

# Factors Influencing Public–Private Partnerships in Sustainable Infrastructure Development: The Case of Zuway Dugda Woreda

Kedir Burka Edao and Dr. Workenh Eshatuu Sime

## Abstract

*The general objective of this study was to examine the factors affecting public–private partnership (PPP) in infrastructure development for sustainable urban growth, with particular reference to selected projects on climate change adaptation in lowland ecosystems in Arsi Zone, Ziway Dugda Woreda. A descriptive research design was employed. The study used simple random sampling to select employees within the organization, while judgmental sampling was applied to identify key informants involved in the climate change adaptation lowland ecosystem project. Data were collected through structured questionnaires administered to employees and semi-structured interviews conducted with organizational managers and human resource personnel. Both qualitative and quantitative data were gathered and analyzed using SPSS version 25 software. The findings of the study revealed that the implementation of PPP projects in the study area is affected by several challenges, including political instability, economic fluctuations, social constraints, inadequate technological capacity, and legal and institutional limitations. These factors significantly hinder the effective performance and sustainability of infrastructure development projects. Based on the findings, the study recommends that responsible bodies strengthen the performance of PPP initiatives by addressing the identified challenges. This includes improving technological capacity, enhancing stakeholder and community participation, and increasing awareness among communities and relevant actors involved in project implementation. Such measures are essential to ensure the effectiveness and sustainability of PPP-driven urban infrastructure development.*

**Keywords:** Public–Private Partnership, Infrastructure Development, Sustainable Urban Growth, Climate Change Adaptation, Arsi Zone

**DOI:** 10.7176/JESD/17-5-04

**Publication date:** August 30<sup>th</sup> 2026

## INTRODUCTION

### 1.1. Background of the study

According to Degefa (2021), a public-private partnership (PPP) is a long-term agreement between a public party and a private party for the development (or major upgrade or renovation) and management of a public asset (including possibly the management of a related public service), in which the private party provides a substantial portion of the financing at its own risk, bears significant risk and management responsibility throughout the contract's term, and compensation is significantly linked to performance and/or the demand or use of the asset or service in order to align the interests of both parties.

The late 1970s economic crisis led to an increase in the popularity of their adoption. By the late 1980s, PPPs were a well-liked tool for policymakers to employ the resources and experience of the private sector to carry out projects at a lower cost while also boosting performance quality, improving delivery, creating jobs, and upgrading skills (Bertha et al., 2020).

Over the past 20 years, public-private partnerships, or PPPs, have gained a lot of popularity as a governance model to enhance service delivery and carry out significant government infrastructure projects. PPP is a cooperative agreement between the government, the public sector, and a private company to improve the delivery of public services and infrastructure (World Bank, 2017 as referenced by Kefela, 2024).

According to the traditional definition, a public-private partnership (PPP) is a private enterprise or government service that is financed and run by a collaboration between the government and one or more private sector businesses (UNDP, 2015 as quoted by Kefela, 2024). As creative management and funding methods for the provision of public services and the creation of contemporary infrastructure for sustainable development, public-private partnerships (PPPs) have garnered significant attention and popularity on a global scale (Twinomuhwezi & Herman, 2020).

Deeper understanding of the variables influencing PPP performance in sustainable building projects is possible through the integration of theoretical frameworks. According to Asuamah Yeboah's Resource Dependency Theory (RDT) (2024), in order to close resource gaps in developing nations, public organizations must rely on private sector resources including capital, technology, and knowledge. Partnerships are fueled by this dependence, but it also necessitates rigorous negotiation to balance public and private interests (Asuamah Yeboah, 2024).

PPP management is a complicated and multifaceted process that necessitates a deep comprehension of the technical, financial, and legal facets of every PPP project. Each PPP has a "Project Cycle," which comprises the various phases and stages that must be carried out from the beginning of the Project Preparation Period to the conclusion of the Project Term. Additionally, the governments of emerging nations have come to understand that their efforts are insufficient to solve their social and economic problems. The lack of public funding in many developing nations is another contributing reason; inviting and encouraging the private sector to join is the most practical option (Dirane, 2021). Therefore, this study was attempt to examine Factors Affecting the Public-Private Partnership In Infrastructure Development For Sustainable Urban Growth On A Selected Projects; The Case of Climate Change Adaptation Low Land Eco- System In Arsi Zone Zway Dugda. and also tries to analyze the gaps in the importance of infrastructure development in Arsi Zone Zway Dugda.

## 1.2. Statement of the Problem

Governments understand that their residents and businesses will continue to demand greater infrastructure access and services because they anticipate that infrastructure will increase economic productivity and quality of life. Infrastructure leads to more inclusive and higher economic growth. However, the growing economic load is also making it difficult for governments to obtain funding for infrastructure development. According to Suk Hyun and Donghyun Park (2018), both the public and private sectors lack the resources necessary to construct infrastructure and manage the associated hazards.

Traditionally, the public sector has been responsible for providing fundamental infrastructure like roads and airports as well as specialized services like defense, security, education, and health. However, the private sector is hesitant to supply fundamental infrastructure like roads or airports as well as specialized services like military, security, education, and health. However, due to factors including lack of profitability, lengthy building and operating times, high capital costs, and the need for roads and airports, the private sector is hesitant to contribute infrastructure. However, because to low profitability, lengthy construction and operation times, high capital requirements, and a difficult appraisal procedure, the private sector is hesitant to supply infrastructure. (Suk Hyun, Donghyun Park, 2018).

In order to achieve future national policies and international treaties, urban housing developers in today's cities must gain a deeper understanding of the relationship between ecological and social sustainability and Public-Private Partnership (PPP). Due to excessive energy use, cities today are accountable for 75% of global emissions, putting them at danger of experiencing the worsening effects of climate change (Fell & Mattsson, 2021).

As a prior study by (Akinola et al., 2024) the result revealed that there are numerous potentials to increase its adoption for effective housing delivery in Oyo State, Nigeria. Meanwhile, governments at all levels in Nigeria have traditionally been the only financiers of infrastructure projects, and they have frequently been in charge of implementation, operations, and maintenance. However, due to the unstable nature of budgetary financing, the emphasis has shifted to PPP. If the United Nations Agenda 2030 is to be achieved, all levels of government must actively participate in partnership with the private sector in the construction of suitable infrastructures that will satisfy the emerging rise in population within their domain. The decreasing state involvement in housing production, the inability of traditional housing finance options to support low-income households, and the lack of alternative financing strategies to supplement the incremental self-build practices that continue to limit low-income households' ability to meet their housing needs are all issues that need to be addressed. Working with private organizations is essential as the government alone cannot meet the entire demand for housing. And also the lack of planning for risk management causes increased project implementation costs, risks of shortfall such as unexpected economic conditions, and other major risks.

As a prior study by (M. N. Haque et al., 2020) revealed that Despite some challenges such as awarding PPP contracts without a competitive tendering process, this PPP project has taken Khulna a step forward to achieve SDGs. This study can serve as a reference for making a long-term sustainable plan for the implementation of

PPP in road medians across the country. Finally, the outcome of this research could influence the policy-making process to make local level PPP success in many other sectors/ areas in Khulna or elsewhere to achieve SDGs. Therefore, this research was proposed to evaluate the Factors Affecting the Public-Private Partnership In Infrastructure Development For Sustainable Urban Growth On A Selected Projects; The Case of Climate Change Adaptation Low Land Eco- System In Arsi Zone Zway Dugda. Moreover, it was planned to fulfill the existing gaps by assessing the Factors Affecting the Public-Private Partnership In Infrastructure Development For Sustainable Urban Growth On A Selected Projects in the study areas.

### **1.3. Objective of the study**

#### **1.3.1. General objective of the study**

The General Objective of this study was to Examine Factors Affecting the Public-Private Partnership in Infrastructure Development for Sustainable Urban Growth on A Selected Projects; The Case of Climate Change Adaptation Low Land Eco- System in Arsi Zone Zway Dugda woreda.

#### **1.3.2. Specific objective of the study**

1. To assess The Role of Public- Private Partnership In sustainable urban growth at Arsi Zone Zway Dugda Woreda.
2. To examine the success factors of Public- private partnerships in Sustainable Urban Growth at Arsi Zone Zway Dugda Woreda.
3. To assess the challenges in `public- private partnerships in infrastructure development at Arsi Zone Zway Dugda Woreda.

### **1.4. Research question**

1. What are the Role of Public- Private Partnership In sustainable urban growth at Arsi Zone Zway Dugda Woreda?
2. What are the success factors of public- private partnerships in Sustainable Urban Growth at Arsi Zone Zway Dugda Woreda?
3. What are the challenges in public- private partnerships in infrastructure development at Arsi Zone Zway Dugda Woreda?

### **1.5. Significance of the study**

This study was significant for the government, employee in the workplace, community, and students which were used as a reference the benefits of the study based on the findings assess 1) provide the necessary information about the trends of the role of public- private partnerships, 2) provide information about the extent of improved infrastructures problems for the success of the organization, 3) it May be used as an input for policymakers to provide guides for the role of public- private partnerships in sustainable urban growth in general. In addition to this it can be used as a reference for the coming researcher based on the analysis of the study.

### **1.6. Scope of the study**

The scope of this study was focused on the Factors Affecting the Public-Private Partnership In Infrastructure Development For Sustainable Urban Growth On A Selected Projects; The Case of Climate Change Adaptation Low Land Eco- System In Arsi Zone Zway Dugda.. Whereas, the spatial scope of the study was limited to the Arsi Zone Zway Dugda Woreda was used as a study site for this research. The reason why this Arsi Zone Zway Dugda Woreda was selected is due to the existence of abundant Infrastructure development was existed for different purposes.

## **1.7. Organization of the paper**

Generally, the paper encompasses five major parts. The first chapter outlines the introduction part, which comprises the background of the study, problem statement, research objectives, research question, significance, scope, and limitation of the study. The second chapter presents a literature review under theoretical literature and empirical and best practices on employee turnover on organizational performance. The third chapter covers the research methodology to be used in the study.

## **LITERATURE REVIEW**

### **2.1. Introduction**

#### **2.1.1. Overview of Infrastructures Development in Ethiopia**

In many parts of the world, infrastructure is essential to the process of growth. Economic growth brought about by infrastructure development improves a nation's wellbeing and reduces inequality (Babu, 2021). For various developing economies in Africa, Latin America, and Asia, increased infrastructure development can boost economic growth by at least 2% annually (Babu, 2021). Therefore, investing in sustainable infrastructure would guarantee the success of international efforts to achieve the Sustainable Development Goals (SDGs), such as constructing dependable and long-lasting regional infrastructure to facilitate rural populations' access to basic resources and to advance economic development. The relationship between Ethiopia and China serves as an example of how infrastructure development is crucial in determining economic diplomacy. The historical background, development of diplomatic relations, and effects of infrastructure projects on economic diplomacy between the two countries are all examined in this essay (Yiblet, 2024).

Infrastructure refers to the fundamental tools and buildings, such roads and bridges, that are necessary for a nation, area, or organization to operate effectively. By boosting productivity and offering services that improve people's quality of life, infrastructure supports economic growth. Increased agricultural output from farmers through better roads, the development of sea ports, rail connections, electrical generation, transmission and distribution of water, and irrigation projects, as well as an improvement in the quality of life and urbanization of various areas, are all examples of the services produced by an adequate infrastructure base that will lead to an increase in aggregate output (Gaal, 2017).

#### **2.1.2. Importance of infrastructure Development**

To achieve sustainable socioeconomic growth throughout Africa, infrastructure development is crucial. The international agenda has long included the development of resilient infrastructure and the promotion of sustainable industrialization, which was initially acknowledged as a crucial prerequisite for raising living standards in the Millennium Development Goals (MDGs). Building resilient infrastructure, encouraging inclusive and sustainable industrialization, and stimulating innovation are all important goals of the Sustainable Development Goals (SDGs), which are a continuation of the MDGs. By mitigating potential negative environmental and social externalities, generating jobs, enhancing economic activity and connecting markets, and lowering production costs through improvements in transportation and connectivity, sustainable infrastructure development can help reduce poverty and promote inclusive economic growth (Grabbelaar, 2020).

There is no denying the advantages of infrastructure development.<sup>1</sup> In general, infrastructure offers services that are included in residents' consumption bundles; it increases labor and capital as inputs in the production process (Nnadozie, 2016); it propels societal advancement by encouraging human development; and it improves residents' quality of life through increased productivity and sustainable economic growth.

#### **2.1.3. Impact of Infrastructures in Economic Growth**

Many earlier studies have looked into how infrastructure affects economic growth, frequently concentrating on vital infrastructure like telecommunication, transportation, and energy. Infrastructure development is essential to the nation's development, according to most of these research on infrastructure and economic growth. Some recent research examines the significance of the connection between infrastructure and economic growth. For example, Ali (2023) used an equilibrium panel to examine the causal relationship between economic growth and air travel in the BRICS countries between 1993 and 2019. The long-term outcome demonstrated the significance of air travel for economic expansion. In a similar vein, the study discovered that the short-term significance of air travel is determined by these nations' economies (Waberi & Waberi, 2024).

#### **2.1.4. Overview of Public- Private Partnerships**

PPPs are frequently used to refer to agreements made in a variety of activities involving various public and private sector entities. As of right now, there isn't a single, globally accepted definition, and different countries have different implementation guidelines and names for the same kind of agreement (Wang, 2020).

The World Bank (2014), cited in Degefa (2021), defines a public-private partnership (PPP) as a long-term agreement between a public party and a private party for the development (or major upgrade or renovation) and management of a public asset (including possibly the management of a related public service), in which the private party provides a significant portion of the financing at its own risk, bears significant risk and management responsibility throughout the contract's term, and compensation is significantly linked to performance and/or demand or use of the asset or service in order to align the interests of the public and private parties.

There is currently no accepted definition of PPP. According to (Barasa, 2023), PPP entails two parties—the public and private sectors who create plans for the delivery of community facilities, public infrastructure, and other services. She points out that the agreements are typified by the state and private sectors sharing investment, risks, duties, and benefits. The finance, planning, construction, operation, and maintenance of public goods are the most significant aspects of sharing (Barasa, 2023).

#### **2.1.5. The Role of Public- Private Partnership In Infrastructure Development**

According to Megerssa (2023), PPPs offer a framework that, while involving the private sector, recognizes and organizes the government's responsibility in guaranteeing that social obligations are fulfilled, sector changes are successful, and public investments are made. Tasks, responsibilities, and risks are distributed among the public and private partners in an efficient manner by a robust PPP. Governmental organizations, such as ministries, departments, municipalities, or state-owned businesses, are the public partners in a PPP. Local or foreign companies or investors with financial or technical know-how pertinent to the project may be among the private partners.

Nongovernmental organizations (NGOs) and/or community-based organizations (CBOs) that represent stakeholders directly impacted by the project are increasingly being included in PPPs. As a result, the public and private sectors play complementary roles in utilizing their strengths, resources, and experience to achieve the objectives of both sectors under the proper circumstances and structuring. Accordingly, PPP establishment and proper operation depend on a favorable macroeconomic climate (Kwame, 2017).

The importance of public-private partnerships in creating sustainable cities has been examined by numerous scholars. (Patrose Leshinka; Moffat Tembo, 2023) claim that PPP has the capacity to address the issue of unsustainable urban development and that the best way for PPP to develop into a future guarantee of a sustainable city is through resident engagement and inclusion. (Patrose Leshinka; Moffat Tembo, 2023) highlight the necessity of implementing a methodical strategy that links with important sustainability concepts and is used early in the process and continues throughout the PPP lifetime. They also advise public and private actors driven by corporate social responsibility to dedicate themselves to the system in order to promote sustainability through innovation and openness. PPP projects assist the nation in a number of ways, including enhancing the urban environment and technological infrastructure, stabilizing the energy supply, and raising people's standard of living (Toan & Hai, 2023). PPP's contribution to Ethiopia's urban expansion includes;

##### **2.1.5.1. Infrastructure Development**

PPPs are utilized to develop essential infrastructure such as roads, transportation systems, utilities (water supply, sewage, and management of solid waste), and affordable housing. Private sector participation helps in leveraging expertise, technology, and funding to accelerate the development process.

##### **2.1.5.2. Service Delivery**

Private sector participation is instrumental in delivering services efficiently and innovatively. This includes the provision of smart solutions for utilities management, public transportation, e-governance, and citizen services. PPP models ensure better service quality and accountability through performance-based contracts.

### **2.1.5.3. Technology Implementation**

PPPs facilitate the integration of advanced technologies into urban infrastructure and services. This involves collaborations with private technology firms to deploy smart solutions for energy management, surveillance systems, traffic management, and environmental monitoring. Private sector expertise in technology deployment enhances the efficiency and effectiveness of urban services.

### **2.1.5.4. Financing**

PPPs make it easier to raise private funds for smart city projects, which relieves financial strain on public coffers. Build-Own-Operate-Transfer (BOOT) and other public-private partnership models, such as Build-Operate-Transfer (BOT), are two of the many ways that both domestic and foreign private investors finance projects. These partnerships enable creative financing structures such as revenue-sharing agreements, municipal bonds, and Special Purpose Vehicles (SPVs).

### **2.1.5.5. Governance and Regulation**

In smart cities, PPP models prioritize responsible and transparent government mechanisms. Regulatory procedures provide performance monitoring, risk allocation, dispute resolution, and adherence to legal and contractual duties. In order to enable the successful implementation of PPPs, the government is essential in providing institutional capacity building, regulatory monitoring, and policy support. PPPs are crucial to the development of smart cities in India because they encourage cooperation between public and private organizations to address urban issues, spur innovation, and enhance the quality of life for residents.

## **2.2. Public- Private Partnerships Approaches**

PPP approaches are divided into four categories: (1) empirical substance, which includes policy sector studies, local regeneration projects, third world development, and financial infrastructure schemes; (2) type of actors, which includes government, business, non-profit, local organizations, or donor countries; (3) organizational characteristics, which include formal contracting or loose organizational arrangement; and (4) others based on less theoretical assumptions, which lead to more explanatory or descriptive formats (Barasa, 2023). The study concentrates on third-world development strategies, financial infrastructure, and local revitalization for the goals of this article. In terms of local development projects, the former focuses on collaborations between corporations and local government. Town home planning and urban use of public land initiatives fall under this category. Here, the emphasis is on shared interests between private companies and local government agencies when cooperative initiatives are being established. The partnerships in this situation are more ad hoc and less structured.

The construction of physical infrastructure based on assets is the main focus of the financial infrastructure strategy. Design, construct, finance, operate, and maintain (DBFOM) and build, own, operate, and transfer (BOOT) are the domains of joint cooperation. It is limited to building plans. The third world development model emphasizes collaboration between national governments and international non-governmental organizations (NGOs) in the areas of economic, institutional, medical, and humanitarian help (Barasa, 2023).

Weihi contends that the literature has at least five qualitatively different approaches: First, there is the custom of using the PPP idea interchangeably with constellations and public-private ties in a particular sector; that is, the policy approach. Second, there is a unique body of literature that discusses PPP in connection to local economic development—the local regeneration method. Thirdly, there is the infrastructure approach, in which PPP is used interchangeably with private capital infrastructure projects and the bundling of, for example, the design, construction, operation, and maintenance of infrastructure projects. This kind of PPP is really covered in a lot of current PPP literature. Fourth, there is the governance approach, which shares many similarities with the policy method. Instead of providing a precise definition, PPP is discussed from a governance standpoint. It is viewed as a logical progression or continuation of the New Public Management that has dominated public bureaucracies during the previous 20 years. Contracting out, strategic partnerships, entrepreneurial collaborations, and private sector ownership in state-owned firms are just a few examples of the many ways that the private sector might participate in the provision of public goods and services. The fifth strategy is the development approach, which addresses PPP in terms of capacity building and development in less developed nations. The paper continues by stating that it is essential to use approach-specific PPP typologies in addition to situating oneself within a particular PPP approach. This will improve analytical clarity and allow for more appropriate generalizations about PPP's operation and advantages and disadvantages (Megerssa, 2023).

| Approach                 |                                                       |                                                                                                                |                                                                                                                       |                                 |
|--------------------------|-------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|---------------------------------|
| Focus                    | Development                                           | Delineating and                                                                                                | Infrastructure                                                                                                        | New                             |
|                          | of local economies, weak local economies              | evaluating the public-private divide in policy sectors, the respective roles of the public and private sectors | projects; predominately from a financial or legal perspective                                                         | deli pub                        |
| <b>Definition of PPP</b> | No specific definition                                | No specific definition                                                                                         | The bundling of the finance, design, construction, maintenance and operation of infrastructure projects <sup>26</sup> | No defi                         |
| <b>Central issues</b>    | Economic development, issues of democratic legitimacy | The optimal public-private constellation in different policy sectors                                           | Contract negotiations and financial aspects, ideological debates, democratic legitimacy                               | Org and mar issu con coo mo gov |

Source: (Megerssa, 2023).

### 2.3. Models for Public- Private Partnerships

According to (N. Haque et al., 2025) has outlined five partnership models including the autonomous model, the independence model, the globalization-convergence model, the hybrid model, and the elite model. Each of these models includes alternative premises, strategies and global frameworks. However, the bedrock elements of any form of a partnership are mutual dependence, respect, and trust, as well as accountability and transparency (N. Haque et al., 2025). Therefore, partnerships can take many forms of collaboration; partnerships with businesses, academia, NGOs, and international organizations.

PPP projects can be implemented through various funding models including the following: Buy-Build Operate (BBO), Build-Own-Operate (BOO), Build-Own-Operate-Transfer (BOOT), Build-Operate Transfer (BOT), Build-Lease-Operate-Transfer (BLOT), Design-Build-Finance-Operate (DBFO), Finance Only, Operation & Maintenance Contract (O&M), Design-Build (DB) and Operational License (Tshehla, 2018). The choice of each model depends on the risk profile for each project. The adoption of each model requires a governance structure that will enforce effective contracts management and performance (Tshehla, 2018). According to the authors, the requirement for monitoring and contracts management should be fully understood and addressed for each concession.

### 2.3.1. PPP Model Characteristics

| PPP Type                                                                                                 | Characteristics of PPP Type                                                                                                                                                                                                                                                                                                                                                                    |
|----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Buy-Build-Operate (BBO)<br>Buy-Conserve-Operate (BCO)                                                    | <ul style="list-style-type: none"> <li>Private sector buys the tourism assets outright.</li> <li>Strict requirements of maintenance and conservation standards.</li> </ul>                                                                                                                                                                                                                     |
| Build-Own-Operate-Transfer (BOOT)<br>Build-Lease-Operate-Transfer (BLOT)<br>Build-Operate-Transfer (BOT) | <ul style="list-style-type: none"> <li>The agreement empowers the concessionaire to use public assets for building projects, empowers it to levy and collect user charges.</li> <li>When the terms of lease are fulfilled, ownership is transferred back to the public sector.</li> <li>Government always remains responsible and accountable for delivery of service to the users.</li> </ul> |
| Design-Build-Finance-Operate (DBFO)<br>Conserve-Build-Finance-Operate (CBFO)                             | <ul style="list-style-type: none"> <li>Applicable to large scale projects where private sector is responsible for construction or additional of new structures and the financing and operation of both.</li> </ul>                                                                                                                                                                             |
| Finance Only                                                                                             | <ul style="list-style-type: none"> <li>Projects funded directly by private sector or uses long-term leases or bonds.</li> </ul>                                                                                                                                                                                                                                                                |
| Operational License                                                                                      | <ul style="list-style-type: none"> <li>Private or third party operates a service under contract or license for a fixed term, but the asset remains in government ownership.</li> </ul>                                                                                                                                                                                                         |

**Source:** (Tshehla, 2018).

### 2.4. Challenges of PPPs in infrastructure development

Infrastructure development may face political, economic, social, technological, legal, environmental, and safety difficulties, according to the PESTLES analysis (Sa & Boyi, 2021). Political stability, the creation of policies, and the politics of the project environment both internally and externally are all related to the political environment. Interest rates, inflation, currency exchange rates, price fluctuations, and other challenges are all part of the economic environment. Diversity in the workforce, including cultural and age differences, is influenced by the social environment. The machinery required to carry out tasks is a part of the technology environment. Topography, geology, and climate are examples of physical environmental factors that are crucial. Health, safety, and the security of the site's resources—human, material, and financial—are all related to safety issues.

PPPs, however, have been seen as the solution to the world's infrastructure financing problem. They have their own benefits and difficulties in the South's developing nations. In a 2015 study on PPPs, AFRODAD and its partners Eurodad and Landad found that PPPs frequently have more detrimental effects than beneficial ones. Using standards for budgetary affordability, service delivery efficiency, poverty reduction, combating inequality, and democratic and transparent project management frameworks, it was discovered that:

#### 2.4.1. PPPs are an expensive method of financing that increases costs to the public purse

The business sector's desire for profit has clashed with the social compact that governments have with their citizens about the provision of reasonably priced essential services during the planning and execution of PPPs. According to EURODAD's 2015 assessments, PPPs are costly and dangerous, have inconsistent development outcomes, are challenging to negotiate, are tainted by subpar project selection and design, and typically lack

accountability and transparency. Alongside this is the worry that most African projects do not show up on national public accounts, have a currency mismatch due to borrowing, and have difficult payback terms. currency, but local currency is used for project income, government revenues, and/or tax transactions. Local currencies usually weaken in relation to hard currencies over the course of projects, and this, coupled with other variables, may cause African projects to default, which will result in termination and accumulated debts. Local currency financing, service and/or off-take payments in local currency, and the inclusion of highly liquid local capital markets like insurance and pension funds that want long-term assets to meet their long-term commitments must all be carefully considered. The Queen Mamo Hato Hospital in Lesotho serves as an example of how PPPs affect the public coffers. In 2016, Tsepong Private Limited, the private partner, "invoiced" fees totaling twice the "affordability threshold" that the government and the World Bank had established at the beginning of the PPP. The government's unitary fee to Tsepong was estimated to be US\$12.9 million (M180 million), but it ended up paying US\$18.4 million (M255.6 million) due to poor forecasting and incorrect indexing of the annual fee.

#### **2.4.2. The evidence of impact of PPPs on efficiency is very limited and weak with challenges in reducing poverty and inequality**

In the areas of transportation, energy, water, and sanitation, PPPs have been crucial to the development of infrastructure. Even though the infrastructure has been widely praised for fostering economic efficiency within economic development, there have been some difficulties along the way, particularly for the general public who have had to foot the bill for contractual obligations by paying service fees like tolls, water rates, and levies for health and education out of their own pockets. Individuals who are unable to pay these fees are automatically denied access to the services, either directly or indirectly, which violates their human rights to safe portable water, basic housing, education, health care, and a healthy life.

#### **2.4.3. Implementing PPPs poses important capacity constraints to the public sector, particularly in developing countries**

The private sector and financial markets are already tough for African governments to regulate, and their efficacy is low. Inadequate legislative and regulatory frameworks, as well as the necessary technical expertise to run PPPs, are characteristics of some of their administrations. In most African nations, PPP projects are more costly due to limited infrastructure and financial markets.

#### **2.4.4. PPPs suffer from low transparency and limited public scrutiny, which undermines democratic accountability and leads to corruption and illicit financial flows.**

The majority of low-income nations' PPP implementation is marked by a lack of public consultation and engagement. As a result, the impoverished and marginalized are either left out or ignored because their governments find it difficult or careless to include them in the policy-making process. Because of this, PPPs don't really help the underprivileged and disenfranchised. One of the reasons for criticism of PPPs' long-term social impact is their lack of transparency, which results in little public scrutiny and involvement.

### **2.5. The policy Framework Governing PPP in Ethiopian**

The term "policy" often refers to "the general principles by which the government is guided in its management of public affairs." Therefore, the basic guidelines that direct the government's management or administration of PPP-related issues constitute PPP policy. To put it another way, PPP policy is a statement of the reasons why the government wants to employ PPPs to provide public services, including the program's goals, parameters, and guiding principles. Hafa (2023). Ethiopia did not have a detailed PPP policy paper until 2017. Before 2017, various Ethiopian development strategy documents had policies that demonstrated the government's commitment to collaborate with private partners. The Plan for Accelerated and Sustained Development to End Poverty (PASDEP), the Growth and Transformation Plans (GTP), the Industrial Development Strategy, and the Rural Development Policy are all worth mentioning in this context.

In order to secure and grow markets for agricultural products, the Rural Development strategy paper acknowledged the significance of building an alliance or cooperation between farmers and private investors, particularly in the agricultural sector. The strategy states that "all sorts of efforts shall be done to find private companies with high level of experience in agricultural development and attract them to come and work with farmers in partnership." This strategy document even went so far as to say that a contractual agreement between farmers and private investors might be used to carry out this cooperation.

The policy for rural development only discusses collaboration between farmers and private investors. Put another way, it doesn't address PPPs—partnerships between the public and private sectors. In a similar vein, the Industrial Development Strategy emphasizes the importance of public-private collaboration in achieving the goals of the strategy. In order to achieve the intended policy goal, the Strategy declared that "the government shall work with private investors in a more collaborated manner and partnership." The PASDEP asserts that the public is becoming more supportive and aware of the private sector and recognizes the growth, variety, and expansion of program activities and areas of public interaction. Additionally, PASDEP acknowledges the critical role non-governmental groups play in the fight against poverty.(Hafa, 2023).

In terms of Ethiopia's PPP policy framework, 2017 is a significant year. As previously mentioned, in August 2017, Ethiopia created a restrictive policy document known as the Policy for the Use and Implementation of PPPs (henceforth referred to as the PPP Policy). The PPP Policy states that the development of a policy on PPP arrangements was motivated by the infrastructure gap, the need for investment, and economic stability. According to the PPP Policy, it is prudent and essential to include the private sector in infrastructure services because Ethiopia's infrastructure construction projects cannot be carried out solely by the government (Hafa, 2023).

## **2.6. Key issues underpinning the performance of PPPs**

According to Chowdhury et al. (2016), the main goal of a PPP from a public policy standpoint is to increase the effectiveness and quality of a particular service provided to the citizen. It would also have the advantage of drawing private funding to public services, which would free up public funds for other vital projects and relieve long-term financial strain. The efficacy and feasibility of PPPs vary widely among activities and industries, as this section demonstrates, and these gains have frequently not been realized. It is essential that nations have the institutional capacity to design, oversee, and assess PPPs, particularly in light of alternative funding sources, in order to guarantee that PPPs are an efficient means of delivering crucial services, like infrastructure. This would necessitate help from the international community in the form of capacity building and technical support for several emerging nations.

## **2.7. Assessing the value for money of PPPs**

A PPP must offer value for money (VfM) in order to be justified. This term must be interpreted as broadly as feasible. Fundamentally, VfM would consider both the cost of a PPP and the quality of service; in order for a PPP to be justified, it would have to outperform public sector services in these areas. However, the terms "cost" and "quality of service" need to be interpreted more broadly, with the former considering a project's financing, transactions, and operational costs as well as its longer-term fiscal implications (including the risks of any contingency liabilities), and the latter taking into consideration efficiency gains as well as the social, economic, and environmental goals embodied in the 2030 Agenda for Sustainable Development (Chowdhury et al., 2016).

## **2.8. The Success factors of Public-Private Partnership in Infrastructure**

It is clear that PPP creates a formalized relationship and interaction between private and public players in order to accomplish predetermined objectives. Each party in this partnership has different interests, and the comparative advantage is balanced to achieve efficiency and effectiveness in service delivery. The need to increase program performance efficiency through improved service delivery is what motivates the public sector. This is supported by reduced risk and expense for the public coffers while creating an atmosphere that is conducive to the private sector's efficient operation (Kwame, 2017). have also demonstrated that the provision of infrastructure is linked to a variety of hazards, which are essential to the structure and success or failure of PPP formation in infrastructure provision. Project default, financial, operational, political, and legal hazards are some of these concerns. In addition, it has been determined that the infrastructure industry has monopolistic characteristics, necessitating a strong institutional and regulatory framework to support its growth.

## **2.9. Public-Private Partnership Guidelines**

(IP3, 2009) referenced by (Megerssa, 2023) Establishing rules for the planning, approval, and awarding of PPP agreements fosters a predictable environment that encourages participation from private partners. Standardized guidelines have helped governments carry out e-government PPP projects successfully in a number of key areas, including project identification and selection, project prioritization, project feasibility studies, project preparation, project approval and process, and project procurement guidelines. The net value that a government obtains from a PPP project is measured by "value for money" (VfM). The evaluation of VfM aids the

government in determining whether a project should be carried out as a PPP and how much funding it should give it. Given the many and evolving ideas of "value" that the government would seek to access through PPP, evaluating VfM is both an art and a science.

**Approval procedure:** A PPP project will be subject to several approval procedures. Approvals aid in bringing up important concerns and queries while the project is being prepared. They are crucial for quality assurance as well as gaining support from many organizations, giving investors more ownership and assurance. However, the process may become more difficult due to these layers of several agencies having approval authority. To expedite the investment process, lower the cost of approvals, and enable effective application and approval, these approval procedures should be simplified as much as possible. Government fiscal risk management authority, sector regulator, and sector line ministry Among the important parties with approval rights and the stages of the project process where approvals are typically needed are the environmental agency and the procurement agency. Following pre-feasibility and feasibility studies, project preparation, the procurement procedure for PPP projects, and the implementation and monitoring of PPP projects, the government can support project preparation and implementation through the Procuring and Implementing Transactions approach.

## **2.10. Empirical Literature Review**

According to the study of (Oleo et al., 2015) entitled on The influence of the institutional environment on public-private partnership transport projects. The objective of this paper is to analyze the influence of institutional environment on the investment carried out through public-private partnerships in middle-and-low income countries for the period 1996–2011. Public-private partnerships (PPP) have become a key tool in the provision and management of transport infrastructure projects providing countries access to the necessary financial resources for infrastructural needs. Despite the increasing number of PPP projects implemented in many countries, there are factors that hinder development of these projects. One of these factors is the weakness of the institutional environment, particularly in developing countries. To date, few empirical studies have analyzed the effects of public institutions on PPP projects, despite the relevance of this issue.

According to the study of (Megerssa, 2023) entitled on Practice and Challenges of Public-Private Partnership for a Unified Billing System in Addis Ababa. This report presents findings from a study of the practice and challenge faced by public and private sector in adapting and implementing public-private partnership (PPP) in the unified billing system of Addis Ababa. It assesses the contextual and operational level of conditions for public-private partnership as development strategy. The research is an explorative research type and it is multiple case study and dominantly qualitative nature with some use of quantitative research design formats. The study used a mixed data which is qualitative and quantitative type to explore the challenge and practices faced in adapting and implementing PPP in unified billing system and illustrate the future research area for farther research. A total of 103 questioners were distributed for those purposively selected employee of kifiya financial technology plc which is a private partner and out of which 102 of questioner has filled and returned in time manner. Also 16 closed ended questioner which were used as a key informant for utility organization Ethio telecom, Addis Ababa. The study revealed that the current conditional level of public private partnership lacks having Favorable legal framework, lack of government guidelines and procedures, Prevalence of dedicated institution, well organized and committed public agency, aggressive risk transfer of government & un clear and Substantial technical, operational and financial risk transfer method to the private party are identified as major challenge in adapting and implementing public private partnership approach as developmental strategy. However, currently adapted and implemented public-private partnership has created a chance to leverage private partner expertise, knowledge, capital investment and created an employment opportunity to the city.

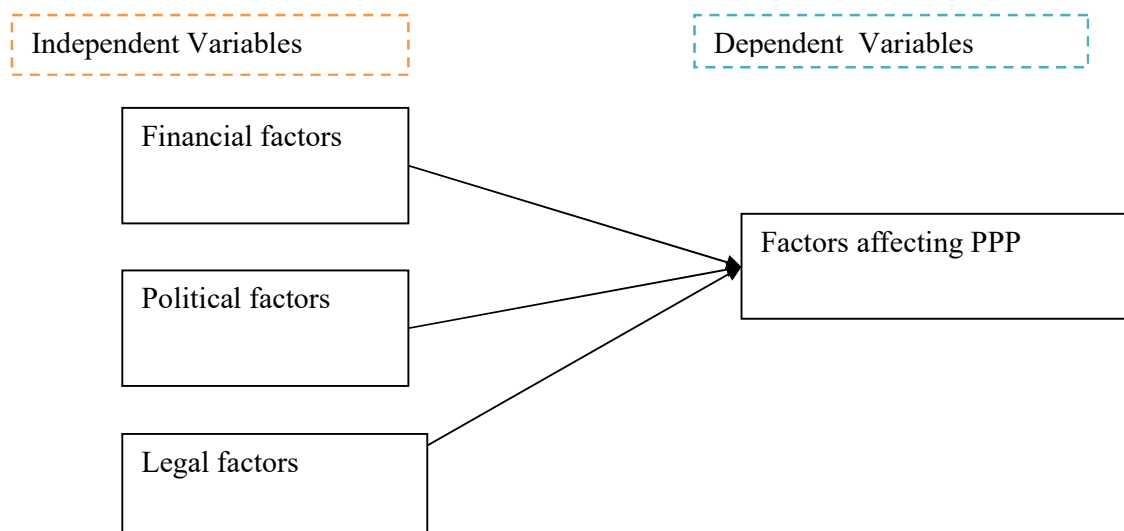
According to the study of (Mundonde & Makoni, 2023) entitled on Public private partnerships and water and sanitation infrastructure development in Zimbabwe: what determines financing? The study applied Tobit regression methodology on data collected for the 25 years ending 2021 to investigate determinants of financing water sanitation PPPs in Zimbabwe. Tobit regression method is preferred given the censored nature of the investment values of water and sanitation public private partnerships that reached financial closure in Zimbabwe. Results In Zimbabwe, financial market development is a key financing determinant of water and sanitation public private partnerships. Both the capital and bank market development influences infrastructure financing in Zimbabwe's water and sanitation sector. Moreover, foreign direct investment negatively and significantly relates with water and sanitation public private partnership investments.

According to the study of (Wibowo, 2015) entitled on Determinants of Public-Private Partnerships in Infrastructure Provision: Evidence from Muslim Developing Countries. This paper investigates the determinants of private involvement in public infrastructure provision in Muslim developing countries. The issue is considered

important due to the persistent gap between the demand for and supply of public infrastructure in most of the Muslim developing countries. In this regard, an important infrastructure provision scheme increasingly utilised by the developing nations is Public-Private Partnership (PPP). Nevertheless, the policy outcomes of this scheme are diverse. Hence, when such schemes are implemented in those countries, improvements in public infrastructure and higher achievements in development expected from the policy seem to be limited. Based on that perspective, this study employs advanced panel estimators to develop a cross-country analysis of private finance determinants in 48 Muslim developing countries for the period 2002-2011. The findings suggest that market conditions, institutional qualities and country risks are the most crucial factors determining the private involvement in infrastructure financing in the Muslim countries. It is hoped that the findings will encourage policy-makers in these countries to prioritise this agenda in their efforts to attract private investment in public infrastructure, which in turn will contribute to higher economic growth and better development in the Muslim region.

According to the study of (Straub, 2021) entitled on The Impact of Public-Private Partnerships (PPPs) in Infrastructure, Health and Education. This paper summarizes what is known about the impact of public-private partnerships (PPPs) in the three sectors where they have been used intensively: infrastructure (energy, transport, water and sanitation, and telecommunications), education, and health. It lays out the main elements of economic theory relevant to analyzing the trade-off between PPPs and the public provision of complex projects. It places PPPs within a historical perspective. It reviews empirical evaluations of the effectiveness of PPPs and, whenever possible, the implications for social outcomes. Finally, it draws conclusions on cross-cutting issues that influence the efficiency of PPPs, from contract design and regulation to renegotiations and institutional issues. The paper straightens out and qualifies the record of existing evidence and signals some of the main areas and topics for future fruitful research.

## 2.11. Conceptual Framework



Source; Developed by Researcher (2026)

## RESEARCH METHODOLOGY

### 3.1. Introduction

This section was consist of description of study area, research design, sources of data , data collection tools sampling techniques, data analyzing tools and ethical consideration

### 3.2. Research Design

According to (Leedy & Ormrod, 2010), the research design is defined as the plan and structure of investigation and how studies are put together. According to (Leedy & Ormrod, 2010) descriptive survey involves acquiring information about one or more groups of people by asking them questions and tabulating their answers. It also further explained the ultimate goal of survey research design is to learn about the large population by surveying their representative sample and summarizing those using statistical tools. Descriptive design is the most economical method of obtaining information; it is not time taking to collect data; and drawing inferences about a particular population from the responses of the sample would be possible (Leedy & Ormrod, 2010). Therefore, in this study Quantitative and descriptive research designs was used. Quantitative phenomena were described quantitatively and information with non-numeric which is important for making critical business decisions that are necessary for the growth of any organization.

### 3.3. Research Approach

The quantitative approach was used for numerical data whereas the qualitative was used for non-numeric data. A qualitative approach is concerned with the assessment of the attitudes of people and helps to analyze various factors which make them like or dislike (Mukoka et al., 2020). Therefore, the study was conducted by using both quantitative and qualitative approaches because it helps to collect diverse types of data that provide reliable information and to generalize the result.

### 3.4. Sources of Data

To achieve the future objective of the study, the important data required for this study was collected both from primary and secondary sources of data. I was collected the primary data from expert's key informant interviews, and questionnaires for this study. Was collected the secondary data from the internet, books, journals, reports, and different documents available online.

#### 3.4.1. Primary Data

For this study was collected the primary sources of data from distributed through questionnaires and interviews; collection permission was obtained from my supervisor, the head of the department, and the authors of the scales. The questionnaires interview will be created for data collection permission, which I was obtained from all the relevant authorities of the organizations through a physical approach. After explaining the nature and aim of the research, participants were identified by exclusion and inclusion criteria, and informed consent was obtained from them.

#### 3.4.2. Secondary Data

Secondary data include information that are obtain mainly from different reports, bulletins, websites and literatures, journals, books, which are relevant to the theme of the study, the will be gathered from various sources to complement the survey-based analysis was collected from relevant books, internet sources, unpublished materials, and procedures.

### 3.5. Sampling Techniques

According to (Cooper, D. R., Schindler, P. S., & Sun, 2006), a sampling technique is a statistical technique a researcher adopts to develop an appropriate sample that is representative of a population under study. Besides, (*Research Methodology Kothari, C.R., 2004. Research Methodology.*, n.d.) Pointed out that the sampling technique is a definite plan for obtaining a sample from a given population. In this study, the researcher will use probability sampling through a simple random sampling technique to select the target population of the 150 and non-probability sampling through purposive sampling technique to get important persons like share company manager, and human resources, management of the project.

### 3.6. Methods of Data Collection

#### 3.6.1. Questionnaire

The purpose of the questionnaire survey was generated to develop comprehensive information from as many banks experts as possible. Accordingly, quantitative data was gathered from bank experts using closed-ended

and partially open-ended questionnaires. The survey questionnaire was designed on likert scale. According to (Joshi et al., 2015) the original scale is a set of statements offered for a real or hypothetical situation under study. Participants are asked to show their level of agreement (from strongly disagree to strongly agree) with the given statement on a metric scale.

### 3.6.2. Key Informant Interview

Interviews with key informants through unstructured questions was deployed to explore respondents' earnest feelings and insights about the problem under a study conducted and to gather information, to explain issues at their proper unstructured place. The unstructured questions offered those interviewed sufficient flexibility and an opportunity to express their opinion broadly as well as allowed the researcher to approach several respondents differently and to use follow-up questions to expand his understanding of the subject. To this end, experts who have had practical experience with the problem under study were purposefully interviewed regarding their views on the factors affecting PPPs in infrastructure.

## 3.7. Method of Data Analysis and Presentation

### 3.7.1. Data Analysis

In this study data which was collected from both the primary and the secondary sources by using various data collection tools were analyzed and described through different data analyzing methods, such as descriptive statistics including mean median, frequency and standard deviation and SPSS data analysis tools was used.

### 3.7.2. Data Presentation

The data in this study were presented by using different tables, charts, and figures that are accompanied by written discussion analysis methods depending on the characteristics of the data collected from both the primary and the secondary data sources.

## 3.8. Validity and Reliability

### 3.8.1. Reliability Test

According to (Kubai, 2019) reliability is "the extent to which measurements are repeatable when different people measure on different occasions, under different conditions, supposedly with alternative instruments which measure the construct or skill". It can also be defined as the degree to which the measure of a construct is consistent or dependable. For instance when several people guess your weight, the value of the weight might not be necessarily correct since it will be inconsistency with the accurate value hence the measurement is said to be unreliable. If a weighing scale is used by different people to give the value of your weight then there is the likelihood of getting the same value every time a measurement is done hence this measurement would be said to be reliable. For this study, the reliability of collected data from primary and secondary data was checked by using Statistical Package for Social Science (SPSS) software. According to (Taherdoost, 2018) have proposed four cut-off points for dependability: excellent reliability (0.90 and above), high reliability (0.70-0.90), moderate reliability (0.50-0.70), and low reliability (0.50 and below). Therefore; the result was above 0.9 it is excellent.

**Table 1: Reliability Statistics test**

| Reliability Statistics |            |
|------------------------|------------|
| Cronbach's Alpha       | N of Items |
| .950                   | 14         |

### 3.8.2. Validity Test

As defined earlier (Kubai, 2019) validity is the extent to which an instrument measures what it purports to measure. Validity is trying to explain the truth of research findings. This study was checked by using Statistical Package for Social Science (SPSS) software. In order to address validity, this study focused on criteria validity. Any validity procedures that concentrate on the relationship between the test being validated and some reputable outside measure(s) of the same objectives or specifications are typically referred to as criterion-related validity. Predictive validity is another name for criterion-related validity. The level of correlation between test results and another measure that the test is intended to predict is known as predictive validity. Use of an expectancy table can be used to represent criteria-related evidence. Straightforward a

crucial Correlation coefficient is a commonly used index that measures the degree of association between an individual's scores on two different tests and is represented by the letter "r".

+Relationship: One score is high and the other is low

- Relationship: Both scores are high or low.

Kaiser Meyer Olkin (KMO) in SPSS evaluates the sample's suitability. If the KMO value is more than 0.5, the sampling is considered adequate or sufficient (Field, 2000). According to Pallant (2013), KMO should have a value of 0.6 or above. According to Kaiser (1974), a value of 0.5 is the absolute minimum, followed by values of 0.7 and 0.8 that are good, 0.8 and 0.9 that are super, and 0.9 and above that are exceptional (Hutcheson & Sofroniou, 1999). Therefore, the result was 0.826 so it is super value.

**Table 2: Validity Statistics Test**

| <b>KMO and Bartlett's Test</b>                   |                    |         |
|--------------------------------------------------|--------------------|---------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. |                    | .826    |
| Bartlett's Test of Sphericity                    | Approx. Chi-Square | 744.034 |
|                                                  | df                 | 10      |
|                                                  | Sig.               | .000    |

### 3.9. Ethical Consideration

As a result, putting ethical considerations are necessary. The following governing rules of the research were respected during data collection. The research could not affect the physical and social life of the individual respondent, time would be respected and activities are governed by schedule, respect social values, and due recognition for respondents during and after the interview was attempted, and be free from personal biases and opinions, affair consideration was given for data obtained from respondents.

## DATA ANALYSIS AND PRESENTATION

### 4.1. Introduction

This section presents the demographic characteristics of the respondents, descriptive statistics variables, findings of estimated models, discussion of results of diagnostic test conducted and responses from interview questions.

### 4.2. Demographic Characteristics of the Respondents

Knowing the demographics of the Low Land eco-system project sample respondents is crucial for having a thorough grasp of the study's findings;

**Table 3: Demographic Characteristics of respondents**

|                                     |         | Frequency | Percent |
|-------------------------------------|---------|-----------|---------|
| <b>Age of Respondents</b>           | 21-30   | 22        | 14.7    |
|                                     | 31-40   | 68        | 45.3    |
|                                     | 41-50   | 51        | 34.0    |
|                                     | >50     | 9         | 6.0     |
| <b>Sex of Respondents</b>           | Male    | 99        | 66.0    |
|                                     | Female  | 51        | 34.0    |
| <b>Education status Respondents</b> | Diploma | 44        | 29.3    |
|                                     | Degree  | 64        | 42.7    |
|                                     | Masters | 42        | 28.0    |
| <b>experience (years)</b>           | 1-5     | 46        | 30.7    |
|                                     | 6-10    | 43        | 28.7    |
|                                     | >10     | 61        | 40.7    |

According to table 3 above, 22 of the respondents (14.7%) were between the ages of 21 and 30, 68 (45.3%) were between the ages of 31 and 40, 51 (34%) were between the ages of 41 and 50 and 9 (6%) were over the age of 50. The results suggest that the majority of responders were between the ages of 31 and 40 followed by responders in the age range of 41 to 50. As a result, the majority of the company current sample of employees are under 40 and are therefore quite youthful. About, 99 respondents (or (66%) were male and 51 respondents (or 34 %) were female. According to the statistics, male made up the majority of employees in Company, while the proportion of female working there is lower than that of male. According to the statistics 44 employees (29.3%) have a Diploma, 64 respondents (42.7%) have a first degree, and 42 respondents (28% have a Masters. This shows that the majority of respondents in the study held first degree, and the company has educated labor available. And about: 46 (30.7%) of respondents have one years to five years' experience, 43 (28.7%) have six to ten years of experience, and 61(40.7%) have greater than ten years of experience. This revealed that most of the respondents have worked in the company for the majority of them for between greater than years, and they have the necessary work experience to carry out their jobs.

#### 4.3. Analysis of Role of PPP in Infrastructure development

The researcher has summarized the measurements with the corresponding averages and standard deviations to evaluate how respondents generally role of PPP in infrastructure development. Therefore, the mean shows how much on average the sample group agrees or disagrees with the various propositions. More respondents disagree with the statements, the lower the mean. More respondents agree with the statement when the mean is greater. Standard deviation, on the other hand, demonstrates the variability of an observed response from a single sample. The study was based on a likert scale from 1 to 5, with 1 = strongly disagree, 2= disagree, and 3= neutral. 4 = agree, 5 = strongly agree, and the flows for the detailed study of the infrastructure development.

**Table 4: Analyzing the Role of PPP in Infrastructure development**

| No | Description                | Mean   | SD      | N   |
|----|----------------------------|--------|---------|-----|
| 1  | Infrastructure development | 4.0733 | 1.08124 | 150 |
| 2  | Service delivery           | 3.3867 | 1.31989 | 150 |
| 3  | Technology implementation  | 3.6600 | 1.26295 | 150 |
| 4  | Governance and regulation  | 3.6933 | 1.28464 | 150 |
| 5  | Financing                  | 4.0733 | 1.08124 | 150 |

The mean ratings of Infrastructure development and financing in organization were strong, as shown in table 4 above (mean 4.0733 and SD 1.08124). This suggests that the majority of respondents answered agree on Infrastructure development and financing in one organization the most important role of PPPs. The highest mean significantly contributes to the grand mean, in particular; Service delivery (3.3867); Technology implementation (3.6600); Governance and regulation. According to the results, the majority of respondents agree that the company employees had positive perceptions on the infrastructure development performance. the standard deviation that ranged from 1.08124 to 1.31989, indicating that the replies of the respondents do not always match the mean.

#### 4.4. Analyzing the success factors of PPPs in Infrastructure development

**Table 5: Analyzing The success factors of PPPs in Infrastructure development**

| No | Description                                       | Mean   | SD      | N   |
|----|---------------------------------------------------|--------|---------|-----|
| 1  | Profitability                                     | 3.3867 | 1.31989 | 150 |
| 2  | Operating risk controlling                        | 3.6600 | 1.26295 | 150 |
| 3  | Institutional and regulatory environment facility | 3.6933 | 1.28464 | 150 |
| 4  | Delivery time management                          | 3.4800 | 1.30934 | 150 |

The mean scores of Institutional and regulatory environment facilities, as shown in table 5, above (mean 3.6933 and SD 1.28464). This suggests that the majority of responders concur on agree. The highest mean strongly influences the overall mean. In particular, profitability (3.3867), operating risk controlling (3.6600), and the delivery time management (3.4800), a standard deviation that ranged from (1.26295 to 1.31989), indicating that responses to questions varied from the mean.

#### 4.5. Analyzing the Challenges on PPPs in Infrastructure Development

**Table 6: Analyzing the Challenges on PPPs in Infrastructure Development**

| No | Description           | Mean   | SD      | N   |
|----|-----------------------|--------|---------|-----|
| 1  | Political instability | 4.2267 | .97724  | 150 |
| 2  | Economic fluctuation  | 3.5867 | 1.27541 | 150 |
| 3  | Social life           | 3.5733 | 1.32780 | 150 |
| 4  | Technology            | 3.8000 | 1.26915 | 150 |
| 5  | Legal problem         | 3.7067 | 1.32375 | 150 |

The mean scores for **political instability** (mean 4.2267 and SD 0.97724), as shown in table 6 above. This suggests that the majority of responders agreed on **political instability**. In particular, the economic fluctuation (3.5867), social life (3.5733), technology (3.8000), legal problem (3.7067), all of which contribute significantly to the grand mean. The standard deviation for Rewards and Recognition was between 0.97724-1.32780, indicated the respondent responses to a question vary from the mean.

#### 4.6. Analyzing Results from Interview questions

The following response was provided based on an interview with project managers, Human Resource management (HRM) of a Low Land Eco-system Project about how factors affecting PPPs in infrastructure development.

**The role of PPPs in Infrastructure development:** as the responses from the interview the role of PPPs are social obligations are fulfilled, sector changes are successful, public investments are made, utilizing their strengths, and there is technology implementation.

**Success factors of PPPs in infrastructure development;** the responses from the interview indicates that there is delivery time management, operating risk controlling, profitability analysis, institutional and regulatory facility.

**Challenges on PPPs in infrastructure development;** as the responses from the interview with manager and human resource management on the challenges of PPPs in infrastructure development are creations of policies, internal and external political impact, price fluctuation, topography, geology and climate changes, limited transparency and public scrutiny.

#### 4.7. Analysis of inferential statistics

The outcomes of inferential statistics are presented in this section. Regression analysis and Pearson's Product Moment Correlation Coefficient were used to evaluate the study's goals. These statistical methods allow for the drawing of conclusions about the sample.

##### 4.7.1. Analyzing correlation

In this study, the Pearson Product Moment Correlation Coefficient was used to assess the significance of the link between the variables of infrastructure development and urban sustainable growth. The outcomes of Pearson's Product Moment Correlation on the relationship between independent variables and dependent variable are shown in the next section.

The correlation coefficient ( $r$ ) ranges from 0.1 to 0.29 for minor correlation, 0.3 to 0.49 for medium correlation, and 0.50 to 1.0 for great correlation, according to Filed (2009). This section includes a correlation analysis that was carried out in light of each research objective and set of produced hypotheses. Correlation analysis was used to investigate the link between infrastructure development and urban sustainable growth. This gave correlation coefficients, which showed the relationship's strength and direction. The p-value also showed the likelihood that this link would be statistically significant. To determine the association between infrastructure development and

urban sustainable growth in Zway Dugda Woreda, a correlation study was done. According to the study, the middle level correlation coefficient ranged from 0.380 to 0.844.

| Correlations                                                 |                     |                            |                  |                           |                           |           |
|--------------------------------------------------------------|---------------------|----------------------------|------------------|---------------------------|---------------------------|-----------|
|                                                              |                     | Infrastructure development | Service delivery | Technology implementation | Governance and regulation | Financing |
| Infrastructure development                                   | Pearson Correlation | 1                          | .380**           | .436**                    | .480**                    | 1.000**   |
|                                                              | Sig. (1-tailed)     |                            | .000             | .000                      | .000                      | .000      |
|                                                              | N                   | 150                        | 150              | 150                       | 150                       | 150       |
| Service delivery                                             | Pearson Correlation | .380**                     | 1                | .844**                    | .743**                    | .380**    |
|                                                              | Sig. (1-tailed)     | .000                       |                  | .000                      | .000                      | .000      |
|                                                              | N                   | 150                        | 150              | 150                       | 150                       | 150       |
| Technology implementation                                    | Pearson Correlation | .436**                     | .844**           | 1                         | .812**                    | .436**    |
|                                                              | Sig. (1-tailed)     | .000                       | .000             |                           | .000                      | .000      |
|                                                              | N                   | 150                        | 150              | 150                       | 150                       | 150       |
| Governance and regulation                                    | Pearson Correlation | .480**                     | .743**           | .812**                    | 1                         | .480**    |
|                                                              | Sig. (1-tailed)     | .000                       | .000             | .000                      |                           | .000      |
|                                                              | N                   | 150                        | 150              | 150                       | 150                       | 150       |
| Financing                                                    | Pearson Correlation | 1.000**                    | .380**           | .436**                    | .480**                    | 1         |
|                                                              | Sig. (1-tailed)     | .000                       | .000             | .000                      | .000                      |           |
|                                                              | N                   | 150                        | 150              | 150                       | 150                       | 150       |
| **. Correlation is significant at the 0.01 level (1-tailed). |                     |                            |                  |                           |                           |           |

**Table 7:Correlation Analysis**

The result of correlation indicates that infrastructure development had a positive correlation with urban sustainable growth ( $r = 0.844^{**}$ ) which is statistically significant 99% level of confidence. this indicates that two variables are highly correlated since pearson correlation is close to one and also positively related to each other meaning when infrastructure development increases, urban sustainable growth will also increase at the same time.

#### 4.7.2. Analyzing Regression

Regression analysis is a statistical measurement used for estimating the relationships among the dependent and independent variables. It enables to determine the strength of the relationship between variables and the

predictive power of the independent variables on the dependent variable. In short, regression helps a researcher understand to what extent the change of the value of the dependent variable causes the change in the value of the independent variables, while other independent variables are held unchanged. Regression analysis is a way of statistically sorting out the variables that have indeed an impact. While there are many types of regression analysis, at their core they all examine the influence of one or more independent variables on a variable. After conducting various diagnosis tests presented in the next section estimation technique that produce consistent and unbiased results are selected.

#### 4.7.3. Multi-co-linearity Tests

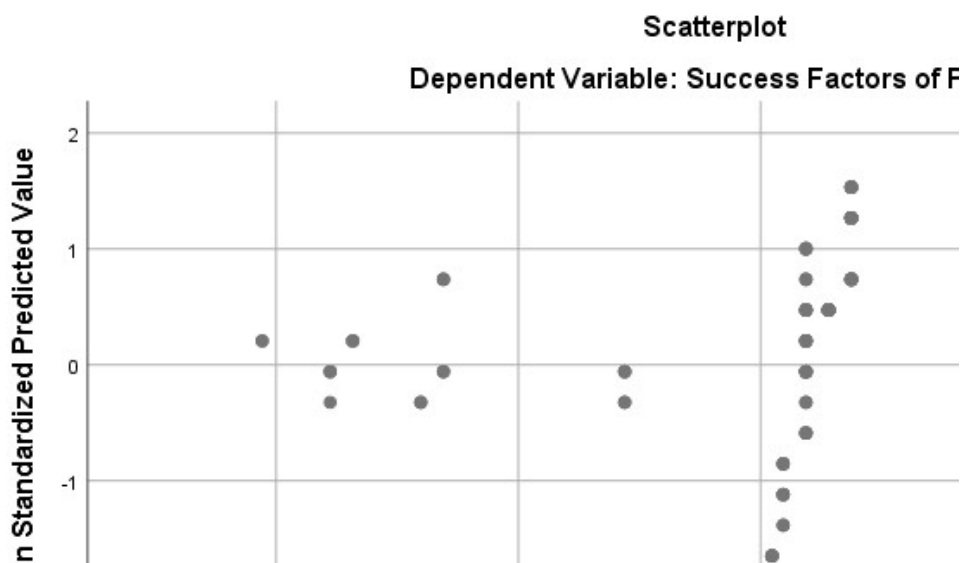
The data was run through the necessary model assumption tests, such as the autocorrelation, normality and multi-co linearity test, to determine the extent to which the explanatory variables explain the variance in the explained variable. According to Filed (2009), multicollinearity exists when the mean tolerance statistic is less than 0.1 and VIF is greater than 10. The result from regression analysis shows that the mean VIF is 4.783 and tolerate.

**Table 8 Analyzing Regression**

| Model |                                                   | Co linearity Statistics |       |
|-------|---------------------------------------------------|-------------------------|-------|
|       |                                                   | Tolerance               | VIF   |
| 1     | (Constant)                                        |                         |       |
|       | Profitability                                     | .271                    | 3.691 |
|       | Operating risk controlling                        | .209                    | 4.783 |
|       | Institutional and regulatory environment facility | .329                    | 3.043 |
|       | Delivery time management                          | .976                    | 1.024 |

Homoscedasticity is the assumption made by the researcher that errors are distributed uniformly among the independent variables, with the same variance of errors occurring at all levels of the independent variables. When the scatter is uneven, heteroscedasticity is indicated; typical patterns of violations include fan and butterfly shapes. Additionally, we can see the absence of heteroscedasticity if the P-plot is a straight-line graph with a positive slope or if it is not stair-case shaped. The researcher therefore assumed that the problem of heteroscedasticity was not identified for the data since there is no significant deviation visible in the scatter and P-plots below.

Figure 1: Homoscedasticity test



**Normality:** The normal P-plot for each of the four independent variables in the following figures illustrates normality, indicating that errors are normally distributed. This ensured the existence of the normal distribution of errors. The points in this plot reflect the observed residuals, and the straight line represents a normal distribution. Therefore, all points in a set of data with precisely distributed data will lie on the one place. Thus, the data are consistent with the regression model's essential premise.

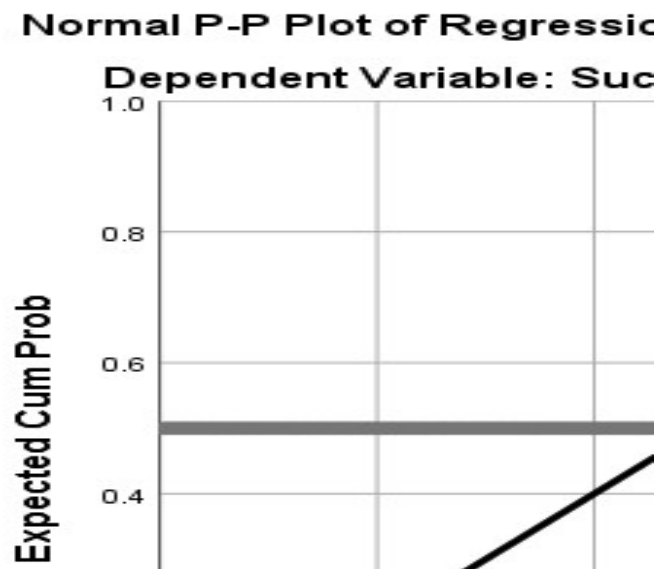


Figure 2: normality regression analysis

#### 4.7.4. Testing Hypothesis

Multiple regression analysis was used to examine the infrastructure development. How much of the variation in infrastructure development is accounted for by the chosen sustainable urban growth is shown by the regression model: role of PPPs in infrastructure development, success factors of PPPs in infrastructure development, and the challenges on PPPs in infrastructure development. Supporting elements for sustainable urban growth. According to the results of the regression study, role of PPPs in infrastructure development, success factors of PPPs in infrastructure development, and the challenges on PPPs in infrastructure development. it is accounted for 100% (where R square is 1.000 and adjusted R square is 1.000) of the variances in how infrastructure development. How well the independent variables are able to predict the dependent variables has been determined using R Square. In addition, it is commonly acknowledged in social and psychological applications that an R<sup>2</sup> adjusted of above 75% is very excellent, between 50-75% is good, between 25-50% is fair, and below 25% is poor (Sakaran, 2000). Based on the outcome, the model (100%) is excellent.

According to the ANOVA table, the model as a whole account for significant differences between the infrastructure development and urban sustainable growth.

**Table 9: ANOVA Table**

| Model Summary                                                                                                                                     |       |          |                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------|-------|----------|-------------------|
| Model                                                                                                                                             | R     | R Square | Adjusted R Square |
| 1                                                                                                                                                 | 1.000 | 1.000**  | 1.000 **          |
| a. Predictors: (Constant), Delivery time management, Operating risk controlling, Institutional and regulatory environment facility, Profitability |       |          |                   |
| b. Dependent Variable: Success Factors of PPPs                                                                                                    |       |          |                   |

Source: Survey: 2026

| ANOVA <sup>a</sup> |            |                |     |             |   |                |
|--------------------|------------|----------------|-----|-------------|---|----------------|
| Model              |            | Sum of Squares | Df  | Mean Square | F | Sig.           |
| 1                  | Regression | 132.359        | 4   | 33.090      | . | . <sup>b</sup> |
|                    | Residual   | .000           | 145 | .000        |   |                |
|                    | Total      | 132.359        | 149 |             |   |                |

a. Dependent Variable: Success Factors of PPPs

b. Predictors: (Constant), Delivery time management, Operating risk controlling, Institutional and regulatory environment facility, Profitability

Source: Survey SPSS (Version 25)

## CONCLUSION AND RECOMMENDATION

### 5.1. Introduction

This section presents the conclusion and recommendation based on the findings of the study.

### 5.2. Conclusion

The objective of the study is to Examine Factors Affecting the Public-Private Partnership in Infrastructure Development for Sustainable Urban Growth on A Selected Projects; The Case of Climate Change Adaptation Low Land Eco- System in Arsi Zone Zway Dugda woreda. The research employed both qualitative and quantitative research approach. The questionnaires that was distributed to the target population of 100 employees of the Climate Change Adaptation Low Land Eco- System in Arsi Zone Zway Dugda woreda including the company manager and different departments in the projects like; human resource management, technical group, finance group. the data gathered quantitatively was analyzed with the aid of the statistics package for social sciences (SPSS) version 25 computer program, Statistical methods for both inference and description were used to analyze the acquired data.

The responses from the interview indicates that the challenges on PPPs in infrastructure development in Arsi Zone Zway Dugda Woreda are; creations of policies, internal and external political impact, price fluctuation, topography, geology and climate changes.

According to the results of a descriptive analysis above 22 of the respondents (14.7%) were between the ages of 21 and 30, 68 (45.3%) were between the ages of 31 and 40, 51 (34%) were between the ages of 41 and 50 and 9 (6%) were over the age of 50. The results suggest that the majority of responders were between the ages of 31 and 40 followed by responders in the age range of 41 to 50. As a result, the majority of the company current sample of employees are under 40 and are therefore quite youthful. About, 99 respondents (or (66%) were male and 51 respondents (or 34 %) were female. According to the statistics, male made up the majority of employees in Company, while the proportion of female working there is lower than that of male. According to the statistics 44 employees (29.3%) have a Diploma, 64 respondents (42.7%) have a first degree, and 42 respondents (28%) have a Masters. This shows that the majority of respondents in the study held first degree, and the company has educated labor available. And about: 46 (30.7%) of respondents have one years to five years' experience, 43 (28.7%) have six to ten years of experience, and 61(40.7%) have greater than ten years of experience. This

revealed that most of the respondents have worked in the company for the majority of them for between greater than years, and they have the necessary work experience to carry out their jobs.

According to the results of a descriptive analysis, the mean ratings of Infrastructure development and financing in organization were strong, as shown in table 4 above (mean 4.0733 and SD 1.08124). This suggests that the majority of respondents answered agree on Infrastructure development and financing in one organization the most important role of PPPs. The highest mean significantly contributes to the grand mean, in particular; Service delivery (3.3867); Technology implementation (3.6600); Governance and regulation. According to the results, the majority of respondents agree that the company employees had positive perceptions on the infrastructure development performance. the standard deviation that ranged from 1.08124 to 1.31989, indicating that the replies of the respondents do not always match the mean.

According to the results of a descriptive analysis, the mean scores of Institutional and regulatory environment facilities, as shown in table 5, above (mean 3.6933 and SD 1.28464). This suggests that the majority of responders concur on agree. The highest mean strongly influences the overall mean. In particular, profitability (3.3867), operating risk controlling (3.6600), and the delivery time management (3.4800), a standard deviation that ranged from (1.26295 to 1.31989), indicating that responses to questions varied from the mean.

According to the results of a descriptive analysis, the mean scores for political instability (mean 4.2267 and SD 0.97724), as shown in table 6 above. This suggests that the majority of responders agreed on political instability. In particular, the economic fluctuation (3.5867), social life (3.5733), technology (3.8000), legal problem (3.7067), all of which contribute significantly to the grand mean. The standard deviation for Rewards and Recognition was between 0.97724-1.32780, indicated the respondent responses to a question vary from the mean.

The correlation coefficient ( $r$ ) ranges from 0.1 to 0.29 for minor correlation, 0.3 to 0.49 for medium correlation, and 0.50 to 1.0 for great correlation, according to Filed (2009). This section includes a correlation analysis that was carried out in light of each research objective and set of produced hypotheses. Correlation analysis was used to investigate the link between infrastructure development and urban sustainable growth. This gave correlation coefficients, which showed the relationship's strength and direction. The p-value also showed the likelihood that this link would be statistically significant. To determine the association between infrastructure development and urban sustainable growth in Zway Dugda Woreda, a correlation study was done. According to the study, the middle level correlation coefficient ranged from 0.380 to 0.844.

According to the results of the regression study, Delivery time management, Operating risk controlling, Institutional and regulatory environment facility, and Profitability accounted for 100 % (where R square is 1.000\*\* and adjusted R square is 1.000\*\*) of the variances in how employees responded to their performance. How well the independent variables are able to predict the dependent variables has been determined using R Square. In addition, it is commonly acknowledged in social and psychological applications that an R<sup>2</sup> adjusted of above 75% is very excellent, between 50-75% is good, between 25-50% is fair, and below 25% is poor (Sakaran, 2000). Based on the outcome, the model (100%) is very excellent.

### 5.3. Recommendation

Based on the study's findings, analysis, and conclusions, the researcher suggests that organizations emphasize on the

The Role of Public- Private Partnership In sustainable urban growth, the success factors of PPPs in Sustainable Urban Growth, and the challenges in PPPs in infrastructure development. Because of their significant contributions to employee dedication, support

The HR manager in project shall give attention to PPPs to improve the problem in organization for infrastructure development for sustainability of urban growth.

The responsible body shall make a further analysis to identify the success factors of PPPs on infrastructure development for sustainable urban growth

HR and manager in the project shall identify the impact of political on the performance of PPPs to play a great role improve the performance of the organization and analysis them how they affect the productivity and profitability as well as quality of service delivered by the organization.

The study suggests that more frequent and varied feedback mechanisms be used in Ethiopian public-private partnership initiatives. A more thorough grasp of stakeholder viewpoints and concerns can be obtained by using more surveys, feedback forms, suggestion boxes, direct calls, and other digital techniques, even though focus groups and public consultations are still beneficial.

The responsible body shall improve the project's activities' transparency. The prevalence of insufficient transparency as a significant issue suggests that PPP projects must give openness top priority in order to foster confidence and guarantee successful stakeholder participation. This can be accomplished by incorporating stakeholders in the decision-making process, disseminating comprehensive project information on a regular basis, and putting in place clear and consistent communication procedures. Increasing transparency will promote trust, boost teamwork, and increase stakeholder engagement's overall efficacy.

In order to prevent delays and extra expenses in the implementation of PPP projects, it is crucial that all decision makers have enough support, coordinate well, communicate quickly, and make decisions. In this sense, the government must raise sufficient knowledge of PPP in order to ensure its successful implementation.

According to the study, Ethiopian Public-Private Partnership initiatives should use more frequent and varied feedback systems. A more thorough grasp of stakeholder viewpoints and concerns can be obtained by using additional surveys, feedback forms, suggestion boxes, direct calls, and other digital techniques, even though focus groups and public consultations are still beneficial.

The frameworks' preference for economic or physical infrastructure sectors should be reexamined, and social infrastructure sectors should be given equal attention. The Ministry of Science and Higher Education, the Ministry of Health, and other line ministries from the social infrastructure sectors should be given the opportunity to join the PPP Board either permanently or on an as-needed basis in order to better address this issue. The PPP Board, the Ministry of Finance, or the Ethiopian government should initiate changes for this application.

I recommend that to improve the performance of organization the responsible body shall the follow up the basic challenges on PPPs during infrastructure development for sustainable urban growth by developing mechanism like; developing technology, participating communities on projects, giving awareness for stakeholders and communities.

## Reference

- Akinola, M. H., Adedire, F. M., & Akande, O. K. (2024). Optimising Public-Private Partnership Adoption for Housing Delivery in Oyo State, Nigeria: A Narrative Review. *Journal of Sustainable Social Change*, 15(1), 73–94. <https://doi.org/10.5590/josc.2024.16.1.06>
- Asuamah Yeboah, S. S. (2024). *Overcoming Challenges in Public- Private Partnerships for Sustainable Building Initiatives in Developing Countries*. 122667, 0–39.
- Babu, J. O. (2021). *Infrastructure Development, Trade, and Economic Growth in The East African Community: An Emprical Analysis*.
- Barasa, E. M. T. K. (2023). *PARTNERSHIPS IN PUBLIC-PRIVATE PARTNERSHIPS IN*.
- Bertha, V., Nicholas, O., Maurice, B., & Banji, O. (2020). *LESSONS FROM RESEARCH-BASED PUBLIC-PRIVATE PARTNERSHIPS FOR AFRICAN SCIENCE GRANTING COUNCILS*.
- Chowdhury, A., Sharma, K., & Platz, D. (2016). *Public-Private Partnerships and the 2030 Agenda for Sustainable Development : Fit for purpose ?*
- Cooper, D. R., Schindler, P. S., & Sun, J. (2006). Business research methods (Vol 9). In *Business Research Methods* (Issue 2000, p. 38).
- Degefa, A. (2021). *Assessment of Critical Success Factors that Affect Implementation of Public Private Partneship Power Projects In Ethiopia- The Case of Dicheto Solar Project*.

- Dirane, P. (2021). *THE Role of Public-Private Partnerships in Overcoming Infrastructure Challenges in South Africa*.
- Fell, T., & Mattsson, J. (2021). The Role of Public-Private Partnerships in Housing as a Potential Contributor to Sustainable Cities and Communities : A Systematic Review. *Systematic Review*, 1–25.
- Gaal, H. O. (2017). *Lack of Infrastructure : The Impact on Economic Development as a case of Benadir region and Hir-shabelle , Somalia*. 7(1), 49–55.
- Grabbelaar, N. (2020). *Best Practices on PPP Infrastructure Development in SADC Countries Japan International Cooperation Agency ( JICA ) Southern African Development Community - Development Finance Resource Center ( SADC-DFRC )* (Issue February).
- Hafa, D. (2023). *Assessment on Legal and Institutional Frameworks Governing Public Private Partnership in Ethiopia: A Challenges and Opportunities*.
- Haque, M. N., Saroar, M., Fattah, M. A., & Morshed, S. R. (2020). Public-Private Partnership for achieving sustainable development goals: a case study of Khulna, Bangladesh. *Public Administration and Policy*, 23(3), 283–298. <https://doi.org/10.1108/PAP-04-2020-0023>
- Haque, N., Saroar, M., & Fattah, A. (2025). *Public-Private Partnership for achieving sustainable development goals : a case study of*. 23(3), 283–298. <https://doi.org/10.1108/PAP-04-2020-0023>
- Joshi, A., Kale, S., Chandel, S., & Pal, D. (2015). Likert Scale: Explored and Explained. *British Journal of Applied Science & Technology*, 7(4), 396–403. <https://doi.org/10.9734/bjast/2015/14975>
- Kefela, D. (2024). *Stakeholder Engagement in Public-Private Partnership Projects in Ethiopia By Stakeholder Engagement in Public-Private Partnership Projects in Ethiopia By Daniel Kefela*.
- Kwame, B. A. N. (2017). *Public private Partnership(PPP) in Infrastructure Provision: Key Determinants for Private Sector Engagement in Sub- Saharan Africa (SSA)*.
- Leedy, P., & Ormrod, J. E. (2010). Practical Research: Planning and Design Ninth Edition. In *Practical Research - Planning & Design*.
- Megerssa, T. G. (2023). *Practice and Challenges of Public-Private Partnership for a Unified Billing System in Addis Ababa*.
- Mukoka, S., Chibhoyi, D., & Machaka, T. (2020). Research Approaches and Sampling Methods Paradox: The Beginning of Marginal Thinking in Research Methodology. *Danubius Working Papers*, 2(1), 33.
- Mundonde, J., & Makoni, P. L. (2023). Public private partnerships and water and sanitation infrastructure development in Zimbabwe : what determines financing ? *Environmental Systems Research*, 1–11. <https://doi.org/10.1186/s40068-023-00295-7>
- Nnadozie, E. (2016). *INFRASTRUCTURE DEVELOPMENT AND FINANCING IN SUB-SAHARAN AFRICA : Toward a framework for capacity enhancement* (Issue 25).
- Oleo, J. P., Castro, C., Herraiz, I., & Carpintero, S. (2015). *The influence of the institutional environment on public – private partnership transport projects*. 146, 399–410. <https://doi.org/10.2495/UT150321>
- Patrose Leshinka; Moffat Tembo, E. M. M. (2023). Role of Public-Private Partnerships in Developing Sustainable Cities : Framework , Opportunities , Mechanisms. *International Journal of Innovations and Interdisciplinary Research*, 1(1), 1–16. <https://doi.org/10.61108/ijir.v1i1.1>
- Research Methodology Kothari, C.R., 2004. *Research methodology*. (n.d.). 2–3.
- Sa, M., & Boyi, R. (2021). Challenges and Prospects of Infrastructure Development in Gombe Metropolis, North East Nigeria. *International Journal of Humanities, Art and Social Studies(IJHAS)*, 6(1), 23–31.
- Straub, A. F. and S. (2021). “ *The Impact of Public-Private Partnerships ( PPPs ) in Infrastructure , Health and Education .* ”
- Suk Hyun, Donghyun Park, and S. T. (2018). *Determinants of public-private partnerships in infrastructure in Asia : Implications for capital market development DETERMINANTS OF PUBLIC – PRIVATE*

*PARTNERSHIPS IN INFRASTRUCTURE IN ASIA : IMPLICATIONS FOR.*

- Taherdoost, H. (2018). Validity and Reliability of the Research Instrument; How to Test the Validation of a Questionnaire/Survey in a Research. *SSRN Electronic Journal*, January 2016. <https://doi.org/10.2139/ssrn.3205040>
- Toan, N. Q., & Hai, D. T. (2023). *Assessment of factors influencing on the success of public-private partnerships infrastructure projects in Vietnam*. 55(1), 343–365. <https://doi.org/10.24425/ace.2023.144177>
- Tshehla, P. M. F. (2018). Constraints for Successful Implementation of Public Private Partnership ( PPP ) for Tourism Infrastructure Projects. *African Journal of Hospitality, Tourism and Leisure*, 7(4), 1–10.
- Twinomuhwezi, I. K., & Herman, C. (2020). Critical success factors for public-private partnership in universal secondary education : Perspectives and policy lessons from Uganda. *International Journal of Educational Administration and Policy Studies*, 1, 133–146. <https://doi.org/10.5897/IJEAPS2020.0656>
- Waberi, A. A., & Waberi, A. A. (2024). *Analysis of the Influence of Infrastructure Development on Economic Growth in Djibouti*. 1–20. <https://doi.org/10.20944/preprints202405.1539.v1>
- Wang, E. X. (2020). *PEREZ-GUERRERO TRUST FUND FOR ECONOMIC AND Final Report on Public Private Partnership Livelihood Projects in Africa : Policy and Performance Foreword*.
- Wibowo, R. A. K. and F. A. (2015). Determinants of Public-Private Partnerships in Infrastructure Provision: Evidence from Muslim Developing Countries Rahmatina Awaliah Kasri 1 and Farid Arif Wibowo 2. *Journal of Economic Cooperation and Development*, 36(2), 1–34.
- Yiblet, F. D. (2024). Infrastructure Development in Ethiopia and Its Impact on Economic Diplomacy With China. *Journal of Management and Strategy*, 15(1), 50–68. <https://doi.org/10.5430/jms.v15n1p50>