

Capitalizing on H₂O: Examining the Potential Risks of Privatizing Puntland's Water Supply Companies

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Submitted: 2023, Dec 04; Accepted: 2024, Jan 22; Published: 2024, Jan 29

Citation: Mohamed, A. M. (2024). Capitalizing on H₂O: Examining the Potential Risks of Privatizing Puntland's Water Supply Companies. *Earth Envi Scie Res & Rev*, 7(1), 01-06.

Abstract

This research delves into the intricate dynamics of water supply management in Puntland, exploring the potential risks and benefits associated with the privatization of water supply companies. The study is situated in a context where the government, once holding full control over water supply, now owns less than 20% of the industry. Rapid urbanization in Puntland presents a significant challenge, with a projected 67% of the population concentrated in urban centers within the next thirty years. The paper investigates the adherence of private water supply companies to international standards for water quality, addressing concerns about equitable access and profit-driven motivations. Advocating for a government-led strategic plan, the research proposes water pricing reforms to enhance efficiency and affordability. Set against the unique geographical and socio-political landscape of Puntland, the study evaluates the current state of water supply industries, shedding light on revenue disparities, household connections, pricing strategies, asset ownership, and reticulation costs.

Keywords: Water Supply, Privatization, Puntland, Urbanization, Government-Led Management, Pricing Reforms.

1. Introduction

The indispensability of liquid water for life is axiomatic, given its pivotal role as a universal solvent and medium for essential biochemical reactions, underpinning the very fabric of carbon-based organisms and their intricate biological processes[1]. In a broad sense, urban areas tend to exhibit a higher demand for water compared to rural areas. Despite this trend, Puntland faces a challenge as its population experiences an annual growth rate of 3%. Projections indicate that within the next thirty years, an estimated 67% of the population will be concentrated in urban centers, exacerbating the demand for fresh water resources. This anticipates a scenario where urban water consumption will surpass the current levels, posing a significant concern for sustainable water management in the region[2] [3]. The ability of water supply companies in Puntland, particularly those under private ownership, to safeguard the quality of water for the burgeoning urban population hinges on their adherence to established standards. Following the Guidelines for Drinking-Water Quality (GDWQ) issued by the World Health Organization (WHO) is imperative in this context. Stringent compliance with these guidelines ensures that water quality meets international standards, safeguarding public health and mitigate potential risks associated with population growth and

increased urbanization. Effective management and adherence to global standards are crucial elements in maintaining the integrity of water supplied to the large and growing community in Puntland [4].

In Africa, the effectiveness of water management is a subject of debate, with advocates favoring private companies for their efficiency, innovation, and investment potential, while critics express concerns about potential inequities and accessibility challenges associated with profit-driven approaches[5]. Hence, the primary challenge associated with private ownership of water companies lies in the profit-oriented motivations of individual owners, leading to increased business-oriented practices and, consequently, higher costs for water services[6]. The per capita water demand in communities lacking access to the standard of clean water remains a pressing issue, particularly evident in regions like Sub-Saharan Africa, where 90% of rural areas grapple with insufficient water access, and 60% of urban areas encounter water-related challenges. Despite these critical water shortages, private companies appear unable to adequately address the societal needs in these areas[6] [7].

Contrastingly, the most effective approach to overseeing a nation's water supply is for the government to formulate a strategic plan. Such a plan would serve to preempt conflicts and mitigate the risk of private individuals exploiting this essential resource for personal gain, ensuring the responsible and equitable distribution of this fundamental need[8][9]. After that, water pricing reforms serve as potent measures for enhancing water-use efficiency and sustainability. Nevertheless, given the distinctive characteristics that set water apart from ordinary commodities, it is essential to apply economic principles for managing water resources within the context of a comprehensive social and institutional perspective. This dual approach ensures a balanced consideration of economic, societal, and institutional factors in the pursuit of effective and equitable water resource management[10]. Additionally, the government's sale of water to the public at a cost ten times lower than the current rates could serve as a revenue source, providing

funds that can be allocated towards the reconstruction and development of economic infrastructure[11].

2. Method

2.1 Description of the Study Site

Puntland is located in the northeastern geographical region of Somalia. It shares borders with the self-declared Republic of Somaliland to the west, the Gulf of Aden to the north, the Indian Ocean to the southeast, and Ethiopia to the southwest. The coordinates place it at approximately 8.9794° N, 49.6911° E. Puntland features vast expanses of arid land, covering an area of 212,510 km² (82,050 sq mi), making it roughly one-third the size of Somalia's total land area. Prominent mountain ranges in the region include the Golis Mountains, Galgala, and the Cal Madow Range.



Figure 1: Map of the study area.

2.2 Current Status of water supply industries in Puntland

Prior to the 1991 civil war, the government held control over the water supply. Currently, private companies in Puntland, formerly government-owned, manage the water supply, distributing it through household-connected pipelines while operating under a concession agreement with PWDA. Groundwater serves as the primary resource, yet its mineral content renders it non-potable,

leading to unaffordability of treated water for many. Consequently, individuals resort to using it solely for drinking. A secondary company attempts to address this by treating water, but its high cost limits its accessibility. The population, particularly poorer households, resorts to harvesting rainwater from rooftops, storing it in locally constructed underground tanks facilitated by NGOs. This multifaceted water management approach reflects shortcomings in

policy clarity and institutional coordination. Additionally, the lack of political commitment to providing safe, affordable, and reliable drinking water has hindered the achievement of the Minimum

Development Goals (MDGs) and poses a challenge to attaining Sustainable Development Goal 6 (SDG 6)[12].

3. Result and Discussion

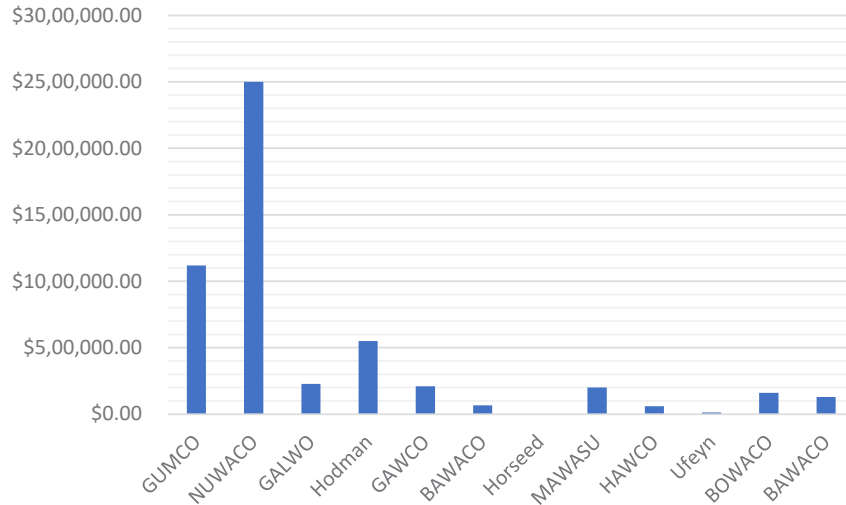


Figure 2: AVERAGE REVENUE

The revenue levels of water companies in Punland are illustrated in this chart, with NUWACO emerging as the top-earning company and Ufeyn at the bottom. Surprisingly, there is no available

revenue data for Horseed, suggesting a potential data gap or lack of financial transparency for that company.

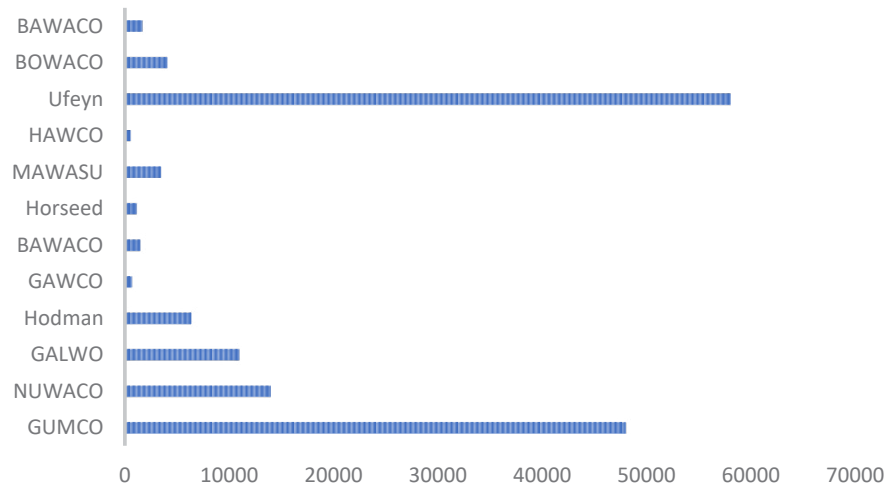


Figure 3: Number of HH connection

In this chart, the household connection numbers of Punland water companies are depicted, and it's quite surprising to see that Ufeyn has the highest number of household connections despite

having the lowest revenue. This indicates a potential discrepancy between revenue generation and the reach of their services, raising questions about their pricing strategies or subsidy models.

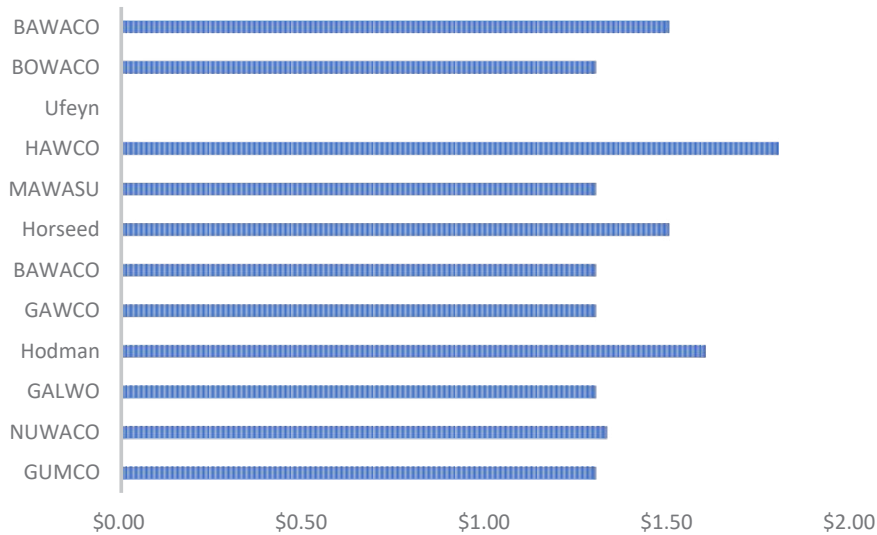


Figure 4: PRICE PER CUM

This chart illustrates the price that water companies pay for 1 cubic meter of water, where HAWCO stands out as the most expensive. It's worth noting that Ufeyn doesn't sell water per cubic meter but charges per tank, offering a considerably low price per tank. This

pricing strategy may explain why Ufeyn has the highest number of connections despite generating less revenue, highlighting their focus on affordability and accessibility for customers.

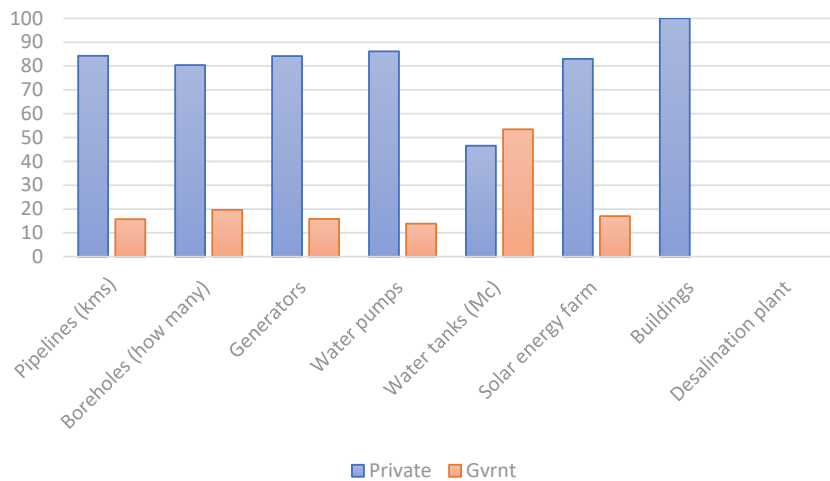


Figure 5: ASSET OWNERSHIP AS PERCENTAGE

Upon examining the chart, it's evident that the red columns represent properties owned by the government, while the blue ones signify private ownership. On average, government ownership in water companies stands at around 20%. This implies that, in

theory, the government should be entitled to 20% of the profits from these companies. However, whether the government actually receives this share from the companies remains an open question, raising concerns about profit distribution and oversight.

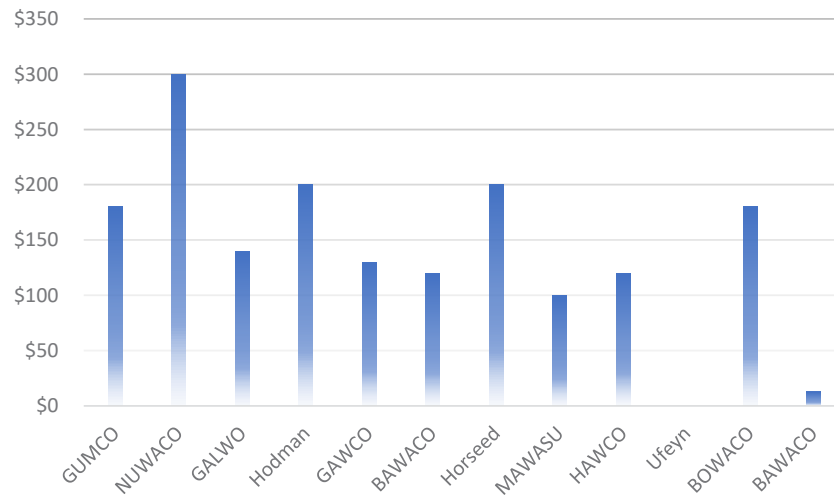


Figure 6: Reticulation cost

In this chart, the reticulation cost of various companies is displayed, and NUWACO incurs the highest cost in this regard. This suggests that NUWACO may have substantial expenses associated with the distribution and infrastructure needed to provide water services, which can impact their overall financial performance.

4. Conclusion and recommendation.

In conclusion, this research offers a comprehensive examination of the intricate landscape of water supply management in Puntland, with a specific focus on the transition from full government ownership to private ownership of water supply companies, now accounting for less than 20%. The study elucidates the challenges posed by rapid urbanization and population growth, projecting a scenario where 67% of the population will be concentrated in urban centers within the next thirty years. The findings underscore the pivotal role of adhering to international standards, particularly the Guidelines for Drinking-Water Quality issued by the World Health Organization, in ensuring the quality and safety of water for the burgeoning urban population.

The research illuminates the dichotomy in perspectives on privatization, with advocates citing efficiency, innovation, and investment potential, while critics express concerns about equity and accessibility. Notably, the study reveals variations in revenue, household connections, pricing strategies, asset ownership, and reticulation costs among water supply companies in Puntland. NUWACO emerges as the top-earning company, and Ufeyn, despite having the highest number of household connections, raises questions about the correlation between revenue generation and service reach.

The implications of the government's reduced ownership highlight the need for a balanced and strategic approach to water resource management. Policy recommendations include transparent profit distribution, addressing pricing strategies for enhanced affordability, and strengthening government oversight.

The research contributes valuable insights to the ongoing global discourse on water resource management, providing a nuanced understanding of the challenges and opportunities presented by privatization in the context of Puntland's unique socio-economic and geographical context. These findings can inform evidence-based policy decisions, guiding efforts to ensure sustainable, affordable, and equitable access to water in the face of urbanization and population growth.

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