

# Challenges and Opportunities in Implementing Public-Private Partnerships for Urban Development: A Case Study of the Geo Pomona Solid Waste Project in Harare, Zimbabwe

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## Abstract

This study examines the governance dynamics of Public-Private Partnerships (PPPs) in urban infrastructure delivery, focusing on the Geo Pomona Solid Waste Management Project in Harare, Zimbabwe. Using a qualitative case study approach, the research analyses five interrelated dimensions: institutional arrangements, legal and contractual structures, financial models and risk allocation, stakeholder engagement and transparency and environmental and technical feasibility. Data were drawn from municipal records, policy documents, media sources and grey literature. Findings reveal significant governance challenges, including fragmented institutional capacity, legal opacity, fiscally risky contractual commitments, exclusionary stakeholder processes and questionable technical alignment with local conditions. Nonetheless, the project presents emerging opportunities for urban development through infrastructure modernisation, energy recovery, improved waste management and enhanced private sector participation. These opportunities, however, are conditional on robust governance reforms, transparent risk-sharing mechanisms and participatory decision-making structures. Theoretically, the study integrates Institutional Theory, Urban Governance Theory and Principal-Agent Theory to illuminate how institutional fragility, accountability deficits and asymmetrical power relations shape PPP implementation in politically complex urban environments. The analysis highlights the limitations of transplanting PPP models from the Global North without local institutional adaptation, emphasising the need for regulatory reform, inclusive governance and sustainable financing frameworks. This research contributes to the growing literature on PPPs in the Global South by offering a context-specific examination of both implementation challenges and developmental prospects. It concludes with policy recommendations and directions for future research on inclusive, accountable and sustainable PPP governance in African urban contexts.

**Keywords:** Public-Private Partnerships, urban governance, solid waste management, Harare, institutional capacity, environmental sustainability, infrastructure finance

## Introduction

Urban development in sub-Saharan Africa continues to face critical challenges stemming from rapid urbanisation, strained public infrastructure, limited municipal budgets and weak institutional capacities (UN-Habitat, 2020; Turok, 2016). Cities such as Harare, the capital of Zimbabwe, have experienced significant difficulties in delivering essential urban services, particularly in solid waste management (Makoni, 2016). In response to these challenges, many governments in the Global South have turned to Public-Private Partnerships (PPPs) as an

alternative mechanism to mobilise private capital, technical expertise and innovation for infrastructure development and service delivery (World Bank, 2015a; Yescombe, 2007).

The application of PPPs in urban development is supported by a substantial body of research highlighting potential benefits such as improved efficiency, innovation and risk-sharing (Hodge & Greve, 2007; Grimsey & Lewis, 2004; Zhang, 2005). However, empirical studies also point to recurring implementation challenges, particularly in politically volatile and institutionally fragile contexts. These include governance failures, opaque contracting, skewed risk distribution and insufficient stakeholder engagement (Ameyaw & Chan, 2015a; Akintoye et al., 2008; Osei-Kyei & Chan, 2017a). In Zimbabwe, PPPs remain under-researched and their deployment has often been marked by controversy, raising critical questions about institutional readiness, contractual integrity and long-term sustainability.

This paper critically examines the Geo Pomona Solid Waste Management Project, a 30-year PPP agreement signed in 2022 between the City of Harare and Geo Pomona Waste Management (Pvt) Ltd. The project, valued at over US\$300 million, seeks to transform the long-degraded Pomona dumpsite into a modern waste-to-energy facility (City of Harare, 2022). While positioned as a major leap forward in addressing Harare's waste management crisis, the project has also generated substantial public scrutiny over its cost implications, legal transparency, financial risk and alignment with local development priorities (NewsDay, 2022; The Herald, 2022).

The study is theoretically grounded in Institutional Theory, Urban Governance Theory and Principal-Agent Theory, which together offer a robust framework for understanding the dynamics of PPP implementation in low-capacity urban governance environments. These perspectives enable a critical interrogation of how institutional structures, governance relationships and asymmetries in information and accountability influence the design, performance and legitimacy of PPPs.

By analysing the Geo Pomona PPP through these lenses, the paper contributes to the broader discourse on infrastructure governance in African cities. It provides insights into how PPPs function in practice, beyond normative policy models and identifies both the structural constraints and reform opportunities that emerge from large-scale urban infrastructure partnerships. In doing so, the study not only highlights the pitfalls of PPP implementation in fragile contexts but also outlines actionable pathways for policy and institutional reform aimed at enhancing transparency, accountability and sustainability in urban development.

The remainder of the paper is structured as follows: Section 2 outlines the research methodology. Section 3 discusses the empirical findings of the Geo Pomona case across five key thematic areas. Section 4 concludes by summarising the key insights, discussing theoretical and policy implications and offering recommendations for future research and practice.

## Research Methodology

This study adopts a qualitative case study methodology, selected for its strength in enabling in-depth exploration of complex phenomena within their real-life contexts (Yin, 2018). The Geo Pomona Solid Waste Management Project, as a high-stakes, multi-dimensional PPP, provides a critical case through which to examine the interaction between institutional arrangements, contractual governance, financial models, stakeholder dynamics and environmental considerations in an urban African context.

Data were collected primarily through document analysis, which included publicly available council reports, PPP contracts, city budgets, parliamentary records, media coverage and grey literature. This approach allowed for triangulation across diverse sources to validate emerging insights and mitigate potential biases inherent in single-source data. The study also drew on relevant secondary literature, including academic articles, policy papers and international PPP guidelines, to situate the case within broader theoretical and comparative urban development frameworks.

A thematic analysis was employed to organise and interpret the data. Coding focused on five interrelated thematic areas: institutional capacity, legal and contractual structures, financial risk and sustainability, stakeholder engagement and environmental and technical feasibility. This process was informed by established frameworks in the literature on PPP governance (Cui et al., 2018; Roehrich, Lewis, & George, 2014), as well as the theoretical lenses guiding the study—Institutional Theory, Urban Governance Theory and Principal–Agent Theory.

These theoretical perspectives provided an analytical scaffold to interrogate how institutional fragility, governance structures and asymmetrical power relations shape PPP performance in developing urban contexts. By focusing on the Geo Pomona project as a paradigmatic example, the research offers both empirical insights and theoretical contributions to the discourse on sustainable urban infrastructure delivery in the Global South.

## Results and discussion

This section presents the key findings of the case study, derived from thematic content analysis of publicly available documents and secondary sources. Findings are organised around five core dimensions that emerged inductively: institutional arrangements, legal and contractual structures, financial models and risk allocation, stakeholder engagement and transparency and environmental/technical considerations.

### Institutional capacity constraints and governance gaps

The research found that the implementation of the Geo Pomona Public-Private Partnership (PPP) has revealed significant institutional capacity gaps within the City of Harare, particularly in its ability to plan, manage and monitor complex urban infrastructure projects. The absence of a dedicated PPP coordination unit limited technical expertise and lack of internal oversight mechanisms have contributed to fragmented decision-making and weak project governance. For instance, publicly available council minutes and press releases indicate that critical aspects of project design and risk evaluation were either overlooked or handled with minimal interdepartmental consultation. These shortcomings have not only diminished operational efficiency but have also eroded public confidence in the City's ability to manage large-scale PPPs in a transparent and accountable manner.

From the perspective of Urban Governance Theory, these findings underscore fundamental weaknesses in the institutional architecture governing PPP implementation in Harare. Governance theory emphasises the importance of coordination, accountability and stakeholder participation in shaping effective urban service delivery—particularly in cities where power is distributed across multiple actors and institutions. In the case of Geo Pomona, the absence of coherent governance arrangements and procedural clarity contributed to a decision-making environment marked by opacity and limited checks and balances. The lack of institutional legitimacy—exacerbated by weak mechanisms for oversight and public accountability—reinforces the governance gap that governance theorists argue is critical to PPP failure (Van Ham & Koppenjan, 2001).

Moreover, the evidence supports insights from Principal–Agent Theory, which highlights the risk of misaligned incentives and information asymmetries in long-term contractual relationships. Without adequate oversight capacity and technical expertise, the City of Harare—as the principal—is constrained in its ability to effectively monitor and regulate the private agent (Geo Pomona Waste Management), increasing the risk of opportunistic behaviour and poor service outcomes. The absence of an internal monitoring framework and the limited involvement of key municipal departments further reflect breakdowns in principal-agent dynamics, where the agent operates with substantial discretion and limited accountability.

In line with Institutional Theory, these challenges can also be understood as symptoms of deeper structural and normative deficits within the City of Harare’s administrative culture. Institutional theory draws attention to how rules—both formal (for example, laws, policies) and informal (for example, norms, political practices)—shape organisational behaviour and implementation outcomes. The findings point to a lack of embedded institutional routines for managing PPPs, coupled with politicisation and bureaucratic inertia, which inhibit effective implementation. As Zhang (2005) observes, the success of urban PPPs is highly contingent upon the strength and maturity of public sector institutions—a condition that remains underdeveloped in the Zimbabwean urban governance landscape.

These findings corroborate prior research emphasising the importance of robust institutional arrangements in PPP implementation. Scholars argue that beyond capital investment, PPPs demand significant institutional capability—ranging from regulatory clarity and administrative competence to mechanisms for stakeholder coordination and conflict resolution (Roehrich, Lewis & George, 2014; Ameyaw & Chan, 2015a). In contexts marked by political volatility and institutional fragility, such as Zimbabwe, these challenges are often magnified (Makoni, 2016). Moreover, as Van Ham and Koppenjan (2001) contend, institutional legitimacy and trust are essential for PPPs to be accepted and effective elements that were found to be lacking in the case of Geo Pomona.

Despite these constraints, the findings suggest a window of opportunity for institutional reform. The visibility and controversy surrounding the Geo Pomona project have prompted increased civil society engagement and parliamentary oversight, potentially catalysing reforms in PPP governance. Establishing a dedicated municipal PPP unit, improving interdepartmental coordination and adopting more transparent project evaluation frameworks could enhance the City’s future capacity to manage such partnerships. Furthermore, as the literature suggests, institutional learning from early-stage implementation can strengthen long-term governance capacity if supported by political will and technical support (Yescombe, 2007; Osei-Kyei &

Chan, 2017a). In this way, the project may serve as both a cautionary tale and a foundation for building stronger institutional frameworks for urban development in Zimbabwe.

### **Legal and contractual ambiguities in PPP governance**

The research found that the legal and contractual framework governing the Geo Pomona PPP is characterised by significant opacity and rigidity, which has raised serious concerns regarding transparency, public accountability and long-term financial exposure. The 30-year concession agreement between the City of Harare and Geo Pomona Waste Management (Pvt) Ltd was reportedly finalised without full disclosure to key stakeholders, including civil society groups and some elected city officials. Publicly available documents suggest that critical contractual provisions—such as performance benchmarks, financial guarantees and dispute resolution mechanisms—were either insufficiently detailed or not made publicly accessible. This lack of transparency has contributed to widespread criticism and speculation about the fairness and legality of the deal, particularly surrounding tipping fees, revenue models and termination clauses. In the absence of clear contractual safeguards, the City of Harare appears to be locked into a long-term financial commitment without adequate mechanisms for redress or renegotiation.

These findings resonate strongly with Principal–Agent Theory, which emphasises the dangers of asymmetrical information and misaligned incentives in long-term contractual relationships. In this case, the public authority (principal) appears to lack the legal and technical capacity to fully assess or enforce its contractual relationship with the private partner (agent). This imbalance increases the risk of opportunism, particularly where critical contract terms are vague, undisclosed or skewed in favour of the private entity. Without clear performance clauses and legally enforceable benchmarks, the agent operates with disproportionate discretion—an outcome Principal–Agent Theory identifies as a primary threat to effective public-private governance.

From the perspective of Urban Governance Theory, the Geo Pomona contract exemplifies how opaque legal arrangements can undermine public accountability and participatory governance. Governance theory emphasises the role of institutional transparency and multistakeholder engagement in maintaining legitimacy, especially in the implementation of long-term infrastructure projects. The exclusion of civil society actors and elected officials from contract negotiation processes contravenes the principles of inclusive urban governance, creating a legitimacy deficit that erodes trust in both the project and the institutions overseeing it. In urban contexts where governance capacity is already limited, such legal opacity can further weaken the legitimacy of public institutions and fuel political resistance.

Additionally, Institutional Theory helps explain the structural causes behind these contractual weaknesses. The apparent absence of standardised procedures, legal review protocols or regulatory enforcement mechanisms reflects deeper institutional deficiencies in Zimbabwe's urban governance system. This aligns with scholarship emphasising that weak formal institutions often produce legally fragile and inconsistently enforced PPP agreements (Li et al., 2005a; 2005b; Ameyaw & Chan, 2015a). The Geo Pomona contract, while legally sanctioned, appears to lack the normative and procedural foundations necessary for long-term enforceability, dispute resolution and adaptive governance—hallmarks of a mature institutional environment.

These observations align with existing literature on PPP risk governance in developing contexts, which underscores the need for transparent and flexible contractual design (Zhang, 2005; Li et al., 2005). Scholars such as Hodge and Greve (2009) argue that PPPs should be governed by legally sound agreements that equitably distribute risk between public and private actors. However, in many African cities, contracts are often drafted without rigorous legal review or stakeholder consultation, leading to disputes, implementation delays or outright project failure (Ameyaw & Chan, 2015b; Osei-Kyei & Chan, 2017a). The Geo Pomona case reflects this broader pattern, suggesting that while the legal basis for the PPP may exist in principle, the actual contract lacks the structural transparency and performance oversight mechanisms necessary for sustainable governance. Moreover, the absence of an independent regulatory body to monitor compliance further weakens the enforceability of legal provisions and undermines public trust in the process.

Nonetheless, the findings indicate that the current controversy could catalyse strengthening PPP regulatory frameworks in Zimbabwe. Legal reform efforts—such as the development of standardised contract templates, enhanced parliamentary oversight and mandatory disclosure of concession terms—could reduce the legal asymmetries that currently favour private actors in high-stakes PPPs. If pursued, these reforms may lead to greater contractual transparency and legal predictability in future urban infrastructure partnerships. Additionally, lessons drawn from the Geo Pomona experience could inform the drafting of more balanced agreements that clearly outline the obligations, rights and liabilities of all parties involved. As highlighted by Yescombe (2007), legal clarity is not merely a technical necessity but a governance imperative that underpins the legitimacy and resilience of PPPs in urban development.

### **Financial models and risk allocation in the Geo Pomona PPP**

The research found that the financial structure of the Geo Pomona Public-Private Partnership (PPP) raises critical concerns around cost transparency, risk distribution and long-term fiscal sustainability. The 30-year concession agreement reportedly commits the City of Harare to paying tipping fees to the private operator based on the volume of waste delivered to the facility. However, publicly available information on the actual fee structure, projected revenue flows, financing arrangements and the division of financial risks between public and private actors remains sparse. Municipal documents and investigative media reports indicate that the City may be contractually obligated to make fixed payments regardless of operational outcomes or waste volumes processed—creating the potential for a misalignment between cost and service delivery. In a municipality already constrained by limited revenue streams, historical indebtedness and weak financial management systems, this model introduces substantial fiscal risks for both the City and its residents.

These findings closely align with Principal-Agent Theory, which underscores the risks of moral hazard and adverse selection in cases where the principal (the public sector) lacks access to full information or the capacity to oversee and discipline the agent (the private partner). In the Geo Pomona case, the lack of transparent financial disclosures and the apparent imbalance in contract terms suggest that the agent may have secured favourable conditions that do not align with the municipality's long-term financial interests. This risk is compounded by limited performance-contingent clauses, which reduce the incentives for the agent to deliver optimal service outcomes over the contract period.

From the lens of Urban Governance Theory, the financial opacity surrounding the project reflects broader accountability deficits in urban service delivery. Financial governance is a

critical pillar of effective PPP implementation, particularly in cities facing both infrastructural deficits and institutional fragility. The lack of stakeholder access to financial data, especially on affordability thresholds, value-for-money (VfM) assessments and public debt implications—contravenes the principles of participatory governance and erodes the social contract between citizens and municipal authorities. In urban governance frameworks, trust is not only built on service delivery outcomes but also on the transparency of resource mobilisation and allocation. The limited public debate and exclusion of city councillors from key financial decisions, as reported by the media, undermine democratic accountability and reduce institutional legitimacy.

The observed weaknesses also resonate with Institutional Theory, which emphasises the role of formalised rules, norms and procedures in shaping organisational behaviour and decision-making outcomes. The absence of institutionalised VfM assessments, lifecycle costing tools and affordability metrics within the City of Harare's procurement or finance departments points to systemic governance deficits. As highlighted in the literature, sustainable PPPs require not only sound financial models but also institutional maturity to interpret, negotiate and enforce such models (Zhang, 2005; Yescombe, 2007). In this case, the weak financial oversight mechanisms and lack of a municipal PPP framework suggest that decisions were made in an ad hoc and poorly institutionalised environment, thereby increasing exposure to long-term fiscal liabilities.

These findings are consistent with a growing body of research that highlights the need for equitable and transparent risk allocation in PPPs (Li et al., 2005a; 2005b; Hodge & Greve, 2007). Best practices in PPP design advocate for the assignment of risk to the party best positioned to manage it, whether financial, operational or demand related. Yet in many Global South contexts, including Zimbabwe, risks are frequently shifted to the public sector due to asymmetries in negotiating power, limited legal expertise and absent regulatory oversight (Ameyaw & Chan, 2015b; Osei-Kyei & Chan, 2017b). In the Geo Pomona PPP, the apparent lack of cost-benefit analysis and the municipality's exposure to fixed tipping fees—regardless of service performance—highlight a significant deviation from these standards.

Nevertheless, the Geo Pomona project also presents a potential turning point for the evolution of more accountable and resilient financial models in Zimbabwe's urban governance landscape. The public scrutiny surrounding the project has sparked important debates on the necessity of formalising financial risk assessment and ensuring public oversight in high-value PPPs. Moving forward, institutionalising financial due diligence tools such as VfM evaluations, affordability thresholds and debt sustainability analyses could help mitigate fiscal exposure and improve financial governance in similar projects. In line with Institutional Theory, embedding these tools into municipal practice will require capacity-building initiatives targeting finance departments, legal units and elected officials. As emphasised in the literature, innovative PPP financing must be matched by institutional competence to ensure that such partnerships deliver value without undermining public financial stability (Hodge & Greve, 2007; Yescombe, 2007).

### **Stakeholder engagement and transparency deficits**

The research found that the Geo Pomona Public-Private Partnership (PPP) was marked by a significant deficit in stakeholder engagement and transparency during both its conception and early implementation phases. Public consultations were either minimal or absent and key actors including local communities, civil society organisations and even some elected city councillors

were reportedly sidelined from crucial decision-making processes. Available council minutes and press reports indicate that the details of the concession agreement were not widely disseminated until after the contract had already been signed. This lack of procedural openness not only fuelled public suspicion and criticism but also undermined the legitimacy of the project. The backlash culminated in calls for a parliamentary inquiry, legal contests from interest groups and increased media scrutiny. The failure to foster inclusive dialogue limited the opportunity to integrate local knowledge, contextual expertise and community-specific concerns into the project's design and implementation.

These findings align closely with Urban Governance Theory, which underscores the centrality of inclusive, participatory processes in legitimising urban infrastructure interventions. According to this framework, governance in urban contexts is not solely about efficiency and outputs, but also about accountability, transparency and responsiveness to citizen needs. The Geo Pomona case demonstrates how bypassing these principles weakens institutional legitimacy and can trigger civic and political resistance. In Zimbabwe, where local government institutions are often perceived as politicised and opaque, such procedural omissions are particularly consequential (Marumahoko et al., 2020; Marumahoko et al, 2025). Rather than fostering social license or citizen ownership, the project's exclusionary planning model exacerbated historical tensions between the public and municipal authorities, reducing the potential for cooperative urban governance.

The theoretical insights of Principal–Agent Theory also illuminate key challenges in this case. When critical stakeholders are excluded from decision-making, the principal (in this case, the public) is deprived of the information and oversight necessary to hold the agent (the implementing authority or private partner) accountable. This asymmetry of power and knowledge increases the risk of moral hazard and agency drift, as the agent may pursue objectives that diverge from public interest. In the case of Geo Pomona, the absence of early stakeholder engagement and disclosure mechanisms enabled contract finalisation without adequate scrutiny, reducing the transparency of both negotiation processes and implementation plans. This condition fosters conditions where accountability gaps and inefficiencies can thrive.

From an Institutional Theory perspective, the exclusion of stakeholders highlights the underdevelopment of participatory norms and institutional routines within Harare's municipal governance systems. The lack of structured procedures for stakeholder engagement such as mandatory social impact assessments, stakeholder consultations or public hearings, suggests that participatory governance is not yet embedded in the city's administrative culture. This institutional fragility weakens not only project outcomes but also the long-term capacity of the municipality to build consensus and trust in future PPPs. As emphasised in the literature, stakeholder participation is not a peripheral activity but a fundamental component of robust governance (Roehrich, Lewis & George, 2014; Osei-Kyei & Chan, 2017b).

Despite these shortcomings, the controversy surrounding stakeholder exclusion in the Geo Pomona PPP has catalysed a renewed discourse on participatory urban governance. Civil society organisations, investigative journalists and parliamentary bodies have become more vocal in demanding transparency, inclusive planning and accountability in PPP arrangements. These developments offer a potential pathway for institutional reform. Moving forward, municipalities could institutionalise participatory mechanisms such as multi-stakeholder forums, mandatory public disclosures and independent oversight committees as standard elements of PPP governance. Embedding transparency and engagement protocols in municipal policy frameworks would not only improve public trust but also enhance the adaptive capacity

of urban authorities to manage complex infrastructure partnerships. As the broader literature affirms, stakeholder participation must evolve from a token procedural requirement into a substantive tool for co-producing more equitable, responsive and effective urban outcomes (Van Ham & Koppenjan, 2001; Hodge & Greve, 2009; Roehrich, Lewis & George, 2014; Osei-Kyei & Chan, 2018).

#### Environmental and technical considerations in project design and execution

The research found that the Geo Pomona Public-Private Partnership (PPP) has sparked significant public and expert debate regarding its environmental soundness and technical feasibility, particularly the proposed conversion of the long-neglected Pomona dumpsite into a modern waste-to-energy (WtE) facility. Although the project is officially framed as a sustainability-oriented intervention, substantial concerns have been raised over the adequacy and transparency of the environmental impact assessment (EIA) process, the appropriateness of the selected thermal technology and the degree to which the facility's design aligns with Harare's local waste characteristics and urban context. Empirical data from publicly available documents suggest that Harare's waste stream marked by high organic content and low calorific value—may be ill-suited for direct thermal incineration, thereby necessitating preprocessing, external energy inputs or both. Furthermore, gaps in emissions control, leachate treatment and long-term ecological impact assessments raise serious questions about the project's environmental integrity and sustainability credentials.

These observations align with Institutional Theory, which emphasises the importance of formalised procedures, technical standards and adaptive regulatory institutions in governing complex infrastructure projects. In the case of Geo Pomona, institutional weaknesses such as inadequate environmental oversight mechanisms and the absence of transparent performance benchmarks, highlight the fragility of the governance system. The lack of clearly defined regulatory norms or independent monitoring institutions contributes to what Institutional Theory identifies as "institutional voids," where critical checks and balances are absent, rendering environmental safeguards ineffective or symbolic. This institutional fragility significantly undermines the legitimacy and potential effectiveness of the WtE component of the project.

The challenges observed also resonate with Urban Governance Theory, which stresses the need for integrated, participatory and context-sensitive planning in urban infrastructure development. From this perspective, the failure to adequately assess and publicly vet the environmental and technical dimensions of the Geo Pomona PPP points to a breakdown in inclusive and responsive governance. A project of this magnitude, situated within a densely populated urban area, requires mechanisms for deliberative planning, citizen input and regulatory adaptability—all of which appear underdeveloped or sidelined in this case. The lack of accessible information and participatory mechanisms in environmental decision-making processes reduces community buy-in and diminishes the social legitimacy of the initiative.

From the lens of Principal-Agent Theory, the absence of clear environmental performance standards and ongoing monitoring arrangements further illustrates the misalignment of incentives between the public principal (City of Harare and its citizens) and the private agent (Geo Pomona Waste Management Pvt Ltd). Without enforceable environmental obligations and mechanisms for accountability, the agent has little incentive to prioritise long-term ecological outcomes over short-term financial returns. The opacity surrounding technical design choices and environmental compliance mechanisms exemplifies the information asymmetry inherent in PPPs that are not subject to rigorous public oversight.

These findings are consistent with broader scholarly literature that cautions against the uncritical importation of capital-intensive waste management technologies into low- and middle-income urban contexts without due consideration for local conditions (Wilson, Velis & Cheeseman, 2012; Mwanza & Mbohwa, 2017). Several case studies have demonstrated that the failure to adapt technologies to existing waste streams, maintenance capacities and financial realities often results in underperforming or abandoned projects. As Roehrich, Lewis and George (2014) argue, the intersection of high technical complexity and weak institutional capacity exacerbates project risk and diminishes public value creation. In the Geo Pomona case, the lack of emissions monitoring protocols, real-time environmental reporting and independent auditing mechanisms underscores these governance deficits.

Nonetheless, the Geo Pomona PPP presents a potential opportunity for Harare to rethink and embed more environmentally responsible and technically appropriate waste management strategies into its urban development framework. If accompanied by robust environmental safeguards, real-time data transparency and stakeholder participation, the WtE facility could reduce illegal dumping, facilitate partial landfill rehabilitation and support energy recovery efforts. The ongoing controversy has also catalysed increased public awareness of environmental issues, creating a potential opening for regulatory reforms and stronger civic engagement in infrastructure planning.

Moving forward, aligning the project with broader principles of climate resilience and circular economy. This includes waste minimisation, composting and resource recovery, could enhance the ecological viability and public legitimacy of urban waste PPPs in Zimbabwe. The institutionalisation of rigorous EIAs, performance-based environmental contracts and adaptive technology reviews could serve to bridge the existing governance and technical gaps. As noted by Yescombe (2007) and the World Bank (2015b), the success of infrastructure PPPs depends not only on technical design but also on the maturity of governance frameworks capable of managing environmental complexity in a transparent, equitable and responsive manner.

### **Conclusion and recommendations**

This study explored the implementation challenges and potential opportunities associated with the Geo Pomona Public-Private Partnership (PPP) in Harare, Zimbabwe, as a lens through which to examine broader dynamics of urban infrastructure governance in sub-Saharan Africa. Employing a qualitative case study approach and drawing on diverse publicly available data sources, the analysis focused on five critical dimensions of PPP governance: institutional capacity, legal and contractual arrangements, financial models and risk allocation, stakeholder engagement and environmental and technical feasibility.

The findings reveal systemic governance weaknesses that threaten the effectiveness and legitimacy of the Geo Pomona project. Key concerns include fragmented institutional coordination, opaque legal frameworks, high fiscal risk exposure, exclusionary stakeholder processes and questionable technological alignment with local waste characteristics. Despite these challenges, the project also offers potential for innovation in urban service delivery, particularly in terms of infrastructure renewal and public-private co-financing provided that structural governance deficiencies are addressed.

Theoretically, the study contributes to the literature on PPPs in urban governance by contextualising the empirical findings within Institutional Theory, Urban Governance Theory and Principal-Agent Theory. Institutional Theory helps illuminate how fragile institutional

architectures, marked by weak oversight, regulatory gaps and lack of procedural formalisation—undermine the capacity of the City of Harare to manage complex PPPs. The absence of a dedicated PPP unit, unclear contract enforcement mechanisms and limited internal technical expertise reflect a broader institutional deficit that constrains sustainable policy implementation.

Urban Governance Theory underscores the importance of inclusive, participatory and context-sensitive planning processes in achieving legitimate and effective infrastructure outcomes. The Geo Pomona case illustrates the consequences of sidelining civil society, local communities and elected officials in critical phases of project design and execution. The resultant political backlash and legitimacy crisis highlight the dangers of technocratic, top-down decision-making in politically sensitive urban contexts.

From the perspective of Principal-Agent Theory, the research illustrates how information asymmetries, misaligned incentives and weak accountability mechanisms compromise project outcomes. The concession agreement's lack of performance-based financial clauses and transparency in risk-sharing exemplifies the difficulties public institutions face in constraining private actors when oversight is minimal and bargaining power is uneven.

Together, these theoretical insights show that PPP models cannot be copied directly from Global North countries and applied to fragile institutional settings without significant adjustment. For PPPs to work in such contexts, success relies not just on good technical design, but also on aligning governance structures with local institutions, political realities and socio-economic conditions.

From a policy standpoint, the findings call for comprehensive reform in the governance of urban PPPs in Zimbabwe. This includes the development of standardised contractual templates, the institutionalisation of Value-for-Money (VfM) and lifecycle cost analyses and the establishment of independent regulatory and monitoring bodies. Equally critical is the formal integration of participatory mechanisms such as public consultations, environmental and social impact assessments and stakeholder forums, into every stage of the PPP lifecycle. Capacity building for municipal officials in areas such as financial modelling, risk assessment and contract negotiation will be essential to mitigate future fiscal exposure.

The study has limits. Secondary data restricted access to confidential negotiations and contract terms and the single-case design limits generalisability, though it allows for rich contextual analysis. Future work should use comparative case studies across Zimbabwe and Southern Africa, plus longitudinal outcome evaluations. Additional research on public perceptions, informal governance and the political economy of urban services would give a clearer picture of PPPs on the ground.

The Geo Pomona PPP shows the double-edged nature of PPPs in politically volatile and resource-constrained settings. It reveals how institutional weakness, secretive contracts and limited public participation can undermine projects, but it also points to a chance for learning and policy change. With clearer laws, responsible financing, public involvement and stronger institutions, projects like this can shift from sources of risk to tools for inclusive and sustainable urban growth. The case is therefore both a cautionary example and a blueprint for reform in African PPPs.

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