

ORIGINAL ARTICLE

Public-Private Partnership: Adapting Context Specific Model for Enhancing Housing Development in Addis Ababa, Ethiopia

Girma Birhanu¹, Teshome Tafesse² & Tesfaye Zeleke³

Abstract

The prevailing model of Public-Private Partnership (PPP) have been hindered by a combination of factors, including regulatory hurdles, non-transparent procurement processes, weak institutional capacity, and a failure to conduct thorough feasibility studies. The study addressed the challenges of Public-Private Partnership model implementation in Addis Ababa and suggested context specific model. It employed sequential explanatory mixed research design. A six-step thematic analysis model development was applied to conceptualize key themes used for adapting a PPP housing model and applied Thematic Analysis. The finding indicated a factor loading of 0.905 a strong positive correlation between the enabling condition created by the city and success. On the other hand, standardized factor loading of -0.928 indicated a strong negative correlation between challenges and successful PPP model implementation. Moreover, lack of transparent procurement with a factor loading of 0.288, a weak positive correlation with the success, is found to be a serious challenge. The findings of the thematic analysis show lack of proper model selection, and fail to adhere to the principles of transparent procurement and participatory risk management which resulted in delays. Therefore, the study recommended an adapted model that emphasizes on transparent and competitive procurement as well as participatory risk identification and sharing among partners.

Keywords: Addis Ababa, Competitive, Housing, Model, Public-Private partnership, Transparent.

1. Background

Public-Private Partnership (PPP) is a long term contractual agreement between a private party and a government entity for providing a public asset or service in which the private party bears a significant risk and management responsibility and remuneration linked to performance (World Bank, 2020). The rationale for adopting PPP models in many countries

- 1 Corresponding author, Ph.D. candidate at CDS, URLDS of Addis Ababa University. Ethiopia.
Email: newtaste1@gmail.com
- 2 Assistant Professor at College of Development Studies, Addis Ababa University.
E-mail: teshome.tb@aaau.edu.et
- 3 Associate Professor at College of Development Studies, AAU.
E-mail: tesfaye.zeleke@aaau.edu.et



This journal is licensed under a creative common Attribution-Noncommercial 4.0. It is accredited to the University of Gondar, College of Social Sciences and Humanities.

DOI: <https://dx.doi.org/10.4314/erjssh.v12i2.1>

is relieving financial constraints, sharing risks, innovation, and achieving efficiency for housing provision in the public sector (Almeile et al., 2024). The implementation of PPP helped public institutions to fill the finance gaps in the housing provision, and overcoming efficiency related challenges (Aboelazm et al., 2024). Global success stories of PPP implementation indicated the potential of PPP has in filling the budget gap of the public sector for housing provision. One of the successful PPP implementation was achieved in Malaysia Kuala Lumpur City Hall in which they built 800,000 houses within three years after adopting PPP in 1993 (Muhammad & Johar, 2019). However, failure stories were witnessed as a result of the lack of the proper selection of PPP model that fits the specific context and weak implementation capacity are the contributing factor to the failure of the PPP projects (Chilala, 2019). As Gifford et al., (2023) claims, the major economic shock, project and political complexity, weak institutional capacity, and inexperience leads to poor implementations. This calls for models that would help to establish transparent communication, building trust, and collaboration among partners (Raharja et al., 2025). In addition, PPP assumes the existence of a well-established institutions, transparency, and trust which is an assumption prevalent in the Western countries (Anuka & Iyi, 2023). These element lacks in the developing countries mainly in Africa, as a result the private sectors does not have trust on the public sector (Zulu et al., 2023a).

The implementation of PPP in the housing sector in Addis Ababa City Administration was not studied so far. However, studies conducted on the Addis Ababa condominium housing provision indicated 400,000 houses constructed in the past 20 years (Charitonidou, 2022). However, the housing demand backlog reached 700,000 which requires large amount of finance. On the other hand, the Addis Ababa City Administration faced challenges of the housing finance (CAHF, 2024). Therefore, to overcome this financing challenge the city administration entered into PPP collaboration with the private sector following the enactment of PPP regulation 122/2022. Furthermore, PPP has a potential of alleviating finance shortage, risk sharing advantage, and achieving efficiency (Getachew, 2022). As the city is at the beginner level in implementing PPP in the housing development, it might face challenges other developing countries are facing. Therefore, it is quite important to consider best practices in the implementation of PPP in the housing sector so that Addis Ababa City Administration benefits from it (Nawushao, et al., 2023). Lack of scholarly studies in the PPP housing model in Addis Ababa context considering the weak institutional capacity, the issue of transparency and competitive procurement is one of the research gaps.

Therefore, to address this gap the study examined the prevailing PPP models of Addis Ababa, with a particular emphasis on identifying the deficiencies within the current PPP housing model implementation. Therefore, the study assessed how the current PPP housing model Addis Ababa City Administration was implemented? What global best practices can be adapted to the Addis Ababa City Administration context? What was the key stakeholders' insights regarding the housing PPP? Consequently, the study proposed a context specific PPP model that could be adapted and implemented by the City Administration.

2. Literature Review

This section presents concepts and definitions, typologies of PPP models, success and failures of in PPP implementation, best practices from developed and developing countries, and synthesis of the literature leading to the conceptual framework.

2.1. Definition and Scope of Public Private Partnership

Public-Private Partnership is established through a contractual relationship which seeks to access private sector's finance, design, construction, commercialization, maintenance or operational management for the delivery of affordable housing, in some cases ancillary services. The private party's remuneration is significantly linked to performance (World Bank, 2020).

Legal frameworks are the PPP proclamations, PPP regulations and directives that guide the overall application of the partnership (Olojede, 2024).

2.2. Models of Public Private Partnership

There are various types of PPP model exists, including service contracts, management contracts, leases, concessions, and Design-Build-Operate-Transfer (DBOT) arrangements (Owotemu et al., 2022). Table 1 below presented types PPP approaches, Build Operate Transfer (BOT) is a specialized concession agreement in which the private partner enters in to PPP contractual agreement to design, finance, and build, and transfer it to the public institution (Asian Development Bank, 2016). In addition, service and management contracts are PPP models in which the private partner takes the responsibility of managing or delivering services for short period of time ranging 3 to 5 years and the financing, risk, and ownership responsibilities assumed by the public sector (Dhanshyam et al., 2024). Concession is a long term contract ranging 30 to 35 years in which the private sector finances and constructs the infrastructure so that over a long period of time recovers its investment cost and the profit (Guo et al., 2021). Hence, the BOT model selected to explain the PPP implementation of Addis Ababa (contribution) (Parakhina et al., 2021).

Table 1: Types of Public-Private Partnership

Category	Content Type	ownership of capital asset	responsibility of investment	Assessment of Risk	Contract Length
Service and Management Content	Outsourcing	Public	Public	Public	1-3
	Maintenance Management	Public	Public/Private	Public/Private	3-5
	Operation Management	Public	Public	Public	3-5
Turkey / BOT/ DBF	Private sector design, finance, and food & nutrition	Public	Public	Public	10 years +
Affermage/Lease	Motor management to the private sector	Public	Public	Public	5-20
Concessions	concession gives the private sector the initiative and develop a public infrastructure	Private/Public	Private/Public	Private/Public	30-35

Private Ownership of Assets and PFI Type	BOO/DBFO (Build operates & until agreed profit secured	Private	Private	Private	10 years +
	PRF-vate sector take the initiative and develop a public infrastructure	Private/ Private	Private	Private/ Public	10-20
	Divestature/ provatization	Private	Private	Private	Indefinite

Source: Method Selection (Zhao & Ying, 2019).

2.3. Challenges of Housing Provision of Addis Ababa City Administration

A multifarious challenge of access to affordable housing includes lack of access to finance, high interest rates, speculation in land market, and inefficiency worsen challenges (Efa et al., 2024). Hence, Addis Ababa introduced an Integrated Housing Development Program (IHDP) which falls shorts of achieving its goal (Teklemariam & Harper-Anderson, 2025). Over the past 20 years the efforts of affordable housing provision through the IHDP have delivered 350,000 units in Addis Ababa City Administration since 2006, and this severe deficit now approaches one million units, underscoring the severity of the crisis (CAHF, 2024). Moreover, the Addis Ababa City Administration had implemented PPP housing scheme as of 2022 (Regulation number 128/2022). In this partnership arrangement, 22 private partners signed the contract to build 120,000 houses. However, out of the 22 partners only 8 of them started the construction, the procurement was not transparent, and deliverables not clearly stated in terms of size and quality (Girma et al., 2025).

2.4. Failure Stories of PPP Implementation

Housing projects in Africa have faced obstructions due to lack of institutional capacity, less attention given to the feasibility study, poor systems, and a lack of transparent procurement processes. However, developing countries, for instance Zambia, Uganda, and Tanzania were falling short of achieving the benefits of PPP due to excessive bureaucracy and a poor business environment (Kavishe, et al., 2018 and Zulu et al., 2023b). Peru, for instance, has an infrastructure budget gap of 108.79 billion USD but its project evaluation and performance measurement gap came mainly because of weak institutional capacity faced challenges of delays, renegotiation, and unforeseen addendums held it stack from capitalizing on PPP potential (Cisneros-Herrera et al., 2024). One of the primary reasons for failing to achieve the most out of PPP is a lack of a sufficient number of capable private partners, which leads the public sector to rush to accept private sector proposals without being prepared with integrity (Kavishe, Jefferson, et al., 2018). In addition, in a comparative study conducted in Colombia, Ghana, and Kazakhstan, public sector was failing to build strong institutions and to hire capable expertise. Poor coordination among government departments also became a hindrance to maximizing PPP benefits (Samoilov et al., 2024). Therefore, the takeaway from the best practices is the importance of having a well-established PPP institution which can be trusted in its capacity to create enabling conditions, provide support, and minimize the bureaucratic hurdles, making countries successful in tapping the potential of the private partners (Batjargal & Zhang, 2021).

2.5. Best Practices of Implementing Public-Private Partnership Model

The lessons drawn from the best practices shown having strong institutions, an enabling legal framework, trust, and proper feasibility studies ensured PPP housing (European Investment Bank, 2019). On the other hand, in institutions having bureaucratic impediments, a lack of an enabling legal framework, extended regulatory frameworks, little attention to feasibility studies, led to time and cost overruns, accelerating project failures and unsuccessful ventures (Akomea-Frimpong et al., 2023a). Moreover, as international experience indicated, Western Countries had benefited much from PPP since the 1990s (Batra, 2022). This success was achieved due to the well-established institutions, trust, and the presence of an enabling legal frameworks (Casady, 2023). In the same way, limited successes achieved in the developing countries like Malaysia attributed to the efforts of the public institutions in reducing regulatory barriers and commitments of the public sector towards successful implementation of PPP models in the housing development (Kang et al., 2019). Furthermore, relative successes of PPP implementation in countries like Ghana, Nigeria, and Republic of South Africa were much remarkable (Osei-Kyei & Chan, 2018). Therefore, best practices would help in the contextualization of effective models to the Addis Ababa City Administration housing development.

2.6. Mixed Development Cross-Subsidized Housing

In this scheme, the transfer price of the houses meets the requirements of the low-income group in terms total selling cost.(Mutwii & Wachira-Towey, 2024) Mixed Development Cross Subsidized Housing (MDCH) model “represents a scenario in which a government allocates land to the private sector as an incentive, contingent upon the private partner’s commitment to erect high-rise buildings that utilize a high Floor Area Ratio (FAR) (Dwivedi, 2021)”. He added that this approach aims at optimizing the number of housing units constructed on a designated parcel of land. Soni & Das (2023) also noted that the private sector cross-subsidized the expenses by selling high-quality houses.

2.7. Transaction Cost Theory

The theoretical foundation of this study is Transaction Cost Theory (TCT) which served to explain the phenomenon of PPP partners facing and to develop a context specific model. TCT predicts contracting parties exert efforts to maximize their gains from the transaction cost of the adaptive capacities and associated costs in a discriminating way (Cuypers et al., 2021). This assumption of bounded rationality which states accessing and processing information has cost. Besides, information asymmetry creates difference among parties added to this limitation of information processing capacity bounds rationality (Rindfleisch, 2020). The other assumption TCT raises is private partners looks for opportunity which is natural but actors may goes beyond this and might commit or make omissions that tilt payoffs in their favor (Chen et al., 2022). Therefore, TCT is applied in this study to explain the cost of weak contract agreement and to develop mechanism to mitigate these issues.

2.8. Conceptual Framework

The conceptual framework in Figure 1 below shows the effective implementation of the legal framework requires having capable institutions both in terms of expertise and organizational structure. Moreover, having flexible procurement approaches based on public transparency and accountability is essential. This means if government institution

prioritizes attracting huge investments, and wants to secure diverse experiences and technologies from the private sector, competitive bids is recommended (Triest, 2024). On the other hand, if the public sector faced forcing circumstance requiring unsolicited procurement, it has to be based on publicly pre-disclosed procedures to ensure accountability. Moreover, incentive mechanism is essential to encourage private sectors' involvement. Equally, reducing bureaucratic delays contributes to its success (Devkar et al., 2020). Above all, after identifying the private partner through competitive bid both parties should stand on equal ground to identify risks together, set mitigating strategies, and share risks to the capable party based on the nature of the risk and experience of the party on such specific matter (Boiarko et al., 2021a). Finally, successful housing provision through PPP relies upon the proper implementation of the legal framework. This could be realized through building trust with private partners, applying proper risk management, and putting in place incentive mechanisms (Li & Wang, 2024).

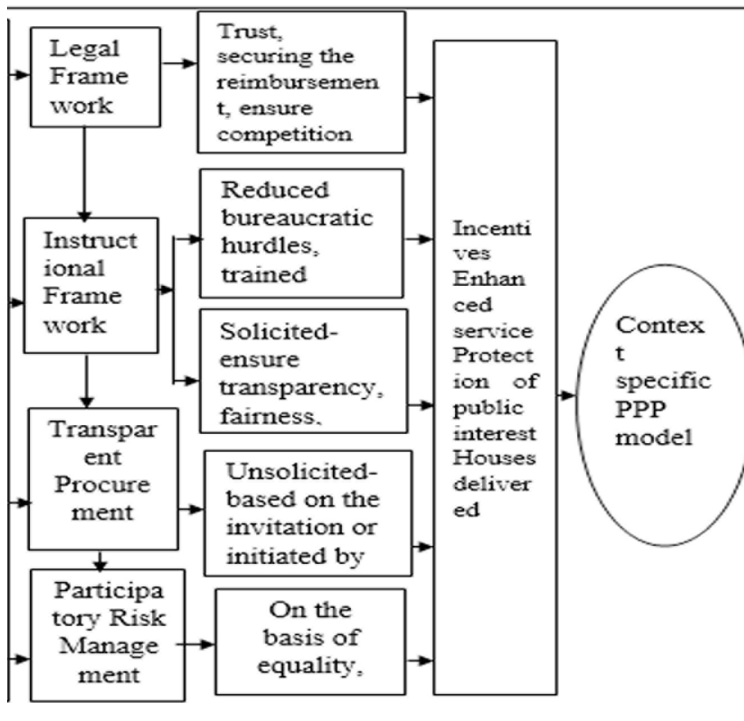


Figure 1. Conceptual Framework
Source: Compilation of the author (2024)

3. Material and Methods

3.1. Study Area Description

The research was conducted in Addis Ababa, the capital city of Ethiopia. It is located geographically between 9°0' 019.4436" North and 38°44' 24" East (CSA, 2013). Covering

a total area of 540 square kilometers, the city is predominantly mountainous in its northern region and comprises of 11 Sub-Cities (EiABC, 2017). It is the largest urban center in Ethiopia, and a home for international agencies. The climate of Addis Ababa is characterized as highland with moderate temperatures ranging from 11°C to 23°C on average. The wet season spans from June to early September, during which the city receives the majority of its precipitation, with an annual rainfall of 1200mm (CSA, 2013). The study covered only five sub-cities in which PPP projects starts such as Bole, Arada, Lideta, Akaki, and Kirkos Sub-Cities.

3.2. Study Design and Methods

The case study design adopted to analyze the PPP model would operate in addressing the challenges of housing provision in the Addis Ababa City Administration (Kumar, 2011). In qualitative design the researchers explores thoroughly a program, process or one or more individuals, and the cases are bounded by time and activity (Ngoc et al., 2022). Therefore, sequential explanatory mixed research approach was adopted, and guided by pragmatist research philosophy (Brown et al., 2021). The analysis of the quantitative data was strengthened by the findings of the qualitative data to obtain the advantage of survey data and to get an in-depth insight about PPP housing model based on the interview results (Brown et al., 2021).

3.3. Sampling Design

The sample size was determined using Yamane's sample size determination formula. To select five key informant officials from both the private and the public sector, purposive sampling was employed. In addition, random sampling technique was employed in selecting individual respondents from the population.

Where: , n = sample size, N = population = 412, e = level of precision = 0.05,

Sample size $n =$

$n = 203$, (Uakam et al., 2021).

3.4. Method of Data Collection

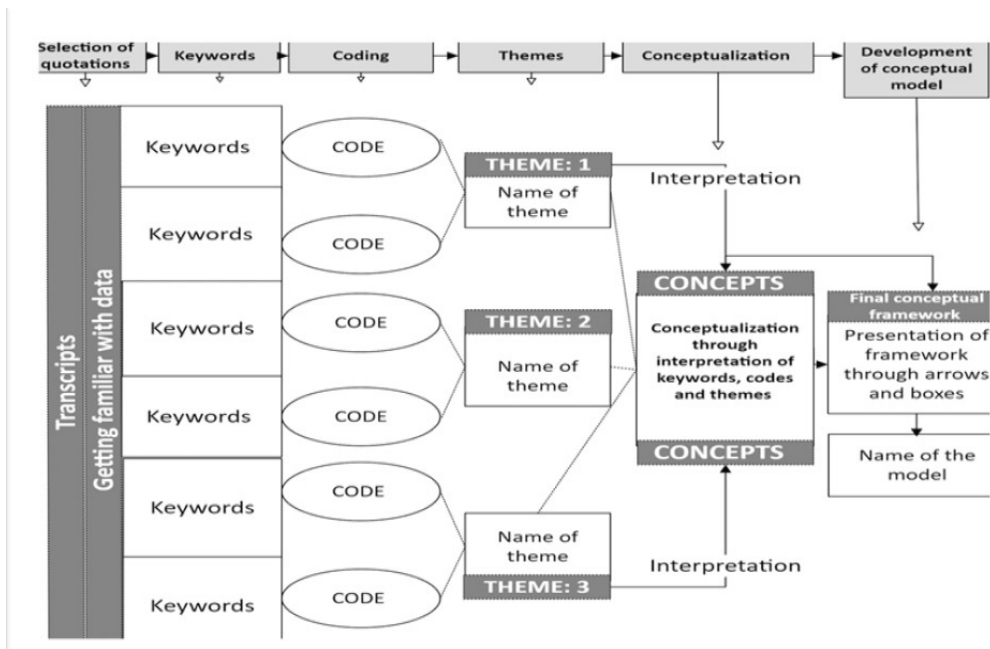
Attempt was made to ensure the representation issue by taking respondents from Addis Ababa PPP units and private enterprises involved in to PPP housing. The data collection started after securing ethical clearance from the College of Development Studies at Addis Ababa University. Moreover, the data was collected by securing full consent of the public and the private institutions as well as individuals. These were Addis Ababa PPP Unit, the PPP Contracting Administration Team of the Addis Ababa Housing Corporation, and the PPP Directorate General of the Ministry of Finance. The eight selected private enterprises were OVID Real Estate, Gift Real Estate, Africa Holdings, Irre General Trading, Jambo Star Trading, KH Engineering Group, Oromiya Construction Corporation, and East African Real Estate Development Plc. The data collection methods were self-administered survey, interview guide, and secondary data collection. Hence, 216 questionnaires were administered to the respondents and out of which 203 questionnaires were returned making the response rate 100%.

3.5. Analytical Methods

The dependent variable is the effectiveness of the PPP model in Addis Ababa City Administration housing development. The PPP housing model implementation

successfulness is affected by the independent variables such as transparent procurement, institutional capacity, risk management, stakeholders' involvement, legal framework, and incentive mechanisms. Therefore, the effects of these independent variables were assessed using Thematic Analysis using NVivo15 analysis software; moreover, Standardized factor loadings from Confirmatory Factor Analysis (CFA) was used as it explains correlations between dependent and independent variables (Howard et al., 2025 and Hox, 2021). CFA analysis was conducted using R-Version 4.4.2. Further, the results were triangulated so that the results obtained from the interview corroborated by the findings of the survey and further strengthened by the results of the analysis of the international best practices.

The systematic six step thematic analysis model was used to identify the key word from the interview, and then simplified the coding, theme development and conceptualizing the main themes in order to propose a PPP housing model. Besides, all the key words, codes, and themes were encoded to NVivo 15, a free robust software, which simplifies the analysis process and visualizes the display of the result. Thus, a thematic analysis was conducted to analyze the interview and documents obtained from the extant literature and the Addis Ababa City Administration.



Source: Adopted from (Naeem et al., 2023)

Figure 1: A systematic Six Step Thematic Analysis for PPP model Development

A model developed using CFA emphasized planning effectiveness, particularly in terms of institutional capacity. The analysis was made using Confirmatory Factor Analysis using R-Studio 4.4.2. Moreover, the indices showing the model fitness, like SRMR, are 0.077 and RAMSEA 0.082, a mediocre result indicating the CFA model has limitation. Moreover, reliability of the data was tested for Cronbach alpha and the result was 0.9617 making it reliable. A qualitative data analysis technique was employed for a step-by-step and thematic analysis involving six steps. These are:

Step 1: The interview was transcribed from audio into words to capture the core messages.
 Step 2: 290 key words and terms were identified, which facilitated catching the perceptions, understandings, and patterns of ideas surfacing out in the interviews
 Step 3: The ideas described in text form were organized into 290 themes and represented through 21 codes, which would help to summarize the core messages in a simple form.
 Step 4: The key words were categorized into 4 themes of institutional capacity, participatory risk identification, transparent procurement, and legal frameworks.
 Step 5: Delving into the central messages and relating these themes to one another was made so that 3 core themes could have been easily drawn.
 Step 6: In this final phase, a model was suggested involving flexibility to accommodate in decision-making.

4. Results and Discussion

In this section, primary data from the survey and interview, as well as secondary data were collected. Demographic analysis revealed that 37.44% of participants were female, representing various levels of expertise in the construction sector. Furthermore, 67.98% of participants were under the age of 39, with the same percentage holding at least a bachelor's degree. Occupational distribution showed that 29.56% of respondents were from government offices, 48.28% from private partners, 16.75% as consultants, and 5% from other departments. The diversity in respondents' age, education, and experience levels would help to fetch diverse insights from professionals with varying perspectives, and it would make it representative.

4.1. Presentation of the Findings

4.1.1. Stakeholders Perception

Survey data collected from 203 PPP experts engaged in 8 companies and Addis Ababa City Administration PPP offices. The eight private partners are OVID Real Estate, Gift Real Estate, Africa Holdings, Irre General Trading, Jambo Star Trading, KH Engineering Group, Oromiya construction Corporation, and East African Real Estate Development Plc. The respondents were experienced in the construction sector and currently are working in the PPP arrangement which gives them an expertise. The analysis was made using Confirmatory Factor Analysis using R-Studio 4.4. and model fitness indices like SRMR is 0.077 and RAMSEA 0.08.

Table 2: PPP Success Factors

Factors	Estimate	Std.Err	z-value	P(> z)	ci.lower	ci.upper	Std.lv	Std.all
Integration	1.000				1.000	1.000	0.533	0.533
Procurement	0.419	0.120	3.488	0.000	0.184	0.655	0.288	0.288
Challenge	1.821	0.310	5.874	0.000	1.213	2.429	-0.928	-0.928
Opportunity	1.824	0.307	5.938	0.000	1.222	2.426	0.905	0.905
Leadership	1.381	0.265	5.216	0.000	0.862	1.899	0.700	0.700
Financial viability	1.840	0.308	5.965	0.000	1.235	2.444	0.923	0.923
Legal framework	1.165	0.234	4.974	0.000	0.706	1.624	0.891	0.891

Source: Compilation of the author (2024)

Equation:

Success = 0.53 integration + -0.92 challenge + 0.93 opportunity + 0.28 procurement + 0.92 finance +

leadership 0.89

As presented above in Table 3, the standardized factor loading results are used for discussion as it explains the relationship between the factors. The coefficient of integration was 0.53 which indicates the presence of positive moderate correlation, and a standardized factor loading for procurement was 0.288 indicating the presence of weak positive correlation. In addition, the result for challenge was -0.928 indicating strong negative correlation, the result for opportunity is 0.95 indicating strong positive correlated to success, and 0.07 standardized factor loading for leadership indicates a presence of moderate positive correlation. Moreover, finance having a result of 0.923 a strong positive correlation, and legal framework with a standardized factor loading of 0.891 shown the presence strong positive correlation towards PPP success. These findings were strengthened by the result of the document analysis which indicated the contribution was a predetermined, the deliverables not clearly stated in terms of quality and size of the houses, and risk mitigation strategies not clearly articulated. Therefore, the PPP success was measured by the seven factors using CFA in the Table 1.2 above. The result indicated among the seven factors legal framework, the financial viability of the project, the presence of opportunity to both parties to collaborate and leadership commitment had shown strong positive correlation. On the other hand, integration and procurement showed moderate and weak positive correlation, however, the challenge was very serious showing strong negative correlation to success. Therefore, the null hypothesis which stated the existing 70/30 PPP model is effective was rejected. On the other hand, the alternative hypothesis stating the 70/30 PPP housing model is not effective was accepted.

4.1.2. Thematic Analysis of the Interview

Interview discussions held with the key informants from the private enterprises and directly working on PPP in Addis Ababa City administration were fully captured and presented in a survey as part of the emerging model. The views of the stakeholders and the major themes covered under the model development were presented in Annex 1.

As indicated in Annex 1, the lack of transparent procurement affected the Addis Ababa City Administration because it could not ensure the best offer from the private sector. In addition, in transparent procurement, competent private partners would get the chance to engage in the PPP housing collaboration, in which the goal of affordable housing construction was achieved. Besides, the process of risk identification was accomplished by the public institution alone, and it lacks the involvement of the private partner. On the other hand, the process of selecting financially capable private partners was in question in some of the partners as they took an extended time to start the construction. Besides, few of them retreated from the process. In addition, the institutional capacity of Addis Ababa PPP office was not in a position to manage the complex interests in PPP collaboration. Moreover, the 70/30 PPP modality which Addis Ababa City Administration implementing is deviates from one of the principles of PPP that states the amount of contribution to be obtained thorough partnership has to be determined by the market rather than fixing it in advance (Casady, 2021). Finally, financial capacity of the private partners was not dependable as it was, later, revealed only 8 private partners out of the 22 started the construction and one among the eight quitted. Therefore, the success of 70/30 Addis Ababa PPP housing, according to the review of the documents, was challenged because of the lack of adhering to the scientific procedures and practices of implementing PPP.



Figure 2: NVivo 15 Generated Result (2024)

Using NVivo 15 software word cloud, word frequency, and tree map analysis was conducted, as displayed in Figure 3 above. Among the 172 keywords obtained through the interview, those indicated in the innermost center of the chart constitute key factors affecting PPP success. Above all, the risk management was weak and not participatory. In addition, the procurement process was not transparent which contributed to the limited number private partners involvement in the PPP-based housing program. On the other hand, there was a well prepared but affected by the weak implementation. Although, 22 private partners signed the PPP contract document only 7 of them started the construction. This indicates the inefficiency of the PPP institution. This situation was addressed as among critical issues leading partnership projects to failure (De Matteis et al., 2025).

As indicated in figure 4 below, factors are interrelated impacting one another highlighting the areas of success and shortcomings of Addis Ababa City Administration PPP housing. The results indicated that the process demonstrated success at the preparation phase of the plan and at the signing of the contract.

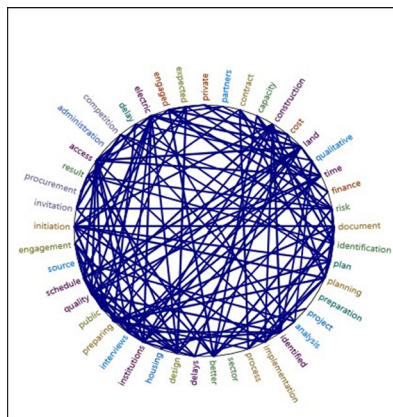


Figure 4: NVivo 15 Generated Result (2024)

Hence, the issues of risk management, the process of private sector involvement with transparent procurement systems, the lack of integration between the planning and implementation phases, and limitations in institutional capacity were recurrently reported as undermining the success of the model (Y. Liu et al., 2025 and Mehkri, 2024).

4.2. Discussion

Effective PPP model is highly dependent on the proper selection of the model. In the meantime, contextualizing the model to a specific context is to be implemented. In this regard, the 70/30 Addis Ababa PPP housing model implementation and its effectiveness in achieving the housing provision in the city was assessed based on the stakeholder's perception and international best practices presented as follows.

4.2.1. Stakeholders Perception

Integration - the institutional capacity of the Addis Ababa PPP offices in integrating the resources, and the partnering parties in realizing housing provision through partnership was weak. In fact, the finding indicated that in the plan initiation phase and getting partners to sign the contract showed a good performance. However, in bringing all the private partners who signed the contract to start the construction faced weakness, and the achievement was only 31%. The findings of Li & Wang (2024) indicated institutional capacity of the public sector determines effectiveness of PPP.

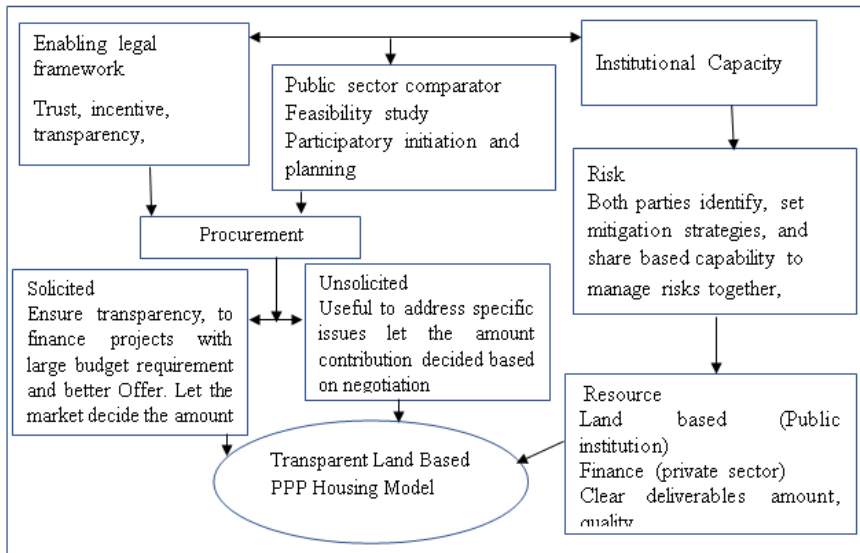
Procurement – the procurement process lacks transparency. The value that the parties contributed also was not decided by the market; in addition, the private partner expected to give back 30% of the constructed houses. This percentage was stated in the contract document but it lacks to state the quality, and size of the room to be delivered, and this harms public interest. The finding agrees with a study in Uganda which stated failure to ensure transparent procurement in the process of PPP implementation affects PPP success (Bagenda & Ndevu, 2024).

Challenge – the challenges of lack of transparency, competitiveness, and lack of participatory risk identification negatively affected the PPP success. These issues in fact opened a room for some private partners to seek for further negotiation leading to delay and termination of the contract. This finding was corroborated by a result of a study conducted on risk management of Public-Private Partnership projects which stated that success can be achieved if risks and challenges properly managed (Boiarko et al., 2021b). Institutional capacity- the above challenges the Addis Ababa PPP implementation faced get ground on the weak institutional capacity of the PPP offices affected by lack of PPP training. As a study conducted in Zambia indicated lack of capacity as a result of lack of knowledge and experience in PPP as well as lack of decision making capacity or confidence contributed to unsuccessful PPP implementation (Chilala, 2019).

The 70/30 PPP model is unique and deviates from the international best practices and the principles of PPP. This is because of the lack of selecting PPP model that fits to the Addis Ababa context. The success of PPP was affected by poor tender document, lack of knowledge, in adequate legal framework, and misinformation of the financial capacity of the private partner (Lopez & Marakas, 2023).

4.3. Transparent Land Based PPP Housing Model

The 70/30 PPP housing model of Addis Ababa faced challenges of the lack of competitive transparent procurement and lack of participatory risk identification and sharing. These challenges affected hinders it from effectively attracting private partners. Moreover, it failed to fully engage those private partners who signed the partnership contract in to the construction phase. Therefore, to overcome these drawbacks, a context specific PPP model which helps to ensure transparent procurement, participatory risk management and resource allocation is necessary. The model depicted in Figure 5 (below) considered the potential of the Addis Ababa City Administration in PPP investments and serviced land and capacities of the private partners.



The model requires a binding legal framework so that the existence as well as the effectiveness of the decisions from the PPP institutions should not be affected by political changes as it is an international contract. Having a strong institutional culture is one of the cornerstones leading the private sector to build strong trust in the system and give them confidence to invest their finance in the public sector. The Second foundation point is the importance of conducting the opportunity cost of engaging into a PPP. This is because there are different development opportunities and several financing options that should have been considered before entering into PPP.

The third issue addressed in the model is conducting a feasibility study of the project that should be conducted and used as an input for decision-making. The fourth point concerns procurement, which extant literature and best practices consulted open and competitive procurement or solicited procurement guarantee the best offer and viable market price for the partnership.

The fifth point is that risk identification should be conducted by both parties, having equal say, as they are partners who are responsible for the project's success and failure

and are ultimately expected to shoulder the associated risks.

Therefore, this Transparent Land Based Public Private Partnership Housing Model (TLPPPHM) is different from other models because it gives a room for solicited and unsolicited procurement. In addition, it insists on transparent procurement as a prerequisite for its successful implementation.

The other critical issue of the model is that it requires the PPP institution to get stakeholders' insight first, and then conduct public sector comparator. This enables it to decide whether PPP is the best financing option or not as compared to other available housing development options. Moreover, PPP institutions are expected to set a clear and publicly pre-disclosed procedure of choosing to proceed in a solicited or unsolicited procurement means based on the project nature and level of urgency. Finally, the document expects to have a process of risk identification where both parties are on equal ground. The finding is supported by the results of prior studies ensuring transparency, removing legal and regulatory barriers make PPP implementation successful (Akomea-Frimpong et al., 2023b and Casady, 2023).

5. Conclusion

The application of PPP 70/30 housing model of the Addis Ababa City Administration exhibited mixed result. The city administrations move towards the application of PPP housing is a success which made partnership to happen. The city administration's effort of involving the private sector into the housing provision resulted in the engagement of 22 private partners out of which 8 of them started the construction process, and it is at different performance level. However, the implementation of the model faced lack of transparent and competitive procurement which limited the chance of getting better offer from the private partners. In addition, the risk identification was not conducted by participating the private partners. It, rather, was decided by the public institutions and left as take-it or leave-it option which was one of the areas of the failure. This is against the principles of PPP and as a result the city misses the basic objectives of benefiting from the private sectors experience and capacities of identifying risks and setting a mitigation strategy. Further, Transaction Cost Theory helped in analyzing how the PPP procurement was managed and how risks were approached. Thus, it could have been better, had the identification and the mitigation process been done together and the risk sharing part was negotiated.

Moreover, the weak institutional capacity was one of the draw backs of the Addis Ababa PPP housing implementation. The parties have different interests to achieve and different working culture which makes PPP project complex to manage. The study found that the problems of risk identification, lack of transparent procurement, and delays were attributed to the weak institutional performance. Further, lack of clearly stating the room size and the quality of the 30% houses to be delivered were the areas where weakness observed. As a result, to overcome these drawbacks requires a context specific PPP housing model. Therefore, based on the analysis result, the study proposed Transparent Land Based PPP Housing Model based stakeholders' perception and international best practices. The model insists the private partner in a PPP housing deal should be treated as an equal party with the contracting authority to identify risks, set mitigation mechanisms, and allocate those risks to the party in a better position with a goal of having the project succeed. Further, the findings presented the importance of context specific PPP model and the six-step PPP model development as theoretical contribution. Finally, the identified implementation gaps as well as the proposed model have practical implications.

6. Recommendations

PPP is a long-term process of managing complex processes and multiple interests at the same time. To manage these issues, it is quite imperative to have strong institutions having the right professionals. These institutions have to give priority towards ensuring ease of doing business and reducing bureaucratic hurdles. In efficiency in the public institutions results in to a contractual agreement that literally gives public resources to the private partners in the name partnership. As a result, cost of the failed PPP has to be paid by the public institutions from the tax payers' money, and it hinders the effective implementation of PPP housing resulting in to delayed housing delivery. Therefore, institutional capacity is a top priority to fix the problems and to enhance effectiveness of PPP implementation. Hence, building institutional capacity as a strategic approach is recommended.

Operational recommendations

Ensuring transparent procurement mechanism: the ultimate goal of the private sector is making a profit so that every deal comes with cost transfer or reduction approach. These issues are managed by the market itself through transparent competition which will help to build trust and accountability. In some instance if the specific project nature demands it and the amount of finance to be raised is that much big, unsolicited procurement under clear and transparent procedure can be implemented (Hochstetter et al., 2023).

Ensuring participatory risk identification and sharing is imperative: Private partners are happy in taking a debated risks hoping to minimize their impact based on their prior experience, technological and financial capacities. However, as a business entity, they consider that if things go wrong, they might hesitate to engage in a partnership with the public sector.

Implementing the modified TLHPM PPP model: Ensuring transparent solicited procurement as well as conducting the public sector comparator makes PPP implementation successful. Besides, conducting feasibility study and clearly setting out the material quality, and room numbers of each housing to be transferred to the public institution in the end of PPP contract period will protect the public interest. Hence, this model aimed at ensuring transparency while giving the options of transparent competition-based procurement and application of unsolicited procurement supported by clear procedure open to the public.

Policy recommendations

Incentive: To encourage the private sector engagement in to PPP-based housing development it is important to incentivize the private partners. Therefore, as PPP proclamation 1076/2018 and its amendment which is PPP proclamations 1283/2023 overlooked incentive it needs to be amended. The issue of incentive was overlooked and left to the laws enacted for non-PPP investment projects which were not expected to share risk, and finance to the public sector. To overcome this, it is important to protect them through applying an incentive mechanism that matches the value they add to the project. Therefore, the study recommends the importance of making an amendment to the PPP proclamation, regulation. And, subsequent directives has to clearly state the issue of incentives that can be given to the value addition made by the private partner.

Delegation: PPP proclamation assumes project area identification and the issue of approval

has to pass extended procedures and requires approval of the Ministry of finance. This extended process has to be shortened delegation to the lower-level Federal institutions and regions has to be given.

Strong enforcement- the proclamation covers issues of transparent procurement and participatory risk identification but lacks a strategy of ensuring its proper enforcement. Therefore, the policy makers need to put in place a mechanism of public disclosure of the procedures for the pre and post implementations.

REFERENCES

- Aboelazm, K. S., Tawakol, F., Dganni, K. M., & Alfil, N. Z. (2024). Public-Private Partnership: A New Policy to Ameliorate the Quality of Public Utility Services to the Public. *Journal of Lifestyle and SDG'S Review*, 4(4). <https://doi.org/10.47172/2965-730x.sdgsreview.v4.n04.pe02509>
- Akomea-Frimpong, I., Jin, X., Osei-Kyei, R., & Kukah, A. S. (2023a). Public-private partnerships for sustainable infrastructure development in Ghana: A systematic review and recommendations. *Smart and Sustainable Built Environment*, 12(2), 237–257. <https://doi.org/10.1108/SASBE-07-2021-0111>
- Akomea-Frimpong, I., Jin, X., Osei-Kyei, R., & Kukah, A. S. (2023b). Public-private partnerships for sustainable infrastructure development in Ghana: A systematic review and recommendations. *Smart and Sustainable Built Environment*, 12(2), 237–257. <https://doi.org/10.1108/SASBE-07-2021-0111>
- Almeile, A. M., Chipulu, M., Ojiako, U., Vahidi, R., & Marshall, A. (2024). Project-focussed literature on public-private partnership (PPP) in developing countries: A critical review. *Production Planning & Control*, 35(7), 683–710. <https://doi.org/10.1080/09537287.2022.2123408>
- Anuka, C. L., & Iyi, E. A. (2023). The Challenges OF Housing Delivery in the Process of Urbanization in Anambra State, Nigeria. *Research Journal of Environment*, 30–36. <https://doi.org/10.36265/arejoen.2023.060105>
- Asian Development Bank. (2016). *PPP Hand BOOK* (p. 101). Asian Development Bank. <https://documents1.worldbank.org/curated/en/490511468331774007/pdf/624230PUB0Publ00Box0361478B0PUBLIC0.pdf>
- Bagenda, B., & Ndevu, Z. (2024). Principal Risks Associated with Public-Private Partnership Projects in Uganda. *Public Works Management & Policy*, 29(2), 183–230. <https://doi.org/10.1177/1087724X231167326>
- Batjargal, T., & Zhang, M. (2021). Review of key challenges in public-private partnership implementation. *Journal of Infrastructure, Policy and Development*, 5(2), 1378. <https://doi.org/10.24294/jipd.v5i2.1378>
- Batra, R. (2022). Review of public-private partnerships across building sectors in nine European countries: Key adaptations for PPP in housing. *Engineering, Construction and Architectural Management*, 30(7), 2904–2927. <https://doi.org/10.1108/ECAM-07-2021-0664>
- Boiarko, I., Tverezovska, O., Polcyn, J., & Miskiewicz, R. (2021a). Risk-management of public-private partnership innovation projects. *Marketing and Management of Innovations*, 5(2), 155–165. <https://doi.org/10.21272/mmi.2021.2-13>
- Boiarko, I., Tverezovska, O., Polcyn, J., & Miskiewicz, R. (2021b). Risk-management of public-private partnership innovation projects. *Marketing and Management of Innovations*, 5(2), 155–165. <https://doi.org/10.21272/mmi.2021.2-13>
- Brown, A., Hecker, K. G., Bok, H., & Ellaway, R. H. (2021). Strange Bedfellows: Exploring Methodological Intersections Between Realist Inquiry and Structural

- Equation Modeling. *Journal of Mixed Methods Research*, 15(4), 485–506.
<https://doi.org/10.1177/1558689820970692>
- CAHF. (2024). *Housing Finance in Africa: A Review of Africa Housing Finance Market* (15th ed.). https://housingfinanceafrica.org/app/uploads/2023/10/2024-CAHF-yearbook_14.10.pdf
- Casady, C. B. (2021). Examining the institutional drivers of public-private partnership (PPP) market performance: A fuzzy set qualitative comparative analysis (fsQCA). *Public Management Review*, 23(7), 981–1005. <https://doi.org/10.1080/14719037.2019.1708439>
- Casady, C. B. (2023). A time differencing qualitative comparative analysis (QCA) of public-private partnership (PPP) market maturity. *Public Management Review*, 1–23. <https://doi.org/10.1080/14719037.2023.2177328>
- Charitonidou, M. (2022). Housing Programs for the Poor in Addis Ababa: Urban Commons as a Bridge between Spatial and Social. *Journal of Urban History*, 48(6), 1345–1364. <https://doi.org/10.1177/0096144221989975>
- Chen, W., Botchie, D., Braganza, A., & Han, H. (2022). A transaction cost perspective on blockchain governance in global value chains. *Strategic Change*, 31(1), 75–87. <https://doi.org/10.1002/jsc.2487>
- Chilala, N. R. (2019). *Challenges in implementing public private partnership (ppp) projects in the road sector in Zambia* [The University of Zambia]. <http://dspace.unza.zm/handle/123456789/6723>
- Cisneros-Herrera, D., Lara-Galera, A., Alcaraz Carrillo de Albornoz, V., & Muñoz-Medina, B. (2024). Driving Peru’s Road Infrastructure: An Analysis of Public–Private Partnerships, Challenges, and Critical Success Factors. *Buildings*, 14(1), Article 1. <https://doi.org/10.3390/buildings14010230>
- CSA. (2013). *ICPS-Population-Projection-2007-2037-produced-in-2012.pdf*. CSA. <https://www.statsethiopia.gov.et/wp-content/uploads/2019/05/ICPS-Population-Projection-2007-2037-produced-in-2012.pdf>
- Cuypers, I. R. P., Hennart, J.-F., Silverman, B. S., & Ertug, G. (2021). Transaction Cost Theory: Past Progress, Current Challenges, and Suggestions for the Future. *Academy of Management Annals*, 15(1), 111–150. <https://doi.org/10.5465/annals.2019.0051>
- De Matteis, F., Borgonovi, E., Notaristefano, G., & Striani, F. (2025). The contribution of public-private partnership (PPP) to sustainability: Governance and managerial implications from a literature review. *Corporate Governance: The International Journal of Business in Society*, 25(1), 144–159. <https://doi.org/10.1108/CG-03-2023-0103>
- Devkar, G., Palliyaguru, R., & Oyegoke, A. S. (2020). The effects of institutional frameworks on implementation of PPP projects: A comparative perspective in Australia and India. *International Journal of Construction Management*, 20(6), 720–736. <https://doi.org/10.1080/15623599.2020.1769255>
- Dhanshyam, M., Srivastava, S. K., & Biswas, I. (2024). Determinants of public-private

- partnership governance structures: Evidence from India. *Public Management Review*, 1–23. <https://doi.org/10.1080/14719037.2024.2349125>
- Dwivedi, S. (2021). *SUSTAINABLE AFFORDABLE HOUSING FOR LOW INCOME GROUP IN INDIA* [fi=Ylempi AMK-opinnäytetyö | sv=Högre YH-examensarbete | en=Master's thesis |]. <http://www.theseus.fi/handle/10024/505965>
- Efa, T., Debele, Taye, N., & Solomon, M. (2024). Institutions' dynamics and homeownership aspirations in Ethiopia. *Discover Global Society*, 2(1), 46. <https://doi.org/10.1007/s44282-024-00073-5>
- EiABC. (2017). *City Profil Addis Ababa.pdf* (p. 33) [City Profile]. Ethiopian Institute of Architecture Building Construction and City Development. https://mdl.donau-uni.ac.at/ses/pluginfile.php/314/mod_page/content/4/City%20Profil%20Addis%20Ababa.pdf
- European Investment Bank. (2019). *Market Update—Review of the European PPP Market in 2019* (Market Update, p. 14) [Market Update]. European Investment Bank. https://www.eib.org/attachments/epec/epec_market_update_2019_en.pdf
- Getachew, Y. D. (2022). Driving factors for adopting public-private partnership in Ethiopia and comparison with other countries. *International Journal of Energy Sector Management*, 16(3), 493–510. <https://doi.org/10.1108/IJESM-02-2021-0018>
- Gifford, J. L., Bolaños, L. A., Daito, N., & Casady, C. B. (2023). What triggers public-private partnership (PPP) renegotiations in the United States? *Public Management Review*, 1–27. <https://doi.org/10.1080/14719037.2023.2200404>
- Girma, B. A., Teshome, T. B., & Tesfaye, Z. I. (2025). Public-Private Partnership Financing Framework for Housing Development in Addis Ababa: Evidence from Planning and Implementation Phase. *Ethiopian Journal of Development Research*, 47(2), Article 2. <https://ejol.aau.edu.et/index.php/EJDR/article/view/11764>
- Guo, K., Zhang, L., & Wang, T. (2021). Concession period optimisation in complex projects under uncertainty: A public-private partnership perspective. *Construction Management and Economics*, 39(2), 156–172. <https://doi.org/10.1080/01446193.2020.1849752>
- Hochstetter, J., Vásquez, F., Diéguez, M., Bustamante, A., & Arango-López, J. (2023). Transparency and E-Government in Electronic Public Procurement as Sustainable Development. *Sustainability*, 15(5), 4672. <https://doi.org/10.3390/su15054672>
- Howard, M. C., Boudreaux, M., Cogswell, J., Manix, K. G., & Oglesby, M. T. (2025). A literature review of model fit and model comparisons with confirmatory factor analysis: Formalizing the informal in organizational science. *Applied Psychology*, 74(1), e12592. <https://doi.org/10.1111/apps.12592>
- Hox, J. J. (2021). Confirmatory Factor Analysis. In J. C. Barnes & D. R. Forde (Eds.), *The Encyclopedia of Research Methods in Criminology and Criminal Justice* (1st ed., pp. 830–832). Wiley. <https://doi.org/10.1002/9781119111931.ch158>

- Kang, S., Mulaphong, D., Hwang, E., & Chang, C.-K. (2019). Public-private partnerships in developing countries: Factors for successful adoption and implementation. *International Journal of Public Sector Management*, 32(4), 334–351. <https://doi.org/10.1108/IJPSM-01-2018-0001>
- Kavishe, N., Chileshe, N., & Jefferson, I. (2018). Public-private partnerships in Tanzanian affordable housing schemes: Policy and regulatory issues, pitfalls and solutions. *Built Environment Project and Asset Management*, 9(2), 233–247. <https://doi.org/10.1108/BEPAM-01-2018-0010>
- Kavishe, N., Jefferson, I., & Chileshe, N. (2018). An analysis of the delivery challenges influencing public-private partnership in housing projects: The case of Tanzania. *Engineering, Construction and Architectural Management*, 25(2), 202–240. <https://doi.org/10.1108/ECAM-12-2016-0261>
- Kumar, R. (2011). *Research methodology: A step-by-step guide for beginners* (3rd ed). SAGE.
- Li, Z., & Wang, H. (2024). Institutional quality, economic development, and the sustainable outcomes of PPP projects: An empirical analysis of failed PPP projects in China from 2014 to 2020. *Heliyon*, 10(10), e30977. <https://doi.org/10.1016/j.heliyon.2024.e30977>
- Liu, Y., Wang, X., Zhang, J., & Guo, S. (2025). How risk factors lead to the early termination of public-private partnership projects in China: A multi-case study based on social network analysis and interpretive-structure modeling. *Engineering, Construction and Architectural Management*, 32(2), 824–846. <https://doi.org/10.1108/ECAM-09-2022-0876>
- Lopez, A. M., & Marakas, G. M. (2023). Public-Private Partnership (P3) Success: Critical Success Factors for Local Government Services and Infrastructure Delivery. *Engaged Management Review*, 6(1). <https://doi.org/10.28953/2375-8643.1077>
- Mehkri, U. (2024). Value for money through procurement planning. *South Asian Journal of Operations and Logistics*, 3(1), Article 1. <https://doi.org/10.57044/SAJOL.2024.3.1.2422>
- Muhammad, Z., & Johar, F. (2019). Critical success factors of public-private partnership projects: A comparative analysis of the housing sector between Malaysia and Nigeria. *International Journal of Construction Management*, 19(3), 257–269. <https://doi.org/10.1080/15623599.2017.1423163>
- Mutwii, K. M., & Wachira-Towey, I. N. (2024). Use of Public-Private Partnerships for Provision of Low-Cost Housing in Kenya. *AFRICA HABITAT REVIEW*, 19(2), Article 2. <https://uonjournals.uonbi.ac.ke/ojs/index.php/ahr/article/view/2321>
- Naeem, M., Ozuem, W., Howell, K., & Ranfagni, S. (2023). A Step-by-Step Process of Thematic Analysis to Develop a Conceptual Model in Qualitative Research. *International Journal of Qualitative Methods*, 22, 16094069231205789. <https://doi.org/10.1177/16094069231205789>

- Nawushao, M., Ng'ang'a, V., & Ng'ang'a, P. (2023). Retroductive Theorizing: A Contribution of Critical Realism to Mixed Methods Research. *Journal of Mixed Methods Research*, 17(1), 93–114. <https://doi.org/10.1177/15586898211049847>
- Ngoc, N. H., Lasa, G., & Iriarte, I. (2022). Human-centered design in industry 4.0: Case study review and opportunities for future research. *Journal of Intelligent Manufacturing*, 33(1), 35–76. <https://doi.org/10.1007/s10845-021-01796-x>
- Olojede, B. O. (2024). Public-private partnership procurement transport infrastructure delivery: Assessing the managerial capabilities of public-sector organizations in Africa. *Zeszyty Naukowe. Transport / Politechnika Śląska*, 122, 253–280. <https://doi.org/10.20858/sjsutst.2024.122.14>
- Osei-Kyei, R., & Chan, A. P. C. (2018). A best practice framework for public-private partnership implementation for construction projects in developing countries: A case of Ghana. *Benchmarking: An International Journal*, 25(8), 2806–2827. <https://doi.org/10.1108/BIJ-05-2017-0105>
- Owotemu, A. E., Daniel, C. O., & Abubakar, H. S. (2022). Evaluating the Management of Public Private Partnerships for the Provision of Affordable Housing in Nigeria. *Journal of Service Science and Management*, 15(04), 392–415. <https://doi.org/10.4236/jssm.2022.154024>
- Parakhina, V. N., Vorontsova, G. V., Boris, O. A., Momotova, O. N., & Ustaev, R. M. (2021). *Evaluation Of Public-Private Partnership Models: Methodological Aspects And International Features*. 797–805. <https://doi.org/10.15405/epsbs.2021.07.95>
- Raharja, A. K., Hadiyanto, H., & Maryono, M. (2025). Risk analysis of public-private partnership waste to energy projects: A systematic literature review. *E3S Web of Conferences*, 605, 03024. <https://doi.org/10.1051/e3sconf/202560503024>
- Rindfleisch, A. (2020). Transaction cost theory: Past, present and future. *AMS Review*, 10(1–2), 85–97. <https://doi.org/10.1007/s13162-019-00151-x>
- Samoilov, A., Osei-Kyei, R., Kussaiyn, M., Mamyrbayev, A., & Mukashev, Y. (2024). Cross-Country Comparison of Risk Factors in Public-Private Partnerships in Infrastructure Development: Evidence from Colombia, Kazakhstan, and Ghana. *Sustainability*, 16(13), 5712. <https://doi.org/10.3390/su16135712>
- Soni, P., & Das, A. A. (2023). *Affordable Design Techniques for Housing in India*. 11(8), 12. <https://ijcrt.org/papers/IJCRT2308200.pdf>
- Teklemariam, N., & Harper-Anderson, E. (2025). Social capital and housing at the urban periphery: Lessons from a government-led housing development program in Addis Ababa, Ethiopia. *Journal of Urban Affairs*, 1–19. <https://doi.org/10.1080/07352166.2025.2458542>
- Triest, V. S. (2024). Incentives and effort in the public and private sector. *Public Administration Review*, 84(2), 233–247. <https://doi.org/10.1111/puar.13691>
- World Bank, Y. (2020). *Public-Private Partnerships for Investment and Delivery of Affordable housing in Emerging Market Economies* (p. 96). International Bank

of Reconstruction and Development IBRD. <https://openknowledge.worldbank.org/server/api/core/bitstreams/5c7756b2-9109-5655-afab-43420a257109/content>

Zhao, N., & Ying, F. (2019). Method selection: A conceptual framework for public sector PPP selection. *Built Environment Project and Asset Management*, 9(2), 214–232. <https://doi.org/10.1108/BEPAM-01-2018-0018>

Zulu, E., Mutwale, J., Zulu, S. L., Musonda, I., Kavishe, N., & Moobela, C. (2023a). Challenges, drivers and incentives to private sector participation in public-private partnership projects in developing countries: Evidence from Zambia. *Journal of Engineering, Design and Technology*, 23(2), 386–405. <https://doi.org/10.1108/JEDT-03-2023-0092>

Zulu, E., Mutwale, J., Zulu, S. L., Musonda, I., Kavishe, N., & Moobela, C. (2023b). Challenges, drivers and incentives to private sector participation in public-private partnership projects in developing countries: Evidence from Zambia. *Journal of Engineering, Design and Technology*. <https://doi.org/10.1108/JEDT-03-2023-0092>

Declaration of Conflicting of interest

The author declared no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

Funding

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Annexure

Annex 1 Matrix of Interview Result

Theme	Description	Qualitative data
Transparent procurement	The way private partners selected or engaged in PPP housing	It could be better had it been left to the market, better price or at least competition as an option to invitation
Risk identification	Did the parties get involved in the risk identification, sharing, and setting a mitigation strategy	It is predetermined and presented as a take it or leave it.
Institutional capacity	Capacity to give technical support, prepare feasibility study, risk identification and set mitigation strategy	Technically not much better compared to the private sector. The document preparation, risk identification, left to predetermined offer due to lack of capacity In terms of bureaucratic facilitation and support there were delays