

Enhancing Infrastructure in sub-Saharan Africa: Exploring the Role of Public-Private Partnerships (PPPs)

By Josphat Machagua and Eliud Moyi

Kenya Institute for Public Policy Research and Analysis (KIPPRA)

Introduction

Africa needs to deepen industrialization to eradicate poverty and create sustainable jobs for 10-12 million youths who join the labor market annually¹. However, a key factor that retards industrialization has been the insufficient stock of productive infrastructure.² Infrastructure is a crucial ingredient to foster growth and productivity. Public expenditure on infrastructure in Sub-Saharan Africa is significantly less than the actual allocations. That affects the development budget's absorption rates and the execution of projects earmarked for investment each year, a clear sign of the public sector inefficiency. According to estimates, inadequate infrastructure reduces per capita GDP growth rates in the region by 2%³.

The infrastructure gap also hurts its global competitiveness. States are the main financing source for infrastructure investment but are limited by fiscal constraints due to inadequate revenue collections, hence the financing gaps. Estimates put the region's infrastructure financing needs at \$130–170 billion per annum by 2025. The region's growing infrastructure quality and quantity gaps are potentially large, standing at US\$ 100 billion annually.⁴ Yet, the African Continental Free Trade Area (AfCFTA), the flagship project of the African Union's Agenda 2063, cannot succeed without adequate infrastructure⁵. As a result, there is an acute need for additional resources to finance infrastructure to create a conducive environment for private sector to thrive. PPPs are gaining traction and have been touted as an alternative and sustainable way to fund critical infrastructure backlogs in SSA.

Understanding PPPs

A Public-Private Partnership (PPP)⁶ is a mechanism for the state to procure and implement public assets or services using private sector expertise and resources⁷. There are five main PPP modes namely management contracts, lease contracts, concessions, and joint ventures (Figure

¹ Job Youth Africa

https://www.afdb.org/fileadmin/uploads/afdb/Images/high_5s/Job_youth_Africa_Job_youth_Africa.pdf

² Africa's Energy Conundrum

https://www.researchgate.net/publication/332624036_Africa's_Energy_Conundrum

³ Africa's infrastructure: great potential but little impact on inclusive growth

https://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/2018AEO/African_Economic_Outlook_2018_-_EN_Chapter3.pdf

⁴ Designing the African Development Bank's PPP Framework Whitepaper for Discussion

https://www.afdb.org/sites/default/files/2020/09/15/afdb_ppp_framework_whitepaper.pdf

⁵ Flagship Projects of Agenda 2063 <https://au.int/en/agenda2063/flagship-projects>

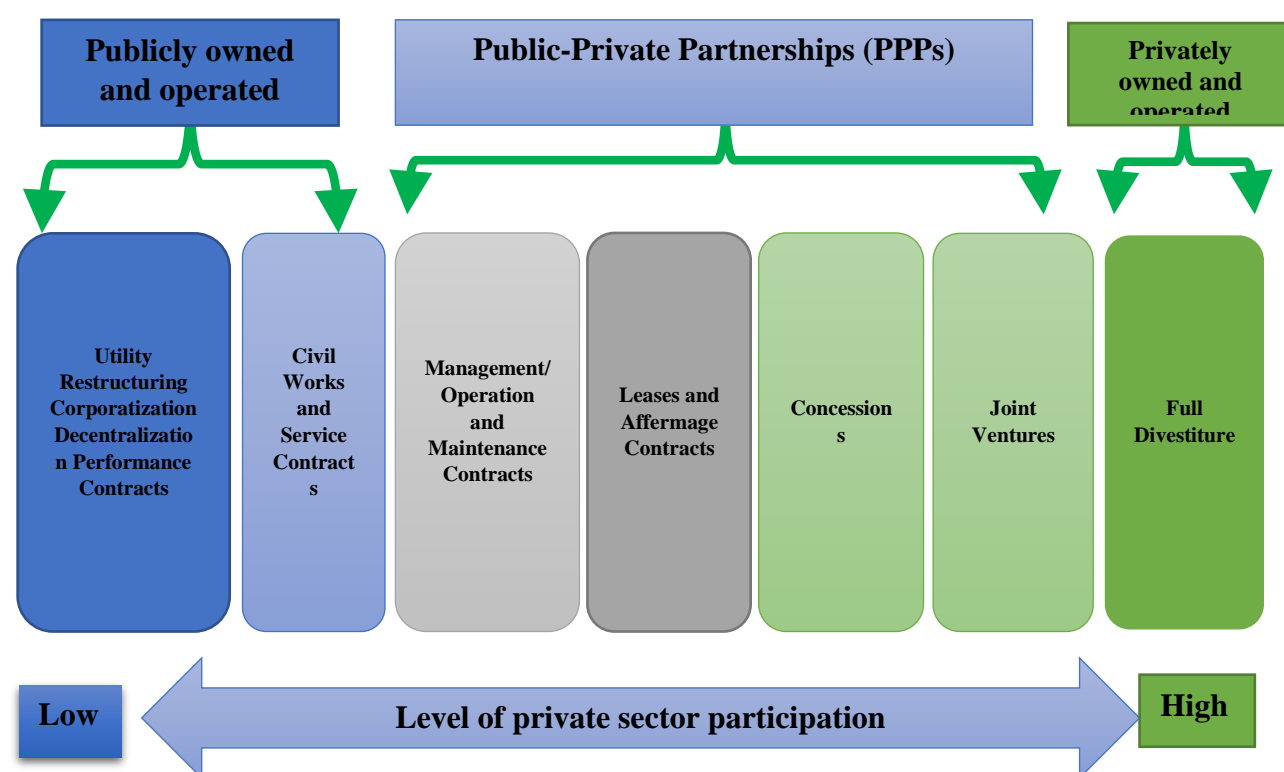
⁶ Public-Private Interplays (PPIs) are a broader form of collaboration not restricted to investment.

⁷ Public-Private Partnerships in Sub-Saharan Africa: Case Studies for Policymakers 2017

<https://www.africaportal.org/publications/public-private-partnerships-sub-saharan-africa-case-studies-policymakers-2017/>

1)⁸. These models vary in the degree of public- private sector participation⁹. In management contracts, private sector participation is very low, while full divestiture entails full/majority operation and ownership by the private sector. Management contracts are agreements where the public sector allow the private sector to manage a section or a part of a public enterprise or asset for a fee. In a lease type of arrangement, an operator (often a leaseholder in the private sector) takes charge of operating and maintaining the infrastructure facility and services.

Figure 1: PPP Spectrum



Source: Delmon, J. (2010)

A concession is a PPP wherein the government grants private sector the right to build, operate and charge public users of the public good or service a fee or tariff which public regulators control. In a concession contract, the government grants the private entity rights to build and operate a facility for a particular period, often called a concession period. A joint venture is an arrangement where the public and private sector agree to pool resources to provide public goods and services. Full divestiture is a PPP in which the private sector does the construction, designing, and operation of a facility. In some cases, the government may even handover the ownership rights of the assets to the private sector. Such a type of PPP is very beneficial from the government's point of view as it transfers the cost and risk associated with designing and constructing a facility from the government to the private sector¹⁰. In this type of arrangements,

⁸ PPP Arrangements/Types of PPP Agreements <https://ppp.worldbank.org/public-private-partnership/agreements>

⁹ PPP arrangements/types of PPP agreements. Public-Private-Partnership Legal Resource Center. <https://ppp.worldbank.org/public-private-partnership/agreements>

¹⁰Types of PPP (Management Contracts) <http://mytypings.com/types-of-ppp-management-contracts/>

the PPPs combine the skills and resources of both the public and private sectors by sharing risks and responsibilities¹¹. This enables the public sector to benefit from the expertise of the private sector and allows the former to focus instead on policy, planning, and regulation.

The Role of PPPs in Enhancing Infrastructure in SSA

PPPs are increasingly gaining traction in the region as innovative and sustainable mechanisms to design, build, finance, and operate public facilities hitherto provided by the public sector¹². PPPs may potentially solve sub-Saharan Africa's profound infrastructure backlogs, where 779 million people (55.6%)¹³ lack basic sanitation and 48.2% of the population people have no access to electricity¹⁴. Closing this gap could increase the region's GDP per capita growth by 2.6 per cent.¹⁵ This is also expected to accelerate the creation of sustainable formal jobs in addition to meeting national, regional and international development goals. Facing 4.3 percent fiscal deficit (as % of GDP)¹⁶ in 2023 and debt burden totaling US \$ 876 billion (55% of GDP)¹⁷, sub-Saharan African countries are increasingly turning to Public-private partnerships as alternative source of funding to meet their infrastructure gaps by crowding in private sector investment.

PPPs generally involve private capital fully or partially financing a government's development projects up-front and then drawing revenues from taxpayers throughout the contract to recoup investment and generate profits¹⁸. In this arrangement, the private entity is also responsible for designing, building/upgrading, operating, and maintaining the project(s). The private entity's investment is recouped through the revenues generated by the asset as per the terms of the PPP contract. The revenues are payable either by the asset users, such as a toll-road concession or by the public authority, or a combination of the two. At the end of the PPP contract, the ownership of the asset reverts to the public sector.

Challenges in Implementing PPP in sub-Saharan Africa

Several SSA nations have already established PPP enabling frameworks in the shape of PPP laws or regulations. According to the PPP Country Profiles from the African Legal Support Facility, 33 of the 54 African nations have already established a PPP Law or Policy and a PPP Unit, with six more countries having set up a PPP Policy or law. There have been 622 PPP and

¹¹ The role of public private partnerships in fostering innovation

<https://www.tandfonline.com/doi/epdf/10.1080/01446193.2019.1610184?needAccess=true&role=button>

¹² Unleashing Public Private Partnership Understanding and the Ideal Underpinning Theories: A Public Sector View <https://www.ccsenet.org/journal/index.php/par/article/view/0/42627>

¹³ Africa to drastically accelerate progress on water, sanitation and hygiene –

report <https://www.unicef.org/senegal/en/press-releases/africa-drastically-accelerate-progress-water-sanitation-and-hygiene-report>

¹⁴ Access to electricity (% of population) - Sub-Saharan Africa

<https://data.worldbank.org/indicator/EG.ELC.ACCS.ZS?locations=ZG>

¹⁵ Why We Need to Close the Infrastructure Gap in Sub-Saharan Africa

¹⁶ Sub-Saharan Africa: Budget balance <https://www.statista.com/statistics/805579/sub-saharan-africa-budget-balance-in-relation-to-gdp/#:~:text=A%20positive%20value%20indicates%20a,around%204.42%20percent%20of%20GDP.>

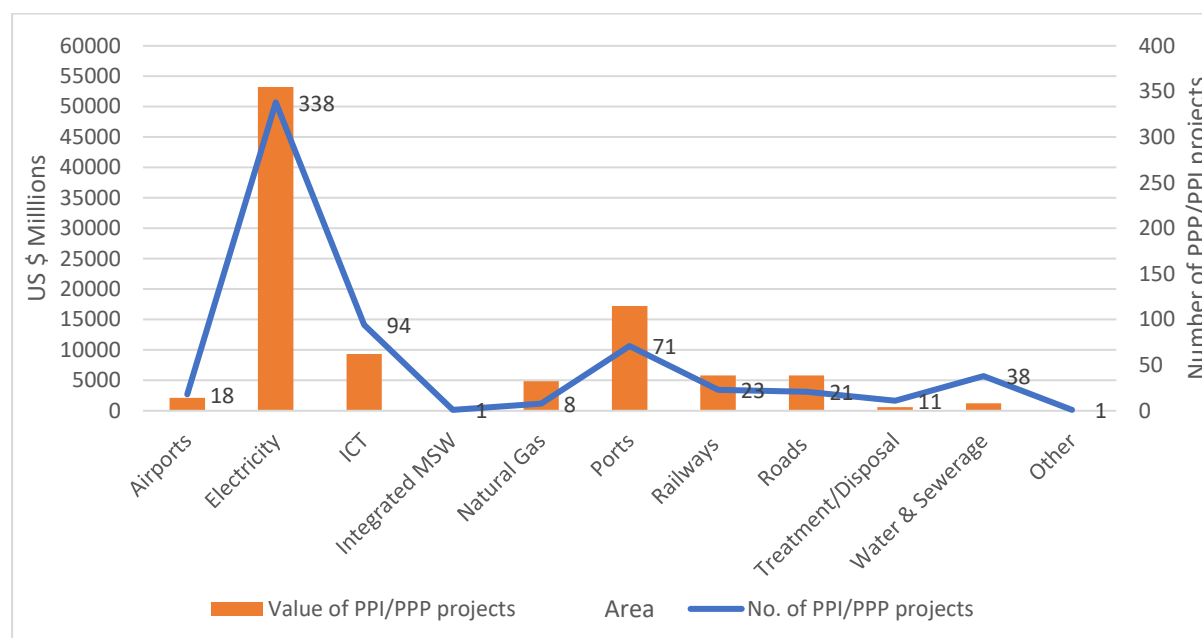
¹⁷ Government Debt (% of GDP)

https://www.imf.org/external/datamapper/GGXWDG_GDP@AFRREO/SSA/OEXP/OIMP/COM

¹⁸ Public Private Partnership Understanding and the Ideal Underpinning Theories: A Public Sector View <https://journals.co.za/doi/abs/10.10520/ejc-jpad-v56-n2-a3>

PPI projects across 45 countries in SSA between 1990 and 2022, with a value of 98.56 billion dollars according to the World Bank. Most of these PPP/PPI investments have been initiated in the last decade. Electricity (338), ICT (94) and ports (71) have the highest number of projects while electricity (\$53.32 billion), ports (\$17.25 billion) and ICT (\$9.32 billion) took the highest share of investment money (Figure 2).

Figure 2: PPI/PPP Projects in sub-Saharan Africa



Data Source: World Bank (2022)

Although a good number of PPP projects have been initiated in SSA, there is a fair share of costly PPP failures. Also, PPPs' contribution towards improved public service delivery has sustainably remained low mainly due to the absence of effective PPP frameworks to implement them coupled with poor PPPs understanding and application. Due inadequate legal and institutional frameworks, many SSA nations contend with challenges involving policy formation, project evaluation, contract negotiation. Also, political instability a pose a significant risk to PPP initiative. Investors cherish a stable political and regulatory environment to ascertain long-term viability of their investments. These risks engender uncertainty and deter the private sector from taking part in PPPs.

The viability of some PPP projects in Sub-Saharan Africa is a great concern. Prevailing issues in existing PPP projects such as unrealistic financial projections, weak market demand, inadequate revenue streams, insufficient cost recovery mechanisms have made PPP projects unattractive to private investors. Another challenges has been inadequate financial guarantees from the states. PPP projects frequently confront social and environmental difficulties, such as land acquisition, community evictions, and environmental effects. It might be difficult to guarantee that projects adopt proper mitigation measures, including stakeholders' engagement, and conform to social and environmental norms. Also, rent seeking behavior by state officials in key positions undermines fair competition and erode public trust, discouraging private investments.

PPP projects frequently necessitate land acquisition, which may result in native communities being displaced and losing their livelihood. Conflicts, legal issues, and reputational hazards for both public and private parties can result from a failure to acknowledge and respect these rights. Social unrest and PPP project delays may be necessitated by inadequate compensation, a lack of engagement with and involvement from the affected people, and inadequate relocation preparations. To address these issues, a multifaceted strategy is needed, one that emphasizes institutional capacity improvement, legal and regulatory framework reinforcement, transparency and governance improvement, private sector participation, knowledge exchange, and capacity building.

Best Practices and Lessons learn from Successful PPPs Projects

The trend toward PPPs has continued to take shape as innovative funding sources for key public development projects across the globe by narrowing the public infrastructure gaps and enhancing efficiency in public facility management and service delivery¹⁹. A good example is the landmark 50.5-kilometer Eurotunnel beneath the English Channel connecting UK and mainland Europe in France through a railway. The initiative has made it easier to travel between the two nations without any delays, promoting economic growth and enhancing cross-border connection.

There have been several successful Public-Private Partnership (PPP) projects in SSA that have demonstrated positive outcomes in various sectors with the most notable one being the Port of Djibouti. This is a successful PPP project in the region that involved the development and operation of container terminals and its associated infrastructure. The project attracted private capital and expertise, which made it possible to upgrade and expand the port's infrastructure. The Port of Djibouti has developed into an important logistical center in the region, allowing commerce abroad and fostering economic development. There are many benefits associated with PPPs. However, to achieve this there are several key considerations that SSA countries need to put in place which include developing a strong project preparation and evaluation process, engaging stakeholders and fostering PPP collaboration, ensuring long-term sustainability and maintenance of infrastructure and learning from successful PPP experiences across the world.

Way Forward

Given Sub-Saharan Africa's limited fiscal latitude due to insufficient tax collections, the substantial infrastructure needs in the region cannot be met unless the private sector actively participates in infrastructure financing through PPPs. As a result, SSA countries have to step up their efforts to close the region's infrastructure gaps by encouraging collaboration with the private sector through public-private partnerships to underwrite the costs of constructing and operating large public infrastructure projects. These partnerships can work well when there is synergy and harmony between public goals and private interests.

There is also a need for SSA economies to go beyond the PPP policies and laws in operationalizing PPP frameworks for infrastructure planning, budgeting, contracting and project management. They adopt and localize best PPP practices across the globe. In parallel, the regulatory frameworks protecting indigenous groups interests where PPPs take place are

¹⁹ The Impact of Public-Private Partnerships (PPPs) in Infrastructure, Health and Education: A Review
<https://ideas.repec.org/p/tse/wpaper/33287.html>

also required in addition to integrating sustainability considerations into the PPPs project lifecycle. Furthermore, progressive sector wide reforms are needed in key areas such as energy and transport before PPPs opportunities can be identified, structured, procured and implemented. By continuously addressing these challenges, SSA countries can enhance their ability to attract private sector investment. This will also create an enabling environment for successful implementation of PPPs and promote sustainable development through maximizing the benefits of private sector participation in public infrastructure development and service delivery.

References:

- African Development Bank. (2018). Africa's infrastructure: great potential but little impact on inclusive growth. *African Economic Outlook*. URL link https://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/2018AEO/African_Economic_Outlook_2018_-_EN_Chapter3.pdf
- Delmon, J. (2010). *Private sector investment in infrastructure: Project finance, PPP projects and PPP frameworks*. Kluwer Law International BV.
- Fabre, A., & Straub, S. (2021). The Impact of Public-Private Partnerships (PPPs) in Infrastructure, Health and Education. *J. Econ. Lit.* URL link <https://ideas.repec.org/p/tse/wpaper/33287.html>
- Jerome, A., Nnadozie, E., & Nabena, D. (2019). Africa's Energy Conundrum. In *African Economic Development* (pp. 395-423). Emerald Publishing Limited. URL link https://www.researchgate.net/publication/332624036_Africa's_Energy_Conundrum
- Ndevu, Z. (2021). Public Private Partnership Understanding and the Ideal Underpinning Theories: A Public Sector View. *Journal of Public Administration*, 56(2), 183-197. URL link <https://journals.co.za/doi/abs/10.10520/ejc-jpad-v56-n2-a3>
- Palaco, I., Park, M. J., Kim, S. K., & Rho, J. J. (2019). Public-private partnerships for e-government in developing countries: An early stage assessment framework. *Evaluation and program planning*, 72, 205-218. URL link <https://www.tandfonline.com/doi/epdf/10.1080/01446193.2019.1610184?needAccess=true&role=button>
- World Bank(2022). Infrastructure Finance, PPPs & Guarantees:Sub-Saharan Africa. URL link <https://ppi.worldbank.org/en/snapshots/region/sub-saharan-africa>
- World Bank. (2020). PPP arrangements/types of PPP agreements. Public-Private-Partnership Legal Resource Center. URL link <https://ppp.worldbank.org/public-private-partnership/agreements>