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Are PPPs the Solution to Kenya's Water Sector Financing Gap?

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Abstract

This article examines the role of Public-Private Partnerships (PPPs) as a potential solution to the pervasive financing gap in Kenya's water sector, echoing broader challenges faced by African nations. Access to safe water services remains a critical driver of human development, yet traditional approaches have fallen short in addressing the pressing need for infrastructure financing. Drawing on extensive literature reviews and case studies from selected countries, the study delves into the benefits and challenges associated with PPPs in the water sector. The findings highlight the transformative potential of PPPs, including improved efficiency, heightened investment, risk transfer, and sustainable financing. However, significant challenges loom, encompassing transparency, accountability, user affordability, limited competition, and community participation. The article underscores the necessity of addressing these hurdles to ensure that PPPs align with community needs and overarching development objectives. The analysis asserts that PPPs are not a panacea but rather require careful structuring to safeguard public interests. Global experiences, particularly China's success in water sector PPPs, provide valuable lessons, emphasizing the importance of proactive pricing reforms and comprehensive planning. In conclusion, the article advocates for a balanced and inclusive approach to PPP implementation, prioritizing the interests of local communities and safeguarding water as a fundamental human right. The success of PPPs in the water sector hinges on their ability to promote sustainable development, enhance service delivery, and uplift communities, thus contributing to the realization of universal access to safe water.

Key Words: Public-Private Partnerships, investment risks, debt distress, infrastructure financing

Introduction

Water service provision is a critical aspect of human development and is essential for health, hygiene, and economic growth (Reynaud, 2015). Water is actually a basic human need and right. That notwithstanding, access to water has been very low especially across African countries (Soliman & Kumar JHA, 2023). Among the key contributors to the low access to water, is the inadequacy of infrastructure financing (Julius & Okech, 2021;Soliman & Kumar JHA, 2023). More worrisome, the financing deficit in the water sector is not huge but it also continues to grow mainly as a result of poor governance, lack of accountability among institutions, inefficiencies in the application of resources and high investment risks (Bastemeijer, 2019, Hutton, 2022). The high risks are particularly brought about by the fact that most African countries have a high risk of debt distress making them incapable of defusing the rising risks and restoring financier confidence (Bastemeijer, 2019).

Globally, attainment of SDG 6 requires require in excess of US $ 1 trillion annually yet only a small fraction of the same is available (Hutton, 2022). Majority of the countries in greater financing need are found in African and middle East countries where the access levels have also been reported to be low. For instance, the water sector infrastructure financing gap up to the year 2017, relating to only on SDG 6.1 and 6.2 was found to be between 81%-84% (Bastemeijer, 2019). According to Marchesi and Valencia, (2015) Peru required up to

US$19.2 billion to finance universal access to water and sanitation by the year 2021. In the United States of America, the projected water infrastructure financing gap to meet the clean water demand for the next 25 years is $1 trillion (Greer, 2020). The huge financing gap calls for innovative financing mechanisms including; public private partnerships, micro finance, green bonds and technology transfer (United Nations, 2020).

According to WASREB (2023) , access to water in Kenya was 62% by end of June 2022. Lack of adequate infrastructure financing has been cited as one of the major contributors to the low access rates (C. M. Julius & Okech, 2021). In Kenya, there seems to be a rush against time in order to meet the financing requirement for timely attainment of the goals set under the country's Vision 2030 (WASREB, 2022). The Ministry of Water Sanitation and Irrigation (MOWSI) notes that the achievement of SDG 6 required a total of Kshs.1,271billion (equivalent to US$10.64 billion) against an available Kshs 529 billion (equivalent to US$ 4.43 billion) resulting to a deficit of Kshs.652 billion (equivalent to US$6.21billion) (MOWSI, 2023). Given the financing gap that the sector is faced with, Kenya just like other countries, have had no choice but to explore different financing modalities in order to ensure universal access to water. Among the identified financing sources included Concessional financing, PPP, Commercial financing, National and county revenues and Donor grants (MOWSI, 2023) . Notably, PPP financing accounted for up to 31% of the total resource requirement, coming only second to concessional financing at 40% (MOWSI, 2023) . The huge proposed uptake of PPP financing in Kenya doesn't come as a surprise as the country and specifically the water sector continues to grapple with high debt obligation whose repayment continues to lag behind (MOWSI, 2023).

Use of PPP Financing in the Water Service Provision

Use of PPP in water service provision is not a new concept but has rather been in existence right from the 18th Century (Reynaud, 2015; Rosell & Saz-Carranza, 2020). The concept was used in France where a 15-year exclusive concession was given for the supply of water in the City of Paris and second concession was also signed for infrastructure development and supply of water to Parisian regions and their environs (Reynaud, 2015).

PPPs have been lauded for its ability to bridge financing gap, increasing investment in the water sector thereby ensuring increased access to clean water and improved sanitation facilities (Rosell & Saz-Carranza, 2020). Secondly, PPPs can lead to improved efficiency by bringing on board private sector's expertise, technology, and operational efficiency to the water sector, which in turn results to improved service delivery (OECD, 2016). On the economic front, use of PPPs is seen as a means of transferring risks from public to the private sector hence freeing public resources for other developmental agenda OECD (2016); while at the same time ensuring sustainable financing for the water sector (World Bank, 2018).

On the contrast, PPPs in water financing are faced with a number of challenges. According to OECD (2016), PPPs in water lack transparency and accountability as most decisions related to the financing are away from public scrutiny making it a preserve of the few people who are involved the financing evaluation (Saussier Avril, 2017) . Due to the limited community participation during project conceptualization, planning and implementation, there is a likelihood that the resultant projects do not prioritize the needs and preferences of local communities (World Bank, 2018). Additionally in most instances the contracting authorities have limited understanding of the PPP infrastructure and costing hence limited their ability to adequately monitor the performance and also to make an informed choice between PPP and the traditional contracting (Saussier Avril, 2017).

Secondly, user affordability is not given adequate consideration because PPPs often result in higher tariffs for water services, making it difficult for low-income communities to access safe drinking water and sanitation facilities (Leigland, 2018) . Thirdly, there is limited competition where PPPs are used in the development of water systems as private sector partners usually have a monopoly over water service provision in the particular area and for the defined period of time (OECD, 2016). Fourthly, PPP financing is affected by political cycles because although private contracting is very clear from the onset, the public component requires extensive public involvement which is likely to cause political contestation likely to destabilize the PPP contracts (Saussier Avril, 2017) . The law has in some instances to change to accommodate PPP financing for essential services which is a political process and is likely to be crippled especially during or near election period (Saussier Avril, 2017).

Given the highlighted concerns associated with use of PPP in financing water infrastructure, it is clear that they are not a bullet proof solution to the financing gap (Cledan, 2009) . It is the duty of the public player to ensure proper structuring of the PPP contracts such that it takes care of the public interest in terms of quality, pricing and environmental protection (Cledan, 2009).

According to Prasad (2006), private sector involvement in water service provision is the least popular compared to other services because of the social nature of the water. This explains why the public sector supplies water to over 90% of the world's population (Prasad, 2006). In effect, the water sector has been robbed off the benefits that accrue from private sector involvement including increased efficiency, reduced tariffs and availability of the much-needed infrastructure financing (Lobina, 2005).

Although PPP financing is seen as a noble innovation for closing the financial needs for the much-required water infrastructure, there are challenges in implementing the same in instances where different levels of government are responsible for different aspects of water service provision (Greer, 2020) . The major question is this case becomes who is responsible to pay for what (Greer, 2020)? The PPP water infrastructure financing thus brings on board additional challenges including issues related to the tariff structure decisions, the political acceptability and water affordability (Greer, 2020).

In Ireland for example, a deliberate decision was made by the government through the Department of the Environment, Heritage and Local Government (DoEHLG) to use PPP financing especially for provision of water and waste water services (Reeves, 2011) . The main reason for the preference was that the infrastructure gap was big hence requiring huge financing within a short timeframe (Reeves, 2011) . Given the magnitude of the financing, PPPs were identified as the preferred financing model because the financing was off balance sheet hence posed no threat to the fiscal sustainability of the country, it reduced public expenditure, increased efficiencies leading to achievement of value for money, transfer of risk to private players and increased room for innovation (Reeves, 2011) . The deliberate decision to use PPPs in the water sector saw to it that thirty out of the thirty-six country's operational PPP financed projects being on water and waste water projects the other six being shared equally by roads and health sectors (Reeves, 2011) . While this may seem like a success, it brought in enormous challenges. To begin with, the value for money studies were cosmetic and did not inform the financing model. Secondly, accountability in the provision of water services was highly compromised to a level that even the parliamentary accounts committee could not be given the required information because of a perceived 'commercial risk' on the part of the private players (Reeves, 2011) . Water being a human right, it is the responsibility

of the government of consent. Without adequate oversight, control and accountability, it is highly unlikely that such services will be provided according to the user needs and at times standards (Reeves, 2011).

Yoshino et al. (2022) established that the infrastructure financing gap for Asia and the Pacific region was $22.55 trillion to cover the investment requirement for up to the year 2030. The water infrastructure investment requirement for Central Asia alone was $492 billion (Yoshino et al., 2022). Despite the huge financial requirement, the public sector and multinational bank financing has been quite minimal resulting to collaboration with the private sector to fill in the gap (Yoshino et al., 2022) . However, due to the assessed risks associated with PPP financing in Asia, ranging from transboundary challenges, political acceptability because of the investment timeframe and possible change of water pricing, it has been established that water infrastructure in Asia cannot be funded fully by the private sector (Yoshino et al., 2022). This called for refinement of PPP engagements to eliminate fiscal sustainability risks associated with normal PPP arrangements in Asia (Yoshino et al., 2022).

According to Wu et al. (2016), the use of the PPP in the Chinese water and sanitation sector has been a great success accounting for 40% of the world's PPP investment in the sector. This success resulted from efforts from both the private and government. On the part of government, there was liberalization of the water tariff for projects for an assured net return of between 8-10%, segmentation of the sector such that PPP financing majorly focused on portable water treatment plants, the contracts were negotiated directly with the local authorities or local utilities, the private parties comprised of joint ventures between a foreign and a local company whereby the local partner was greatly involved in the negotiations (Wu et al., 2016).
While PPP in water financing has been on the rise in the 21st century, most of such investments in the developing countries have since reverted to the public sector (Yoshino et al., 2022). Of interest is that approximately one third of the PPP financed projects are found in developing countries (Yoshino et al., 2022).

Whereas PPPs are increasingly being seen as a major solution to the financing gap, that may continue to be an illusion since the private sector players continue to shy away from investing in developing countries (Rosell & Saz-Carranza, 2020). This is against the premise Private involvement in water service provision especially in developing countries has not attracted enough interest (Rosell & Saz-Carranza, 2020).

Water pricing under PPP financing and its impact on equity, affordability
Water is a basic human right (Whittington, 2003). In the pricing of a basic human right, it is expected that prices will be low and affordable to the poor (Whittington, 2003) . This expectation may not be guaranteed in the case of application of PPP financing. This is especially the case considering the commercial interest of the private party who is in most cases serves as the operator (Cledan, 2009; Fuesta & Haffnerb, 2007). A review of applicable water prices where PPP financing is used are on the average higher than where other contractual arrangements are used (Reynaud, 2015). According to Wu et al. (2016), water pricing and setting of optimal tariffs to enable financial sustainability is still a thorny issue among many nations. This emanates from the conflict between affordability and financial sustainability of the utilities (C. Julius & Kalunda, 2021).

This was evidently the case in China where the use of PPP financing in the water sector led to a significant increase in water prices with up to 357% price increase in some cities (Wu et al., 2016) . The PPP financing in the water sector accounting for up to 8.3% of the total PPP

investments in China (Wu et al., 2016). Despite the general increase in prices, China is the home to more than 40% of the PPP contracts in water and sanitation sector across the Globe (Wu et al., 2016) . The successful utilization of PPP in the water and sanitation sector financing in China is attributed to the water sector pricing reforms which were introduced prior, during and even after the PPP financed project implementation (Wu et al., 2016) . Initiating the pricing reforms prior to the implementation the PPP infrastructure financing was found helpful because it: reduces the financing gap, prepares the populace on the increased prices and it alleviates the fears among the interested private investors making their pricing more favourable (Wu et al., 2016).

Conclusion

The water sector in Kenya, as in many African countries, grapples with a significant financing gap that impedes progress toward achieving universal access to safe water. The traditional approaches and public sector efforts alone have proven insufficient to address the growing challenges associated with infrastructure financing, governance, and investment risks. This article has explored the potential of Public-Private Partnerships (PPPs) to bridge the financing gap in the water sector, drawing on insights from literature reviews and case studies.

While PPPs present promising advantages such as improved efficiency, increased investment, risk transfer, and sustainable financing, the analysis has also revealed substantial challenges. Issues of transparency, accountability, user affordability, limited competition, and limited community participation pose significant hurdles to the successful implementation of PPPs. It is crucial to recognize that PPPs are not a one-size-fits-all solution, and their effectiveness relies heavily on careful planning, structuring, and oversight.

The case of Kenya, where PPP financing if implemented as planned, would account for a substantial portion of the sector's resource requirement, there is need to underscore the urgency of addressing the associated challenges. The paper emphasizes the need to prioritize the interests of local communities and aligning PPP implementation with broader development goals. Striking a balance between public and private sector involvement is paramount, begging the need to ensure that PPPs contribute to increased efficiency without compromising essential aspects such as affordability and community needs.

Moreover, lessons from global experiences, such as China's success in PPPs in the water sector, highlight the importance of proactive pricing reforms and comprehensive planning. Recognizing water as a basic human right, it becomes imperative to navigate the delicate balance between financial sustainability and affordability, avoiding significant price hikes that may disproportionately impact vulnerable populations.

In conclusion, while PPPs offer a potential avenue to address the financing challenges in the Kenya's water sector, a cautious and inclusive approach is necessary. The government and stakeholders must collaborate to design PPP frameworks that prioritize the public interest, incorporate effective oversight mechanisms, and ensure that access to clean water remains a fundamental right for all. Ultimately, the success of PPPs in the water sector lies in their ability to foster sustainable development, improve service delivery, and uplift the lives of the Kenya's citizenry.

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