can lead to inconsistencies, gaps in oversight, and difficulties in ensuring accountability across the sector.

This regulatory brief argues for the need to transition towards a more unified water governance framework for Ghana. The goal is to draw valuable lessons from Sub-Saharan African countries that have successfully implemented more harmonized models. The brief aims to identify pathways to enhance the coherence and effectiveness of the country's regulatory environment for drinking water. This comparative approach will allow for the adaptation and adoption of best practices that have proven successful in addressing similar challenges in other African nations.

2.0 Deconstructing Ghana's Current Drinking Water Regulatory Framework

The provision of drinking water services in Ghana is governed by a complex array of legal instruments and a multitude of institutions, each with specific mandates and responsibilities[3]. Understanding this intricate landscape is crucial to identifying the inherent areas of fragmentation and potential for harmonization.

2.1 Key Legal Instruments and Mandates of Governing Bodies

The Ghana Standards Authority (GSA) plays a foundational role by establishing and promulgating national standards aimed at promoting public welfare, health, and safety across all sectors[3]. Specifically, the GSA is responsible for setting the quality standards for drinking water and determining the necessary testing requirements[3]. The Ghana Drinking Water Standards, DGS 175:2021, provides a comprehensive specification outlining the physical, chemical, bacteriological, virological, parasitological, and radiological requirements that drinking water must meet to be considered safe for consumption[4].

Following the passage of the Local Governance Act in 1993, and subsequent amendments, Metropolitan, Municipal, and District Assemblies (MMDAs) bear the responsibility for the development of essential services within their jurisdictions, which includes water and sanitation, particularly in rural areas[3]. These assemblies are designated as the legal owners of public water infrastructure, highlighting their crucial role in local water service provision[3].

In urban areas, the delivery of water supply is primarily the mandate of the Ghana Water Limited (GWL), a state-owned limited liability company[1]. The GWL's operations and tariffs are regulated by the Public Utilities Regulatory Commission (PURC), which oversees public utilities, including both urban water and electricity supply[1].

The Environmental Protection Agency (EPA) is the principal environmental regulatory body in Ghana, tasked with enforcing compliance with environmental impact assessment procedures and safeguarding water resources from environmental and industrial pollution[3]. This role is critical in ensuring the quality of raw water sources used for drinking water supply. The Water Resources Commission (WRC) on the other hand holds a broad mandate to regulate and manage the

sustainable utilization of Ghana's water resources[3]. This includes granting water rights and abstraction permits, conducting water quality investigations, proposing plans for water resource utilization and conservation, and coordinating activities related to water use[3]. The WRC has also developed the Water Use Regulations, 2001 (LI 1692), which sets out the regulations for the issuance of permits for various water uses[5].

The Public Utilities Regulatory Commission (PURC) plays a vital role in regulating public utilities, with a specific focus on urban water supply services provided by GWL[3]. This includes developing guidelines on rate setting, approving rates proposed by GWL, monitoring GWL's performance, and conducting surveillance of its operations[3].

The Community Water and Sanitation Agency (CWSA) is the key agency responsible for supporting District Assemblies (DAs) in promoting sustainable safe water and sanitation services in rural communities and small towns[1]. The CWSA provides technical assistance to DAs for water development projects, formulates strategies for resource mobilization in the rural water sector, and develops standards and guidelines for safe water supply[1]. To achieve its water safety objectives, the CWSA has developed a Water Safety Framework (WSF) that provides broad guidelines on safe water provision and monitoring[6].

The overarching policy direction for the sector is provided by the Ministry of Works, Housing and Water Resources, which is responsible for policy formulation, implementation, coordination, and review of water resources management and access to safe water and sanitation across the country[7]. In 2015, the ministry launched the National Drinking Water Quality Management Framework (NDWQMF) to promote a risk-based approach to water quality management through Water Safety Plans (WSPs)[2]. The National Water Policy (NWP) serves as a framework for the sustainable development of Ghana's water resources, recognizing the fundamental right of all people to safe and adequate water[3]. The revised NWP (2024) further emphasizes the efficient utilization and equitable access to sustainable, safely managed, and affordable water for all[7]. Finally, the Local Governance Act plays a significant role by designating MMDAs as the legal owners of public water infrastructure, further solidifying their role in water service delivery at the local level[3].

2.2 Identifying Gaps, Overlaps, and Areas of Fragmentation

Despite the existence of this comprehensive set of legal instruments and institutional mandates, the current regulatory framework for drinking water in Ghana suffers from several gaps, overlaps, and areas of fragmentation that hinder its overall effectiveness. One significant gap is the unclear regulatory oversight for the CWSA[1]. While the PURC regulates GWL in urban areas, the specific regulatory mechanisms for the CWSA, which oversees rural water supply, are not as well-defined. Furthermore, a substantial number of self-supplied point sources, both in urban and rural areas, remain entirely outside the purview of any formal regulation[1]. This lack of oversight poses a potential risk to public health, as the quality of water from these sources may not be consistently monitored or meet established safety standards.

Another critical challenge is the limited adoption of Water Safety Plans (WSPs) across the country, despite the launch of the NDWQMF in 2015, which positioned WSPs as the core strategy for water quality management[8]. Findings reveal that only a small fraction of urban and rural water supply systems have fully adopted WSPs, and even among those that have, significant documentation and implementation gaps exist[8]. This limited uptake suggests a disconnect between policy and practice, potentially due to inadequate regulatory enforcement, insufficient resources, or a lack of technical capacity.

In rural and peri-urban areas, the regulatory oversight is particularly fragmented, with the PURC having limited reach beyond the urban centers served by GWL[9]. This leaves a significant portion of the population under less stringent or unclear regulatory regimes, potentially impacting the quality and reliability of their water supply. Overlapping stakeholder roles further contribute to the fragmentation, especially in rural communities where some are connected to urban water services provided by GWL but are subject to different tariff regulations and policy provisions compared to their urban counterparts[10].

The lack of a fully operational Sector Information System (SIS) exacerbates these challenges by hindering the integration of data from various stakeholders[11]. This makes it difficult to track progress, monitor performance, and make informed decisions for the sector as a whole. Additionally, the separation of governance for water and land resources creates conflicts and weakens the legitimacy of water governance actors, as land ownership and use often have direct implications for water resources control[12]. The complex interplay of numerous institutions and legal instruments creates a landscape where coordination and information sharing become significant hurdles. While each entity has a defined role, the interconnected nature of water governance demands seamless interaction. The limited adoption of the NDWQMF points to a potential weakness in translating national policy into tangible actions on the ground, suggesting the need for stronger regulatory mechanisms or more effective support for implementation. The lack of regulation for self-supplied sources creates a blind spot in the national drinking water safety net, as a considerable segment of the population relies on sources that may not meet safety standards.

3.0 Unified Water Governance Frameworks in Sub-Saharan Africa: Case Studies

To gain insights into potential pathways for harmonizing Ghana's drinking water regulatory frameworks, it is instructive to examine the experiences of other Sub-Saharan African countries that have implemented unified or more coordinated approaches to water governance. This section presents case studies of Uganda and Benin, highlighting their legal and policy frameworks, coordination mechanisms, and the successes and challenges they have encountered.

3.1 Case Study 1: Uganda - Decentralized Governance with National Oversight

Uganda's water governance framework for drinking water is characterized by a decentralized system with clear roles and responsibilities assigned at both the national and local government levels[13]. The 1995 Constitution of Uganda establishes the foundation by defining clean and safe water as a fundamental human right for all citizens[13]. This constitutional recognition underscores the government's obligation to ensure access to this essential resource. The National Water Policy, formulated in 1999, further promotes an integrated approach to managing water resources in a sustainable and beneficial manner[14]. This policy recognizes water as both a social and economic good, guiding its allocation and protection. The cornerstone of the legal framework is the Water Act of 1997, which vests all rights to water resources in the Government, emphasizing their management for the benefit of all Ugandans[14]. This act provides the basis for regulating water use, abstraction, and pollution.

A key feature of Uganda's system is the decentralization of governance through the Local Governments Act of 1997. This legislation devolves specific powers, functions, and funds to district local governments, empowering them to provide water services within their jurisdictions[13]. While local councils are responsible for the actual provision and maintenance of water facilities, they receive guidance and support from the central government. The National Water and Sewerage Corporation (NWSC) operates in urban centers, managing water and sewerage services in areas with populations exceeding 15,000[14]. Outside of the NWSC's operational areas, District Water Offices (DWOs) play a crucial role in planning, implementing, and monitoring water and sanitation activities at the district level, with financial support from the national government[14]. The Ministry of Water and Environment (MWE) provides overall coordination, policy formulation, and sets national standards for the sector[14]. Additionally, the National Environment Management Authority (NEMA) is responsible for regulating and overseeing the sustainable use of water resources, including enforcing environmental laws related to water infrastructure and use[15].

Uganda has achieved substantial improvements in water access over the past two decades[16]. By 2020, 83% of Ugandan households had access to either piped water or improved groundwater

sources[16]. This progress can be attributed, in part, to the clear assignment of responsibilities and the coordinated efforts between national and local authorities. However, challenges persist. The increasing pollution of water sources, the growing demand for water due to population growth, and the impacts of climate change continue to pose significant hurdles[17]. Disparities in access between urban and rural areas remain, with rural communities often lagging behind in terms of service coverage and quality[17]. Furthermore, issues related to the functionality and long-term sustainability of water points, particularly in rural areas, require ongoing attention[18]. Uganda's experience demonstrates the value of a clearly defined division of responsibilities between national and local levels, a lesson that could be beneficial for Ghana in streamlining its own fragmented system. However, the continued challenges in water quality and equitable access highlights that a robust legal framework alone is insufficient. In addition to this, effective implementation and enforcement mechanisms are equally critical.

3.2 Case Study 2: Benin - Progressive Reforms Towards Universal Access

Benin has undertaken significant reforms in its water governance framework with a strong focus on achieving universal access to safe drinking water. The Water Act of 2001 laid the groundwork by recognizing the importance of clean water, decent toilets, and good hygiene as essential for public health and development[19]. A key step towards achieving the Sustainable Development Goal 6 (SDG 6) was the establishment of the National Drinking Water Supply Agency in Rural Areas (ANAEP-MR) in 2017[20]. This agency was specifically tasked with developing and managing the country's water systems to ensure universal access to safe drinking water, particularly in rural communities. The National Water Company of Benin (SONEB) plays a central role in providing water supply services in urban areas[20].

Benin has actively promoted public-private partnerships (PPPs) and community management models as key strategies for expanding water service delivery, especially in rural areas[21]. A notable initiative is the implementation of a leasing system for drinking water facilities in rural communities, where private operators are contracted to manage and maintain the water supply systems[20]. This approach aims to improve the quality and sustainability of services by leveraging the expertise and resources of the private sector. Simultaneously, there is a strong emphasis on fostering community-based management and ensuring the involvement of local communities in the operation and maintenance of water facilities[20].

These progressive reforms have yielded significant results in terms of increasing access to water, particularly in rural areas, where coverage reached 76.6% in 2022[20]. Benin has set an ambitious goal to achieve 100% drinking water service coverage by 2026, demonstrating a strong national commitment to this objective[22]. This commitment is further reflected in the increasing budget allocations to the water sector, signaling a high level of political prioritization[20]. Benin's experience offers valuable lessons for Ghana, particularly in its proactive engagement of the private sector to extend water services to underserved rural communities, a challenge that Ghana also faces. The strong political will and clearly defined targets adopted by Benin appear to be key drivers of its progress, suggesting that a similar level of high-level commitment in Ghana would be crucial for the successful harmonization of its water governance framework.

3.3 Additional Potential Case Studies

Beyond Uganda and Benin, other Sub-Saharan African countries offer relevant experiences in water governance. Kenya has demonstrated success in water resources management through participatory approaches in integrated watershed management[23]. South Africa has implemented progressive water policy reforms aimed at addressing historical inequalities in water access, although it continues to grapple with challenges in implementation and governance[24]. Examining these diverse experiences can provide further insights for Ghana's harmonization efforts.

4.0 Comparative Analysis: Drawing Parallels and Identifying Transferable Elements

By comparing Ghana's current drinking water governance framework with the experiences of Uganda and Benin, as well as other relevant African case studies, several parallels and potentially transferable elements emerge that could inform Ghana's journey towards harmonization.

4.1 Comparing Ghana's Context with the Case Study Countries

Ghana shares some similarities with Uganda, particularly in its decentralized governance structure, where local authorities play a significant role in service delivery[3]. However, Ghana's national oversight and the division of responsibilities within the water sector may not be as clearly defined as in Uganda, potentially contributing to the fragmentation observed. Benin's proactive approach to public-private partnerships (PPPs) in expanding rural water supply could be particularly relevant for Ghana, which faces similar challenges in extending reliable and safe water services to its rural populations[20]. South Africa's experience in embedding principles of equity and social justice within its water policy framework offers valuable lessons for Ghana as it seeks to address disparities in water access across different regions and socioeconomic groups[24]. However, South Africa's ongoing struggles with implementation highlight the importance of not only formulating progressive policies but also ensuring their effective execution. Burkina Faso's focus on decentralization and fostering community ownership in water management provides insights that could be adapted to strengthen local-level water governance in Ghana[17].

4.2 Identifying Governance Approaches and Legal Mechanisms Relevant to Ghana

Drawing from these comparative insights, several governance approaches and legal mechanisms implemented in other African countries could be relevant and transferable to Ghana's context. A clearer delineation of roles and responsibilities between national and sub-national entities, as seen in Uganda's model, could help Ghana reduce overlaps and ambiguities within its current framework[13]. Establishing a strong national coordinating body for the water sector, similar to Uganda's Ministry of Water and Environment, with clear authority and sufficient resources, could enhance overall sector management and policy coherence[14]. Exploring regulated PPP models for expanding water services in underserved areas, inspired by Benin's successful implementation, could offer a viable strategy for Ghana to reach its rural populations more effectively[20]. Developing specific policies and strategies tailored to address the unique challenges of rural water supply, learning from the experiences of Benin, could lead to more targeted and impactful interventions[21].

Strengthening mechanisms for community participation and ownership in water management, as demonstrated in Kenya, could foster greater local accountability and sustainability of water services[23]. Finally, embedding principles of equity and social justice within Ghana's water policies and legislation, drawing inspiration from South Africa's National Water Act, could help ensure that the needs of all citizens, particularly the most vulnerable, are prioritized in water resource management[24]. The success observed in both Uganda and Benin, despite their distinct approaches, underscores the critical role of a robust national policy framework coupled with effective implementation at the local level. Ghana's existing National Water Policy could serve as a foundation, but its impact on harmonizing the sector might be enhanced through stronger implementation mechanisms and better alignment with local realities. Furthermore, the experiences of the case study countries highlight the fundamental need for financial sustainability in water service provision. Ghana might need to explore innovative financing models and tariff structures to ensure the long-term viability of a unified system, potentially drawing lessons from Benin's approach to PPPs and cost recovery.

5.0 Lessons Learned and Best Practices for Ghana's Harmonization Journey

Based on the comparative analysis of water governance frameworks in Sub-Saharan Africa, several key lessons and best practices emerge that can inform Ghana's efforts to harmonize its drinking water regulatory framework.

5.1 Key Principles for Effective Unified Water Governance

An effective unified water governance framework should be built upon several key principles. Clarity of roles and responsibilities for all stakeholders is paramount to avoid overlaps, ambiguities, and gaps in regulation and service delivery. Strong national coordination and oversight are essential to ensure policy coherence, effective implementation, and accountability across the sector. Establishing effective mechanisms for inter-sectoral collaboration is crucial, given the interconnected nature of water resources management and its links to other sectors such as health, agriculture, and energy. Emphasizing community participation and ownership in water management fosters local accountability, sustainability, and ensures that the needs and preferences of water users are considered. Integrating principles of equity and social justice within the framework is vital to address disparities in access and ensure that the fundamental right to water is realized for all citizens, particularly the most vulnerable. Financial sustainability and robust resource mobilization are critical for the long-term viability of water services, requiring innovative financing mechanisms and appropriate tariff structures. Transparency and accountability in decision-making processes and service delivery enhance public trust and ensure that water governance is responsive to the needs of the population. Finally, adopting an adaptive management approach allows the framework to respond effectively to changing conditions, emerging challenges, and new information.

5.2 Adaptable Strategies for Legal and Institutional Reform

To achieve a more unified water governance framework, Ghana can adopt several adaptable strategies for legal and institutional reform. Consolidating existing water-related legislation into a more coherent and unified framework would streamline the regulatory landscape and reduce complexity. Revisiting the mandates of key institutions to eliminate overlaps and clearly define their respective responsibilities is crucial for improving efficiency and accountability. Establishing clear regulatory frameworks for all types of water service providers, including the CWSA and self-supplied sources, would ensure consistent standards and oversight across the sector. Strengthening the capacity of regulatory bodies, such as the PURC and the EPA, for effective monitoring and enforcement is essential to ensure compliance with established regulations. Developing and implementing national standards and guidelines for drinking water quality and service delivery that are applicable across both urban and rural areas would promote consistency and equity. Finally, the active promotion, adoption and effective implementation of Water Safety Plans (WSPs) nationwide, with tailored support for different contexts, would enhance water quality management and public health protection.

6.0 Pathways and Strategies for Harmonizing Ghana's Drinking Water Regulatory Frameworks

Drawing from the lessons learned and best practices identified, Ghana can pursue several pathways and strategies to achieve greater coherence and unity within its drinking water governance system.

6.1 Legislative and Policy Reform Options

One key pathway involves legislative and policy reform. Ghana could consider enacting a new, comprehensive Water Act that consolidates all existing laws related to water resources and drinking water into a single, coherent legal framework. This act should clearly define the roles, responsibilities, and powers of all relevant institutions involved in the sector. Revising the Local Governance Act to better integrate water service provision with national policies and standards could also enhance coordination and effectiveness at the local level. Developing specific regulations for rural water supply and sanitation, potentially under the

oversight of a strengthened CWSA, would address the unique challenges and needs of these areas. Furthermore, establishing a clear legal mandate for the NDWQMF and ensuring its effective implementation across all water service providers is crucial for promoting a consistent risk-based approach to water quality management.

6.2 Strengthening Institutional Coordination and Collaboration

Another critical strategy involves strengthening institutional coordination and collaboration. Establishing a high-level inter-ministerial committee or task force, with representatives from all relevant government agencies, could provide a platform for enhanced policy coherence and coordination in the water sector. Strengthening the role of the WRC as the central coordinating body for overall fresh water resources management, with clear authority to convene and guide other sector players, would also be beneficial. Promoting formal agreements and information-sharing mechanisms between key institutions such as GWL, CWSA, EPA, PURC, and MMDAs would facilitate better communication and alignment of efforts. Finally, establishing clear reporting lines and accountability mechanisms across the sector would improve transparency and ensure that all actors are held responsible for their respective roles in drinking water governance.

6.3 Enhancing Regulatory Clarity and Enforcement

To enhance regulatory clarity and enforcement, Ghana can take several steps. Developing specific performance indicators and monitoring frameworks for all water service providers, both public and private, would allow for systematic assessment of their performance against established standards. Strengthening the capacity of the PURC to regulate both urban and, potentially, rural water services would ensure consistent oversight of tariffs, service quality, and operational efficiency across the country. Empowering the EPA with the necessary resources and authority to effectively enforce water quality standards and environmental regulations is crucial for protecting water sources and public health. The WRC and EPA should be empowered to implement stricter penalties for human activities that negatively impact fresh water quality, such as the pollution and illegal use of fresh water. This would serve as a deterrent and promote compliance with regulations.

7.0 Potential Benefits and Drawbacks of a Unified Approach in Ghana

Adopting a more unified approach to drinking water regulation in Ghana holds the potential for significant benefits across environmental, social, and economic dimensions. However, it is also important to consider potential drawbacks that may arise during the transition and implementation process.

7.1 Environmental Sustainability and Resource Management

A unified framework can lead to improved protection of water sources by enabling more coordinated and effective enforcement of environmental regulations[25]. This can result in the reduction of pollution from various sources, safeguarding the quality of fresh water abstracted for treatment and supply of safe drinking water. Furthermore, a unified approach can promote more efficient and sustainable use of water resources through integrated planning and management strategies, ensuring long-term availability for all users[26]. Enhanced coordination can also strengthen Ghana's resilience to the impacts of climate change on its water resources by facilitating the development and implementation of comprehensive adaptation measures[27].

7.2 Social Equity and Improved Access for Vulnerable Populations

A unified regulatory framework can contribute to more equitable access to safe and affordable drinking water across all regions and socioeconomic groups in Ghana[26]. By establishing consistent standards and regulations nationwide, it can help reduce the disparities that currently exist between urban and rural areas in terms of service coverage and quality. Improved water quality and sanitation resulting from better governance can lead to significant positive impacts on public health, particularly for vulnerable populations who are often disproportionately affected by waterborne diseases[28].

7.3 Economic Efficiency and Investment Opportunities

Streamlining the regulatory landscape through unification can reduce administrative burdens and compliance costs for water service providers, leading to greater economic efficiency within the sector[29]. A more predictable and transparent regulatory environment can also enhance investor confidence, attracting greater private sector participation and investment in water infrastructure development and service delivery[30]. Furthermore, a unified approach can facilitate more efficient allocation of financial and technical resources within the water sector, ensuring that investments are targeted effectively to address the most pressing needs[31].

7.4 Potential Challenges and Mitigation Strategies

Despite these potential benefits, the process of harmonizing Ghana's drinking water regulatory frameworks may encounter several challenges. Resistance to change from existing institutions and stakeholders who may be accustomed to the current fragmented system is a possibility. To mitigate this, it is crucial to engage all stakeholders early and throughout the reform process, clearly highlighting the long-term benefits of harmonization for the sector as a whole. The complexity of merging different regulatory frameworks and institutional cultures will require careful planning and a phased approach to implementation, starting with key priority areas.

There is also a potential risk of increased bureaucracy if the unification process is not implemented effectively. To address this, the focus should be on streamlining existing processes and reducing unnecessary regulations, rather than creating new layers of bureaucracy. Finally, a unified national framework must be flexible enough to accommodate the specific local contexts and needs of different regions within Ghana. This can be achieved by building adaptability into the framework and allowing for regional variations in implementation while adhering to overarching national standards.

8.0 Concrete Recommendations for Harmonizing Ghana's Regulatory Frameworks

Drawing directly from the lessons learned from Sub-Saharan Africa, particularly the experiences of Uganda and Benin, the following concrete recommendations are proposed as part of the harmonisation of Ghana's regulatory frameworks for drinking water.

8.1 Specific Legal and Institutional Reforms Based on African Experiences

Ghana should consider establishing a National Water Authority, modelled after Uganda's Ministry of Water and Environment, with a clear and comprehensive mandate to coordinate all aspects of water governance. This authority should be empowered to formulate national policies, set and enforce regulations across all water service providers (including GWL, CWSA, and private entities), and monitor sector performance. To streamline the legal landscape, Ghana should enact a new Water Act that consolidates all existing water-related legislation, including the various acts and decrees currently governing the sector, into a single, coherent legal framework. This act should clearly define the roles, responsibilities, and powers of all relevant institutions, eliminating ambiguities and overlaps. The mandate and capacity of the PURC should be expanded to include the regulation of rural water service providers, ensuring consistent standards for tariffs, service quality, and operational efficiency throughout the country. Simultaneously, the regulatory responsibilities of the CWSA for rural water supply should be clearly defined within the new Water Act, providing the agency with the necessary authority and resources for effective oversight of community-managed systems and private operators in rural areas. To address the current gap in oversight, Ghana should formalize the regulation of self-supplied water sources by developing a registration and monitoring system to ensure that they meet minimum quality standards. This could involve empowering local authorities or community-based organizations to conduct regular water quality testing and provide support for improving water safety in these systems.

Finally, Ghana should mandate the adoption and effective implementation of Water Safety Plans (WSPs) for all water supply systems, both urban and rural. This should include the development of tailored guidelines and the provision of technical and financial support to water service providers to facilitate the development and implementation of robust WSPs, drawing upon the principles and framework outlined in the NDWQMF.

8.2 Actionable Steps for Implementation and Monitoring

To effectively implement these reforms, Ghana should undertake a comprehensive review of its existing water legislation and the mandates of all relevant institutions to identify specific areas for harmonization and alignment. A multi-stakeholder task force, comprising representatives from government agencies (including the MSWR, WRC, EPA, PURC, GWL, and CWSA), civil society organizations, private sector actors, and academia, should be established to guide the harmonization process, ensuring broad ownership and buy-in. This task force should develop a detailed roadmap with clear timelines, specific responsibilities for each stakeholder, and measurable targets for achieving a unified regulatory framework. A robust monitoring and evaluation framework should be implemented to track the progress and assess the effectiveness of the harmonized regulatory system. This framework should include the full operationalization of a comprehensive Sector Information System (SIS) to facilitate data collection, analysis, and informed decision-making. The government should invest in capacity building initiatives for all relevant institutions and stakeholders to ensure they have the necessary knowledge, skills, and resources for effective implementation and enforcement of the new framework. Finally, a public awareness campaign should be launched to educate citizens about the importance of safe drinking water, the goals of the regulatory harmonization process, and the roles and responsibilities of different stakeholders, fostering community participation and accountability in water governance.

9.0 Conclusion

The harmonization of Ghana's drinking water regulatory frameworks is an imperative step towards achieving Sustainable Development Goal 6 and ensuring a sustainable and equitable water future for all its citizens. The experiences of other Sub-Saharan African countries, particularly Uganda and Benin, offer valuable lessons and highlight the potential benefits of a more unified approach. By consolidating legislation, clarifying institutional roles, strengthening regulatory oversight, and promoting community participation, Ghana can address the challenges posed by its current fragmented system. A harmonized framework promises to enhance environmental sustainability through improved resource management and pollution control, foster social equity by ensuring more equitable access to safe and affordable water, and promote economic efficiency by streamlining regulatory processes and attracting investment. While the journey towards unification may present challenges, a strong commitment from policymakers and collaborative efforts from all stakeholders will be essential to translate these recommendations into tangible improvements in Ghana's drinking water governance, ultimately leading to a healthier, more prosperous, and water-secure nation.

References

[1] Ghana – drinking water (sdg target 6.1) - WHAT PROGRESS LOOKS LIKE. Accessed on April 24, 2025, https://www.unwater.org/sites/default/files/2023-03/sdg6_acceleration_snapshot_611_ghana_feb_2023.pdf

[2] National Drinking Water Quality Management Framework for Ghana, accessed on April 24, 2025, https://faolex.fao.org/docs/pdf/gha182908.pdf

[3] GHANA INSTITUTIONAL FRAMEWORK FOR WATER PROVISION, accessed on April 24, 2025, https://www.aquaya.org/wp-content/uploads/2020_Ghana-Institutional-Framework.pdf

[4] Ghana Standards Authority - DGS 175:2021, accessed on April 24, 2025, https://www.gsa.gov.gh/wp-content/uploads/2021/03/DGS-175_2021.pdf

[5] The Laws on Water Rights and the Effects on Community Access and Control of Water Resources - Lands Commission, accessed on April 24, 2025, https://lc.gov.gh/landconference/materials/NLC-Water%20Right%20and%20Land%20Tenure%20Presentation.pdf

[6] Water Safety - Community Water and Sanitation Agency, accessed on April 24, 2025, https://www.cwsa.gov.gh/publications/water-safety/

[7] www.ircwash.org, accessed on April 24, 2025, https://www.ircwash.org/sites/default/files/ghana_national_water_policy_updated_version_2024.pdf

[8] Ghana's water safety journey: A review of efforts toward a risked-based water quality management - IWA Publishing, accessed on April 24, 2025, https://iwaponline.com/jwh/article/22/12/2370/106143/Ghana-s-water-safety-journey-A-review-of-efforts

[9] Ghana's Path to Sustainable Water Supply: Reforming Rural and Small-Town Water Management for SDG 6, accessed on April 24, 2025, https://www.wateraid.org/gh/blog/ghanas-path-to-sustainable-water-supply-reforming-rural-and-small-town-water-management-for

[10] Stakeholders in Ghana's water sector development and implications for rural water tariff payment: a review - informa Healthcare, accessed on April 24, 2025, https://www.informahealthcare.com/doi/epub/10.1080/02508060.2022.2117251?needAccess=true

[11] NATIONAL WASH COORDINATION ADVICE PAPER, accessed on April 24, 2025, https://ndpc.gov.gh/media/WASH_Advice_Paper_03_Mar_251.pdf

[12] Legal Pluralism and Water Resources Governance in Ghana – Outcomes of Formal and Customary Management Frameworks - UGSpace, accessed on April 24, 2025, https://ugspace.ug.edu.gh/items/122ceff0-e376-4a7d-ab23-4ebc362064da

[13] aquaya.org, accessed on April 24, 2025, https://aquaya.org/uganda-institutional-framework-for-water-supply/#:~:text=The%201995%20Constitution%20defines%20clean,the%20146%20district%20local%20governments

[14] www.aquaya.org, accessed on April 24, 2025, https://www.aquaya.org/wp-content/uploads/2020_Ugandan-Institutional-Framework-for-Water-Provision_EN.pdf

[15] Uganda's Law on Underground: What Should Communities in Eastern Uganda Know but Do Not Know? - InfoNile, accessed on April 24, 2025, https://infonile.org/en/2025/02/ugandas-law-on-underground-what-should-communities-in-eastern-uganda-know-but-do-not-know/

[16] Uganda Institutional Framework for Water Supply – Aquaya, accessed on April 24, 2025, https://aquaya.org/uganda-institutional-framework-for-water-supply/

[17] Uganda | Department of Economic and Social Affairs - Sustainable Development Goals, accessed on April 24, 2025, https://sdgs.un.org/basic-page/uganda-24784

[18] Climate Change, Water Insecurity, and Gender Inequality in Uganda - Markkula Center for Applied Ethics - Santa Clara University, accessed on April 24, 2025, https://www.scu.edu/environmental-ethics/resources/climate-change-water-insecurity-and-gender-inequality-in-uganda/

[19] Burkina Faso | WaterAid America, accessed on April 24, 2025, https://www.wateraid.org/us/where-we-work/burkina-faso

[20] Benin aims to eliminate water insecurity for all by 2025 - Africa in Fact, accessed on April 24, 2025, https://africainfact.com/benin-aims-to-eliminate-water-insecurity-for-all-by-2025/

[21] Burkina Faso: a water sanitation and hygiene information sheet - IRC, accessed on April 24, 2025, https://www.ircwash.org/sites/default/files/country_profile_burkina_final.pdf

[22] sdgtransformationcenter.org, accessed on April 24, 2025, https://sdgtransformationcenter.org/news/benin-2024-edition#:~:text=Benin%20aims%20to%20increase%20drinking,infrastructure%20needs%20to%20step%20up

[23] Kenya Success Story in Water Resources Management: Participatory Capacity Building in Integrated Watershed Management - ResearchGate, accessed on April 24, 2025, https://www.researchgate.net/publication/319928977_Kenya_Success_Story_in_Water_Resources_Management_Participatory_Capacity_Building_in_Integrated_Watershed_Management

[24] Full article: Water Equity: The South African Case - Taylor & Francis Online, accessed on April 24, 2025, https://www.tandfonline.com/doi/full/10.1080/08941920.2025.2475498?src=

[25] National Benefits Analysis for Drinking Water Regulations | US EPA, accessed on April 24, 2025, https://www.epa.gov/sdwa/national-benefits-analysis-drinking-water-regulations

[26] On Seven Principles of Water Governance - MDPI, accessed on April 24, 2025, https://www.mdpi.com/2073-4441/17/6/896

[27] Improving Water Governance | SIWI - Leading expert in water governance, accessed on April 24, 2025, https://siwi.org/what-we-do/improving-water-governance/

[28] Access to water in developing countries - Affaires mondiales Canada, accessed on April 24, 2025, https://www.international.gc.ca/world-monde/issues_development-enjeux_developpement/environmental_protection-protection_environnement/water-eau.aspx?lang=eng

[29] Simpler, more streamlined and smarter regulations are required to address evolving policy challenges - OECD, accessed on April 24, 2025, https://www.oecd.org/en/about/news/press-releases/2025/04/simpler-more-streamlined-and-smarter-regulations-are-required-to-address-evolving-policy-challenges.html

[30] Chapter 10: Opportunities for just global water governance, accessed on April 24, 2025, https://economicsofwater.watercommission.org/chapter-10/

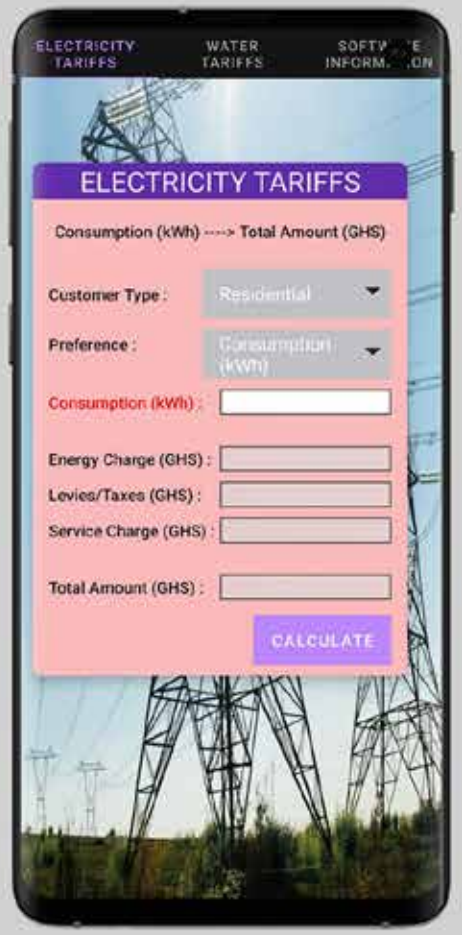
[31] What is water governance? — WAREG - European Water Regulators, accessed on April 24, 2025, https://www.wareg.org/articles/4-what-is-water-governance/

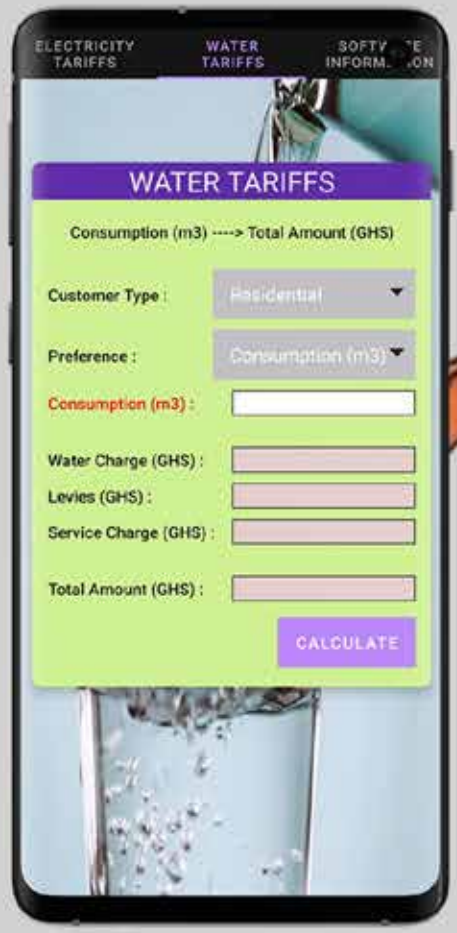
PUBLIC UTILITIES REGULATORY COMMISSION (PURC)

"PURC TARIFF RECKONER"

Mobile App

Calculate the Amount to Pay for Your Electricity & Water Consumption on the Go!





DOWNLOAD NOW!

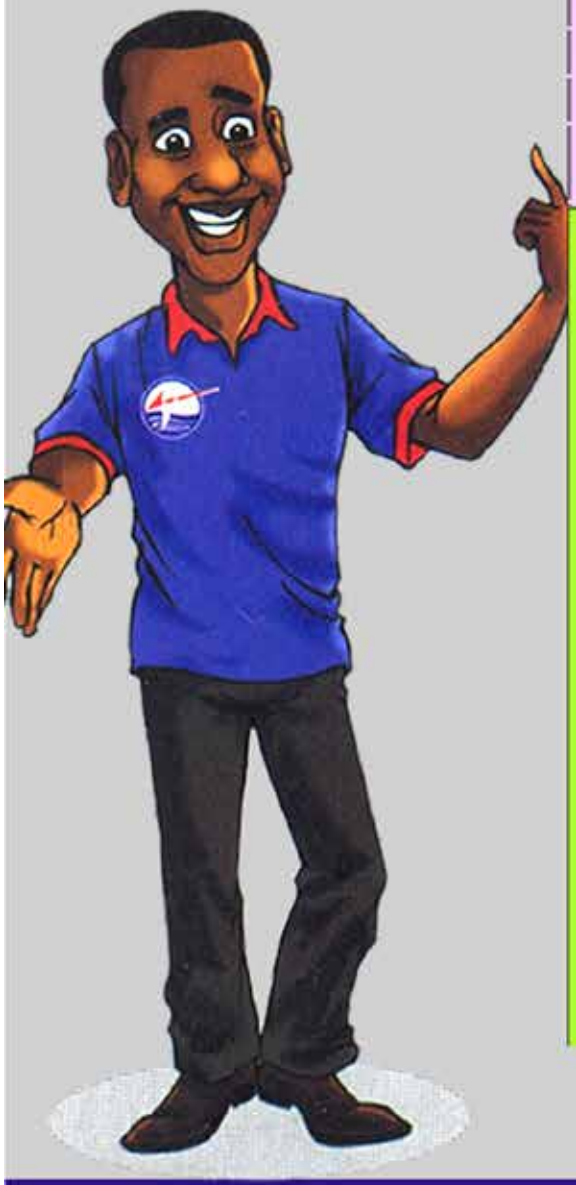
ANDROID APP ON Google play

PURC Ghana | 0302244181-4 | info@purc.com.gh | www.purc.com.gh

PUBLIC UTILITIES REGULATORY COMMISSION (PURC)

"ELECTRICITY CONSUMPTION ESTIMATOR"

Estimates your monthly electricity consumption both in kWh and in GHS using the PURC Gazetted Tariffs



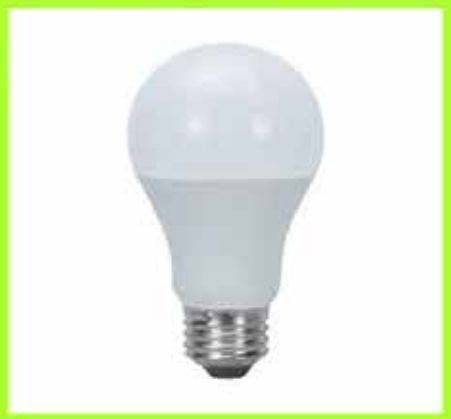
Customer Type: Residential

Diversity Factor (%): 100% Apply

Monthly Electricity Consumption (kWh): 0.6

Monthly Cost of Electricity (GHS): 2.54

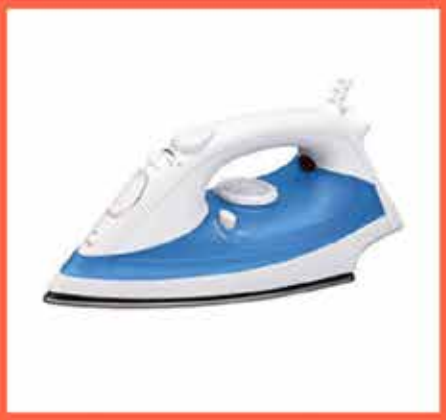
View Chart (kWh) | View Chart (GHS) | CLEAR



LED Bulb 1 ON

Appliance Rating (W): 10

Duration of use (h): 2 hours a day



Iron 1 OFF

Appliance Rating (W): 1200

Duration of use: 1 hour a week

Visit our website or the link below to access the application

www.purcghapp.com/tariffCalc.aspx

PURC Ghana | 0302244181-4 | info@purc.com.gh | www.purc.com.gh

OUR CONTACTS

HEAD OFFICE
2nd Floor
Ghana Olympic Committee Building
No. 53, Liberation Road, Ridge
P. O. Box CT 3095 Cantonments, Accra
Digital Address: GA-052-9469
Tel: (+233) 302 218300
WhatsApp: (+233) 558 082547
Email: info@purc.com.gh
Website: www.purc.com.gh

ACCRA REGIONAL OFFICE
Ground Floor, GNAT Heights
Opposite Zenith Bank, Liberation Road
Tel: (+233) 302 240046
WhatsApp: (+233) 540 126201

KUMASI
1st Floor, Cocobod Jubilee House
P. O. Box 1001, KNUST
Kumasi, Ashanti Region
Tel: (+233) 322 037510
WhatsApp: (+233) 540 126202

TAKORADI
2nd Floor, GPHA Credit Union House
Behind Bank of Ghana
P. O. Box AX 1985
Takoradi, Western Region
Tel: (+233) 540 126203
WhatsApp: (+233) 540 126203

TAMALE
1st Floor, NCA Building
Opposite Regional Coordinating Council
P. O. Box TL 1870
Tamale, Northern Region
Tel: (+233) 372 026380
WhatsApp: (+233) 540 126204

TECHIMAN
1st Floor, Williams Residence
Close to TMA, Pomaakrom
P. O. Box TH 316, Techiman
Bono East Region
Tel: (+233) 503 522089
WhatsApp: (+233) 531 031443

HO
2nd Floor, GERCO Plaza,
Opposite SG-Bank
P. O. Box HP 1373
Ho, Volta Region
Tel: (+233) 362 028607
WhatsApp: (+233) 540 126206

SUNYANI
Plot 15/16 South Industrial Estate
Sunyani Magazine
P. O. Box SY 1003
Sunyani, Bono Region
Tel: (+233) 352 021653
WhatsApp: (+233) 540 126207

CAPE COAST
First Floor, Data Bank Building
Tantri Road
P. O. Box CC 453
Cape Coast, Central Region
Tel: (+233) 332 137926
WhatsApp: (+233) 540 126208

WA
Katee Plaza, Wa Polytechnic Road
Adjacent Winners Chapel
P. O. Box 445
Wa, Upper West Region
Tel: (+233) 392 024275
WhatsApp: (+233) 540 126209

BOLGATANGA
Ground Floor, NCA Building
Opposite the Regional Hospital
P. O. Box BG 273
Bolgatanga, Upper East Region
Tel: (+233) 382 024524
WhatsApp: (+233) 540 126210

KOFORIDUA
Ground Floor, PURC Building
Galloway, Near Jubilee Park
P. O. Box KF 2781
Koforidua, Eastern Region
Tel: (+233) 342 020770
WhatsApp: (+233) 540 126205

PURC Ghana