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PUBLIC-PRIVATE PARTNERSHIPS TO IMPROVE WATER INFRASTRUCTURE IN ZIMBABWE

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Abstract. Zimbabwe desperately requires financial assistance to fix existing infrastructure and build new urban water systems. This analysis suggests that PPPs may give Zimbabwe the best opportunity to overcome its problems with water infrastructure. Zimbabwe still has trouble supplying water to its cities because of a shortage of resources and deteriorating infrastructure. This situation was already confirmed by the United Nations Children's Fund (UNICEF) (see 2019 reports), and PPPs could mitigate the financial challenges to assist the Zimbabwean Government. The study utilised qualitative research to gather information. Interview responses were supplemented with a literature review to thematically state responses. The results demonstrate that political backing, government accountability, economic viability, and suitable statutory, financial, technological, and institutional frameworks are the key prerequisites for implementing PPPs effectively in Zimbabwe. The study proposes that PPPs are perceived as an alternative reform strategy for improved urban water infrastructure in the country. However, PPPs must consider the implementation imperatives before being adopted and implemented. This requires an environment conducive to operating PPPs, including proper planning and meticulous implementation. If entered hurriedly, PPPs can exacerbate the problems they were implemented to rectify, thereby saving the taxpayers' hard-earned money.

Keywords: Public-private partnerships; urban water; water infrastructure; Zimbabwe

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1. Introduction

Section 77 of the Zimbabwean Constitution (2013) defines water as "a basic human right". It continues to state that "the state must take reasonable legislative and other measures within the limits of the resources available to it to achieve the progressive realisation of this right" (Constitution of Zimbabwe (CoZ), 2013). This distinction was relevant to the study in that the government is unlikely to implement PPPs in water infrastructure even though the Zimbabwe Socio-Economic Transformation (ZIMASSET, 2013:77) blueprint stipulates that the infrastructural development shall be funded through PPPs. The rationale was that, worldwide, the desire to utilise PPPs in developing public infrastructure is gaining momentum, largely to compensate for failures by governments to deliver water infrastructure adequately. According to the Asian Development Bank Institute (ADBI, 2011:4), there has been a significant increase in the use of PPPs driven by limited public funds coupled with an increasing realisation that the private sector could often be better placed to handle many of the tasks traditionally associated

with the public sector. This is based on the view that collaborating private firms and governments could provide mega-projects and produce enhanced outcomes that any entity could not deliver alone. According to Osborne (2000:1), the PPPs have become seen as cost-efficient and effective mechanisms for implementing public policy across a range of policy agendas. McQuaid (2005:9) argues that the benefits of the PPP approach come from recognising that any local actor needs to have all the competencies and resources to deal with the interconnected issues raised in many policy areas. The strength of the partnerships approach is derived from aligning partners' interests and taking cognisance of the interdependencies among diverse actors engaged in the successful provision of infrastructural mega-projects. Grimsey and Lewis (2004:6) argue that PPP is an arrangement. According to Garvin (2010:4), the PPP concept includes three dynamics. The first is a long-term contractual arrangement between the public and private sectors to deliver an infrastructural facility for mutual benefit. The second is that the private sector designs, constructs, finances, operates and maintains the facility. Finally, the potential rewards and risks related to the delivery of the project are shared.

The roadmap to PPPs involves managing and organising the process; strategic planning; collecting additional information; defining the scope; defining the objectives; selecting the options; resolving the constraints; costing the recovery strategy; implementing the regulatory framework; offering the tender; negotiating the terms and contracting; finalising the terms of partnership; managing the contract, disputes, transition and procurement and monitoring and evaluating the partnership (Helmy, Khourshed, Wabha & Bary, 2020:5). Countries such as the Philippines, Australia, the United Kingdom countries, and South Africa have established PPP units housed within their finance ministries (World Bank (WB), 2011:80; Dube & Chigumira, 2011:23; Mutandwa & Zinyama, 2015:122). It is essential to recognise the significance of water infrastructure in modern urbanised countries and the need for Zimbabwe to improve its water infrastructure in urban areas, as the current state of its water infrastructure is deplorable with the situation compounded by rapid urbanisation in its cities. In 2008 the country experienced cholera and typhoid outbreaks in the main urban cities, namely Harare and Chitungwiza, that resulted in the untimely death of more than 400 citizens (United Nations (UN), 2021:14). In the case of Zimbabwe, it is however not clear which institution is accountable for PPPs and implementing water PPPs may, therefore, be problematic. This challenge may affect the water infrastructure improvement in Zimbabwe, a case under study. The study applied the transactional cost theory to understand the following:

- What are the challenges in the urban water infrastructure?
- How can PPPs as a procurement model improve urban water infrastructure development in Zimbabwe?

After the introduction, the following section discusses the theoretical and empirical literature, followed by a discussion section on challenges in water infrastructure in Zimbabwe. The next section explains the methodology, followed by a discussion of the qualitative findings of this study. In contrast, the last section synthesises, concludes, and offers improvement recommendations and states further research aspects.

2. Theoretical and Empirical Literature

The 1970s' neo-classical ideas, including the principal-agent and transaction cost theories, had a significant influence on the PPP (Walsh, 1991:151; Boston, 1996:34) and "new institutional economics" (Williamson, 1979:240). According to Kaboolian (1998:190), the abovementioned theories are mirrored in the new public management discourse. The 1990s saw the genesis of a new model of public sector management in many countries referred to as NPM (Farnham & Horton, 1996:32). There were numerous variations of the NPM model, such as "market-based public administration" (Lan & Rosenbloom, 1992:539), "new public management" (Hood, 1991:12); "entrepreneurial government" (Osborne & Gaebler, 1992:201); the post-bureaucratic paradigm (Barzelay, 1992:20) and "managerialism" (Pollit, 1993:3). It is evident that, despite the various names, most academics use different terminology to define the same occurrence. Hood (1991:12) considered managerialism in the UK as a determined attempt to implement the '3Es', namely efficiency, economy, and effectiveness. Hood (1991:12) explains that NPM has doctrines that include a focus on the division of administration into user-pay-

based agencies; management as opposed to policy; efficiency and performance evaluation; the utilization of quasi-markets; outsourcing to promote competition; and reducing expenses; monetary incentives; the freedom to manage and on the use of a specific style of contracts.

The study adopts Transaction cost theory (TCT) with a rationale that in addition to the price, every market transaction has other costs such as negotiating the purchase price or choosing an appropriate supplier (Williamson, 1979:235). Williamson (1979:235) explains that, like the PAT, “the transaction cost theory’s focus is on the contract”. The theory emphasizes the state's function in determining the fundamental terms of contracts (Zinyama, 2014:59). The review of bids, the creation of contract specifications, and the negotiations of the final PPP contract with the successful bidder are all transaction expenses related to PPPs (Zinyama 2014:59). Brown and Potoski (2005:327) assert that the TCT offers a framework that guides government officials through the process of contract management. PPP contracts are complex, but the TCT identifies specific characteristics that affect such PPP contracts. The TCT is concerned with institutional arrangements that best facilitate and economise transaction costs (Stieglitz, 1987:25). The TCT provides a framework that guides decisions on whether to get into PPP contracts and how to maintain contractual ties after the contract has been awarded (Ferris & Graddy, 1991:547). Because of PPP contracts, it is difficult for private and public sector actors to predict future scenarios. Usually, when the contract is complete, the private actors may opportunistically take advantage of ambiguities in an agreement at the expense of the public entity leading to significant risk (Stieglitz, 1987:25). Such opportunism is only minimised through incurring transaction costs. The public entity incurs such costs and includes establishing performance and executing the necessary penalties (Stieglitz, 1987:25). Since the TCT models external vs internal production as a function of both managerial and financial cost, it has the benefit of guiding how public organizations choose to provide services like water, especially in urban municipalities (Williamson, 1996). When deciding whether or not to participate in a PPP, institutions like local authorities assess transaction costs against administrative costs, and production costs associated with providing a service internally or through outsourcing (Forged, 2015:66). The TCT is not without critics and is sometimes criticised for assuming that private partners in a contract operate unscrupulously, pursuing their self-interest with guile (Zinyama, 2014:65). From its most basic form, the TCT advances to provide a more thorough description of organizational transactions, such as logical contracting under asset specificity requirements (Williamson, 1993:453). However, it needs to pay greater consideration to the value of ties built on trust across enterprises (Zinyama, 2014:64).

The concept of transaction cost could be more precise. For example, it is not clearly understood what details should be specified when the government asserts that restructuring institutions like local government has reduced transaction costs (Zinyama, 2014:64). The transaction cost theory excludes components that are included in other contractual models, such as the strategic competence approach (Barney, 1999:7) and the public values and rights approach (DeHoog, 1997:89). The strategic competence approach argues that governments' peripheral and core competencies drive contracting decisions. Governments should outsource their non-core functions and generate internal services based on their key strengths. The public values approach contends that while deciding whether to contract out, public managers should take into consideration values other than economy and efficiency, with a special emphasis on efficacy, and accountability (DeHoog, 1997:89).

2.1 Background of Zimbabwe’s Water Sector Management

In 1980, Zimbabwe inherited the Water Act (1976) from the former colonial government, which was highly skewed towards the white minority settlers (Musemwa, 2021:27). Various successive colonial governments considered controlling the allocation of water in the capital city, then known as Salisbury (now Harare) as a means to give content and form to the segregation between black and white citizens. The city’s infrastructure was primarily designed to serve the white settlers first (Musemwa, 2021:27). In 1980; the new ZANU-PF Government decided to implement major reform programmes in the water sector (Mukurira & Mugumo, 2006:147). The reform programmes aimed to align the country's water regulations with the national goal of rectifying the

discriminatory 1976 Water Act that limited access to water resources to the minority white population. The reforms also sought to embrace the principles of integrated water resources management (IWRM) in line with the new legislation of the Water Act of 1998. The formation of the Zimbabwe National Water Authority (ZINWA) and the seven catchment councils because of the rationalization of water resource management strategies led to the enforcement of the 1998 Water Act. In 2004, a Rural Water, Sanitation and Hygiene (WASH) Policy document was drafted for cabinet consideration. A subsequent review of the document in 2009 picked major gaps in the policy (National Action Committee [NAC], 2010, cited in Dhoba, 2022:249), demanding water reforms to improve the situation.

2.2 Water reforms in Zimbabwe

The water reforms in Zimbabwe were implemented in tandem with developments in other countries. According to Menard, Tropp, & Jiménez (2017), the previous two decades had witnessed major water policy reforms in both developed and developing countries with the significant aim of improving water service delivery. In developing countries, such policy reforms were usually supported by multilateral and bilateral agencies that include, amongst others, the devolution (decentralisation) of local government's functions and services, increased room for stakeholder participation in the water sector and the formation of an independent regulatory body (Taonameso, Mudau, Traore & Potgieter, 2021:2). Despite these reforms in the water sector in urban areas, Zimbabwe has been experiencing a deterioration in water service delivery that is characterised by acute potable water shortages and high morbidity rates due to waterborne diseases (Taonameso et al., 2021:1). The country's urban water infrastructure is dilapidated, resulting in poor water quality and constant water shortages and, consequently, induced deleterious epidemiological cholera outbreaks, for example in 2008 and 2018 (Musemwa, 2021:28). The continuous deterioration of the water sector raises fundamental questions about policy formulation, adoption, implementation and evaluation because a water policy that aims to provide affordable, adequate, quality and sustainable water services ought to include regulations, programmes and plans (Taonameso et al., 2021:2).

2.3 Water sector challenges in Zimbabwe

The establishment of ZINWA was in line with the global water reforms. ZINWA is now under the Ministry of Lands, Agriculture, Water, Climate and Rural Resettlement and was previously under the Ministry of Environment, Water and Climate Change until 2018 (Zimbabwe Infrastructure Report (ZIR), 2019:21). Kanyepi and Tanyanyiwa (2021:6) highlight that with exclusive responsibility for delivering, managing, and selling agreement water, ZINWA oversees commercially developing and managing the nation's water resources. The responsibilities of ZINWA vary according to the level of government; at the national level, it makes recommendations to the Minister of Lands, Agriculture, Water, Climate, and Rural Resettlement regarding the creation of national policies and water pricing, whereas at the catchment level, it is responsible for ensuring Act compliance (Kanyepi & Tanyanyiwa, 2021:6). Despite the authority vested in ZINWA by the Constitution as promulgated, ZINWA continues to face challenges in the execution of its mandate. Taonameso et al. (2021) note that "ZINWA cannot implement its mandate". One of the complexities highlighted as a challenge is that "ZINWA is both a regulator and a service provider, and the National Water Policy (NWP) of 2013 gave way for the formation of ZINWA" (GoZ, 2015:16). Nhapi (2009) criticises the lack of clarity and the stated roles for ZINWA about urban water management and indicates that this is a significant concern. Such complexities call for investigation through research. Taonameso et al. (2021:6) highlight the need for more resources as another challenge faced by ZINWA. The African Ministers' Council on Water (AMCOW) (2015:24) states that urban water services in Zimbabwe declined from once-high standards due to the failure to repair or maintain an ageing infrastructure resulting in a lack of revenue from water. AMCOW lampoons the authorities for the dysfunctional water distribution network and the effluent entering the rivers and dams that are the significant sources of the country's bulk water supply (AMCOW 2015:24). The outbreak of cholera and typhoid in 2008-2009 and 2020 (Ministry of Health and Child Care (MoHCC), 2020) is evidence of ZINWA's failure to provide clean water, as stated under SDG 6.1. Additional challenges affecting Zimbabwe [and many African countries, holistically] include "a series of recurrent droughts" (in Makaya, Rohse, Day, Vogel, Mehta, McEwen, Rangelcroft & Van

Loon, 2020:520), supplemented with lack of funds, embezzlement of financial resources, and inadequate planning, design, construction, monitoring, and maintenance, as well as location problems (non-alignment with the needs of the population and economic exploitation) and financial unsustainability (Marriott, 2014; Kabi, 2020, cited in Elle, 2022:1-2). These challenges are already emphasised under the Water Act [Chapter 20:22] of 1998 which notes that there are major challenges and constraints in managing water resources throughout Zimbabwe. ZINWA needs more financial capacity to execute its primary functions of planning, establishment, and administration of the water resources of the country. ZINWA gets most of its revenue from raw and clear water sales to local authorities without capacity (GoZ, 1998). Furthermore, although the clear water supply function is not prescribed in the Water Act of 1998 [Chapter 20:22], it is covered in the ZINWA Act of 1998. ZINWA is failing to inspect and maintain the water infrastructure, especially the dams, perhaps because of its dual role as both regulator and operator of large dams (Nhapi, 2009).

Urban water services in post-colonial Zimbabwe have declined from their once high standards during colonialism. The government has failed to repair or maintain the ageing infrastructure, which has led to a severe decline in service delivery (AMCOW, 2019:25). Furthermore, reports from urban settlements and semi-urban growth centres present a consistent picture of high levels of dilapidated water distribution systems in need of repair as well as effluent outflows entering rivers and dams (Taonameso et al., 2021:4). The same rivers and dams are often the main sources of bulk water. It is also reported that numerous water treatment plants are dysfunctional and do not have the power to pump water consistently, and lack chemicals for water treatment (Taonameso et al., 2021:4). The intermittent power supply to water services is a major contributing factor (Nhapi 2009:231). In the 1980s, Zimbabwe launched an ambitious programme to develop its water supply and sanitation infrastructure, and by the late 1990s, the levels of services were high in sub-Saharan Africa (ADBI, 2011:113). The nation was regarded as a pioneer in the water industry for service delivery, policy change, and innovation. However, due to a lack of significant new capital investment in services during the previous ten years, the sector's prospects have reversed (Chirinda, 2015:6). Additionally, there were insufficient income for the institution in charge of service delivery, which resulted in a persistent reduction in operations and the upkeep of assets. The 2008–2009 rainy season witnessed a significant cholera outbreak with approximately 100 000 illnesses and an estimated 4280 fatalities because of the gradual reduction in water and sewage systems (MoHCC, 2020). Another outbreak of waterborne diseases was recorded in Zimbabwe in recent years. According to the MoHCC (2020), Zimbabwe recorded epidemics of typhoid and diarrhoea in 2019. By 18 October 2020, there were 722 cases of typhoid and 10 deaths and 256 281 cases of diarrhoea, with 115 deaths (MoHCC, 2020). These statistics indicate a need for more progress in providing clean water in Zimbabwe.

3. Methodology

The study utilised a qualitative approach as ‘it emphasises the careful and detailed description of social practice’ (Sibanda, 2015:45; Nyikadzino & Vyas-Doorgapersad, 2020:235; Mothabi & Vyas-Doorgapersad, 2022:367). The study considered purposive sampling and identified 34 respondents from various sectors, such as: academics from Africa University (AU), the Mass Public Opinion Institute (MPOI), Midlands State University (MSU), University of Zimbabwe (UZ); businesses such as the Zimbabwe National Chamber of Commerce (ZNCC), the Confederation of Zimbabwe Industries (CZI); development agencies such as the International Monetary Fund (IMF), the World Bank (WB), United Nations Children's Fund (UNICEF); government ministries, for example, the Ministry of Finance and Economic Development (MoF), the Ministry of Lands, Agriculture, Water, Climate and Rural Settlement (MoL) and the Ministry of Local Government, Public Works and National Housing (MoLG); local authorities such as the Chitungwiza City Council (CCC), Harare City Council (HCC), Norton Town Council (NTC) and Ruwa Town Council (RTC); think tanks such as the African Capacity Building Foundation (ACBF), the Labour and Economic Development Research Institute of Zimbabwe (LADRIZ), the Zimbabwe Economic Planning and Research Unity (ZEPARU); and other stakeholders such as the Zimbabwe National Water Authority (ZINWA).

R1 denoted the first respondent in each "category," followed by the affiliation, the interview's year, and so on. After compiling their responses, the participants were given codes such as R1 (UZ, 2021), R1 (CZI, 2021), and so on.

4. Results and discussion

The research includes comments pertinent to the current article because not all responses may be included in a single article. Future publications will analyse the other responses. With the interviews, the primary researcher was able to understand the issues under investigation fully. The researcher also made observations to acquire information. The article only discusses one theme: the merits of using PPP as a procurement model in Zimbabwe.

4.1 Merits of using PPP as a procurement model in Zimbabwe

PPPs are perceived to be a viable avenue for rendering public goods and services globally (Global Water Partnership Report (GWPR), 2014:5). Governments across the globe are faced with limited fiscal space to fund extensive infrastructure development such as roads, electricity, energy, water, and telecommunications, among others. As a concept of the NPM reform, PPPs could solve public sector infrastructure problems. Various respondents concurred about the benefits of PPPs; for example, R1 (ZINWA, 2021) stated that *"Zimbabwe stands to benefit immensely from using PPPs in its urban water infrastructural development"* and that *"PPP's bring a myriad of benefits to financially constrained governments. Chief amongst them is the rapid delivery of infrastructure, technical expertise and sharing risks with the public sector. The government's desire to use PPPs is rapidly growing"*. This opinion was supported by R2 (ZINWA, 2021), who asserted that *"ZINWA has been authorised to use or seek funding through loans and other models that include PPPs, joint ventures and ZINWA water infrastructure bonds"*. R1 (HCC, 2021) added that *"This golden opportunity to use PPPs was extended to local authorities to fund urban water infrastructure"*. GWPR (2014:5) affirms that owing to economic decline, rendering water in most urban areas in Zimbabwe has significantly declined, hence the country's struggle to achieve the SDGs. This view concurs with R5 (UZ, 2021), who averred, *"It is evident that the state infrastructure for water is overloaded and needs urgent attention from the stakeholders. Evidence of the current state of the infrastructure was the 2008 cholera and typhoid outbreak that infected more than 100 000 citizens and killed nearly 4000 innocent souls"*.

Most of the opinions expressed by the respondents in this study concurred with the information gleaned from the literature in that embracing PPPs triggers efficiency in the provision of water (Sulser, 2018:8). R1 (MoF, 2021) stated, *"The benefits of PPPs are numerous, especially for the public sector, whereby the infrastructure growth is quickened, which is an advantage. The service delivery is also quickened. The ability of the government to intervene adequately is limited by a lack of resources, and the private sector introduces the required resources"*. R1 (ZEPARU, 2021) asserted that *"The merits are that through PPPs Zimbabwe will be able to attract investment in the water sector. African governments do not have sufficiently large budgets to fund infrastructure. For example, the literature indicates that, on average, African governments allocate revenue equal to 12% of the country's gross domestic product to infrastructure projects, which is an insignificant amount. Zimbabwe does not have sufficient resources to fund infrastructure [and] if the country is on austerity, PPP is a funding mechanism for infrastructure"*.

This view also aligns with the WB (2018:2), confirming that PPP benefits include the ability to manage assets or services for the duration of the PPP. The additional benefits of PPPs mentioned in WB (2018:2) documents include that PPPs provide complementary funding and expertise, and innovation in areas such as project management. The Zimbabwean Government has encountered various challenges while implementing its economic restructuring programme. Critical to this programme is the provision and expansion of essential services and the development of sustainable infrastructure (Wehrheim, 2013:7). Well-functioning and accessible infrastructure is fundamental to social and economic development. Infrastructure provides clean water, power and

gas to a country's citizens and businesses and connects them to their jobs, healthcare facilities and schools. An estimated 60 million people have no access to clean drinking water (WB, 2018:7).

In terms of models for water-related PPPs, most of the respondents opined that Design-build-finance-operate (DBFO), Built Operate Own Transfer (BOOT), Rehabilitate Operate and Transfer (ROT), and Build, Operate and Transfer (BOT) are preferable. In support of PPPs, most of the respondents shared the same opinions; for example, *"PPPs bring quick money. There is no need for funding headaches, and you can have a permanent infrastructure, and DBFO is suitable. These models depend on how new or old a project may be — an old one may need ROT"* R1 (MSU, 2021) and *"new projects may need BOT"* R4 (UZ, 2021). R1 (UZ, 2021) stated that the *"Preconditions for PPPs include mutual trust between two parties, clearly defined legal and legislative frameworks and a clearly defined profit or loss-sharing framework. The formula must be clearly defined and agreed upon by both parties. It should be made very clear who does what and how. Another key issue is technical expertise. It is different from contracting-out, which is for short-term projects"*. This statement was supported by R1 (AU, 2021), who asserted that *"PPPs are complex, multi-dimensional and used for long-term projects."*

Mutazu (2020:6) mentions that PPPs effectively provide quality services in support of the preceding views. In the context of severe infrastructure gaps/backlogs and limited public funds and capacity for addressing the problem, one viable option for mobilising private sector resources is the use of PPPs. The literature review confirms that the Zimbabwean Government has adopted PPPs for various projects in the country. This government position is envisaged in the Short-Term Economic Recovery Programme (GoZ, 2009), the Zimbabwe National Budget Statement (GoZ, 2021:13) and Zimbabwe Socio-Economic Transformation (2013-2018) (GoZ, 2013). R2 (WB, 2021) expressed that *"Because the government of Zimbabwe is incapacitated, it will have a way to bail itself out through PPPs"* and that *"We have seen people in the high- and low-density suburbs buying water or having to pay exorbitant amounts to access water so the benefits are high and at least the water will be available, and if people are to pay, it means they will also be getting quality water so there will be an improvement in the quality of the water and the resources if a PPP invests in water infrastructure development"*. R1 (CCC, 2021) agreed and remarked that *"PPPs bring money to the country for capital projects"*.

Asked if PPPs can be considered a solution to urban water infrastructure challenges in Zimbabwe, the respondents expressed different views, as reflected in their responses. *"No, they are not the solution because they are divorced from the people"* R2 (UZ, 2021); *"Yes. It is the modern practice"* R4 (UZ, 2021). R1 (UZ, 2021) opined that *"PPPs are the solution. The government of Zimbabwe is faced with minimal fiscal space. It cannot manoeuvre because of sanctions; it cannot get international credit and loans. The economy of Zimbabwe is shrinking, the revenue base is shrinking, and the room to manoeuvre is limited. The only way out is to have the private sector join. For successful urban water infrastructure development, the private sector, both local and international, should chip in because they have capital. PPP is the only viable option to catapult Zimbabwe from its current mess"*. R1 (CCC, 2021) suggested, *"Concerning expertise, as a local authority, we do not have the expertise, and we do not have adequate financial resources. Hence, private partnerships ease the municipality's burden in providing water"*. Mutazu (2020:2) notes that more funding is the most significant problem facing developing countries, including Zimbabwe, concerning infrastructure development.

Literature in support of PPP benefits to Zimbabwe confirms that the country was under tight fiscal pressures in the late 1990s and could not afford to fund the PPPs. However, they were recommended as viable tools to finance infrastructure development in rail services, power generation, air transport, highway, and dam construction. However, some PPP projects in areas such as railway and road networks have been implemented in Zimbabwe (GoZ, 2009:119). It is apparent from the findings that PPPs could be a solution to Zimbabwe's urban water infrastructure challenges. The GoZ would benefit immensely from embracing PPPs. Strong evidence from the respondents and data gleaned from the literature suggests that, at the time of this research, Zimbabwe's urban water infrastructure needed urgent attention. The data indicate that Zimbabwe faced a severe fiscal deficit with

insufficient funds to build, maintain or rehabilitate its urban water infrastructure. The study also established that the GoZ highlighted the need to embrace PPPs in all its blueprints from 2009 to 2021. These blueprints include the Short-Term Economic Recovery Programmes (STERP) 1 and 2, the Zimbabwe Agenda for Sustainable Socio-Economic Transformation (ZIMASSET) and the Transitional Stabilisation Programme (TSP).

5. Synthesis, conclusion and recommendations

The Greater Harare Water and Sanitation Investment Plan recommended harnessing the private sector through PPPs to finance water infrastructure development. The Zimbabwe National Chambers of Commerce (ZNCC) (2009) highlighted the need for an institutional policy framework for PPPs in Zimbabwe. These include the Political Commitment Framework (PCF) governing how PPPs are governed. The legislative framework serves as assurance and insurance to investors that the government must honour the contract. The ZNCC (2009) noted several challenges that adversely affected the proper implementation of PPPs in Zimbabwe; they include the unavailability of a legislative framework and funds and a lack of commitment from stakeholders and recommended the need for a legislative framework. The ZNCC (2009) also noted a need for more liquidity in the market that forced private firms to focus on their current, heavily undercapitalised operations.

In response to the call for such a framework, the government enacted the Joint Ventures Act of 2015, Chapter 22:22. This Act serves as a PPP legislative framework in Zimbabwe under the auspices of the Ministry of Finance. Despite all these efforts, infrastructural challenges concerning water continue in Zimbabwe. Major dam projects proposed by the Greater Harare Action Plan, Water Resources and Infrastructural Conference of 2015 remain stagnant, including the Kunzvi Dam for Harare, the Zambezi Water Project and the Siya Dam Project. In addition, Zimbabwe continues to face several challenges to implement and operationalise the PPP financing model, although the JVA 2015 has been passed. The implementation framework has to be put in place, including crucial institutions that are required to play a significant role (Zimbabwe Economic Policy Analysis and Research Unit (ZEPARU), 2016:51). A delay in developing a robust institutional and legal PPP framework has resulted in the sluggish uptake and implementation of PPP projects in Zimbabwe (ZEPARU, 2016:49).

In their explanation of enabling environments, Christy, Mabaya, Wilson, Mutambatsere and Mhlanga (2009:9) state that these are collections of institutions, rules, assistance programmes, and other circumstances that collectively form or enhance a broad business environment where businesses and commercial activities can begin, grow, and prosper. Christy et al. (2009:9) further explain that a conducive enabling environment is associated with domestic and friendly interactions in business through policies and institutions that promote investment and attract and engender economic growth. Thus, PPPs are key to political stability, economic, social, and technological development, the rule of law, respect for property rights, and corruption sensitivity. According to Christy et al. (2009:9), developing a successful PPP programme is a complex undertaking involving various challenges for countries in the developing world. For a government to establish an environment conducive to the operation of PPPs, it needs to take several essential building blocks for implementing a credible PPP programme. It is important to note that any failure to execute a single action may delay the entire programme or cause the breakdown of existing projects. Any private and public sector operators contemplating partnerships for the first time must realise that PPPs can appear to be economical and political minefields full of technical complexities that are best dealt with by experts. In Zimbabwe, the economic, technological, and political aspects of a PPP could be obstacles due to poor relations with the economically powerful Western powers who introduced sanctions protesting for sound governance (Chikwawa & Bvirindi, 2019:12). It is also considered that Zimbabwe's current PPP arrangement is a crowded arena with a diversity of players.

It should be considered that in the 1990s, in the context of Africa, many governments embarked on ambitious reforms of their urban water supply and sanitation (WSS) services, and this included delegating the management of utilities to private operators under various contractual agreements (Marin, 2009:1). There were high hopes that

PPPs would improve the fortunes of non-performing public utilities by injecting a more commercial orientation, new expertise, financial resources and knowledge and know-how. As widely illustrated in the literature (ZNCC, 2009:23; Robles, Torero & Braun, 2009:4), given a limited national fiscal space, rapid urbanisation and population growth, the concept of PPPs can be consolidated as a remedial action to address government failures in undertaking sovereign mandates. According to Jerome (2004:20), the constant malfunction of African governments is well documented but unremedied, and this manifests in their failure to deliver essential services and goods to the general population. Most governments in the developing world operate in an environment of limited resources for maintaining and upgrading infrastructure due to fiscal constraints. This is mainly because national government utilities face challenges due to political interference and a general lack of transparency, resulting in poor cost recovery strategies and low productivity (Baylis & Hall, 2000:35; Jerome, 2004:20; World Bank (WB), 2009:23; Zhou, 2012:34).

PPPs' capacity and institutional status entail creating new institutions and assigning appropriate levels of authority to regulate such partnerships. All new institutions ought to employ learned personnel to initiate standard procedures, and product manuals, train staff to perform their new roles and develop the tools required to implement new functions in such partnerships (Dube & Chigumira, 2011:23; Mutandwa & Zinyama, 2015:130). The financial, economic, and commercial issues highlight the necessity to come to terms with stakeholders concerning the benefits and economic balance in this sectoral reform. In addition, developing a commercially viable financial strategy for PPPs that is realistic for the market is desirable. The technical elements entail documenting and defining the anticipated technical outcomes for such partnerships and determining the "right metric for acquiring the investment, measuring and attaining the improvements and the documentation of the anticipated improvements that do not need major investments" (Xing, Li & Li, 2020:3).

Although the preconditions for PPPs are comparatively analogous in context, they vary from one country to another. In the European Union (EU) bloc, for example, these preconditions are specified in the European Commission (EC) guidelines (WB, 2011:20). The significant preconditions for the successful implementation of PPPs include political will; government commitment; economic stability; regulatory, policy, legal and institutional frameworks; respect for property rights; technical expertise; financial support and public acceptance (Dube & Chigumira, 2011:21; ADBI, 2011:5). The successful implementation of PPPs also requires institutional capacity. The technical elements entail documenting and defining the PPPs' anticipated technical results. A political environment conducive to the operation of the PPPs must be cultivated. Van Meters and Van Horn (1974:30) contend that implementing public policies requires political support. Fervier (2003:7) identifies the preconditions for successful PPPs as clear regulatory and legal frameworks, the integrated grant financing of PPP objectives, the planning, conception, and implementation of PPPs as well as economic, financial and PPP structures.

The study's findings explore additional questions, such as the possibility of using PPPs in urban water infrastructural development in Zimbabwe and the level of Zimbabwe's readiness to embrace PPPs in urban water infrastructural development. These aspects will form part of future publications.

The study offers significance despite encountering a few limitations. This study sought to understand the dynamics of implementing PPPs in water infrastructure development. The selection of this water sector was prompted by the fact that water is becoming a severe challenge in Zimbabwe, as indicated by the relocation of companies from provinces such as Bulawayo to Harare and the resurgence of waterborne diseases such as cholera, typhoid, and dysentery. Furthermore, the water distribution networks in all Zimbabwean cities need to be more dilapidated. Therefore, the study sought to understand how PPP implementation can address water infrastructural challenges in Zimbabwe. This is a topical issue in public administration in Zimbabwe.

As PPPs are a sensitive political topic, constraints could be encountered. The topic's sensitivity might limit the respondents' freedom of expression, and the current political climate could lead to the respondents providing inaccurate or exaggerated information for fear of victimisation by the government. The primary researcher attempted to mitigate these limitations by providing a transparent explanation of the aim of the study and the strict adherence to the ethical considerations of confidentiality, anonymity, and avoidance of harm.

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