EVOlUtiOn Of PROJeCT ImPLEMENtAtiOn iN AfrIcA: tHe RISE Of PbUlic-priVate PArTNerpSHIPs

Case Study: Ghana’s Transportation Infrastructure Needs

Offei Adarkwa and Emmanuel Kofi Adanu*
University of Delaware, 301 DuPont Hall, Newark, DE 19716, USA

Email: adarkwa@udel.edu

*The University of Alabama, University Transportation Center for Alabama (UTCA), Box 870205, Tuscaloosa, AL 35487
Email: ekadanu@crimson.ua.edu

Abstract

Adequate and quality infrastructure systems are required to support sustainable development of countries worldwide. However, provision of infrastructure for public use which in most cases is the responsibility of governments comes at very high costs. With the current global economic challenges and high investment costs for transportation infrastructure development, the concept of Public-private Partnership (PPP) is being considered highly as a solution to ensure efficiency of project delivery and also to decrease the burden on governments’ purse. Despite the benefits of PPPs, many governments are reluctant to adopt it as a means of project delivery due to the complex nature of contracts among other reasons. This paper explores the use of PPPs as a more viable and sustainable option for transportation infrastructure project implementation in the developing world, especially Africa by considering PPP success stories as well as potential pitfalls in the region. Using Ghana as a case study, the paper takes a closer look at the causes of failure of government and private sector partnerships as well as the prerequisites of successful public and private partnerships that must be put in place to realize the full benefits of PPPs.

INTRODUCTION

In the past, infrastructure required to sustain growth and development in communities was delivered by local labor and expertise in the form of slaves, war captives and through communal labor. Public infrastructure delivery has evolved over the years as a result of the presence of formal governments. It has been established over the years that provision of infrastructure for public use is the sole responsibility of formal governments. However, rapid urbanization coupled with growing populations and budgetary constraints have made it difficult for government to deliver such projects. For a developing economy like Ghana, the economic growth and
accompanying increase in demand for transportation infrastructure have resulted in a high demand for efficient and safer movement of people, goods and services. Finding adequate sources of finance for transportation infrastructure development and service provision continues to feature prominently on the agenda of governments all over the world. The finance challenge is exacerbated by the multiple institutions typically involved in urban transport infrastructure development and maintenance, the range of direct and indirect user fees employed, and the distortions in investment signals that typically result [23]. The recovery from the global financial crisis has also stalled most infrastructure projects in Africa.

In recent years, long-term concession agreements involving increased private sector involvement, has emerged as a potential source of significant funding for transportation infrastructure and related services [5]. This model, broadly known as Public-Private Partnership (PPP) has become popular due to the fact that funding requirements for transportation systems cannot be solely provided from the traditional sources, that is the government. Public-Private Partnerships (PPPs) refer to the mobilization of private sector resources for the delivery of essential public services [16]. Traditional project delivery involving private partners usually require them to bid and build facilities designed by the public agency using public funding. PPPs on the other hand, imply increased private sector participation and may even allow private partners to contribute to a combination of design, construction, financing, operations and maintenance tasks.

PPPs have been used to deliver several infrastructure projects in both the developed and developing world. Ideally, this partnership is a mutually beneficial one for the public sector, private investors and general public. However, in cases where due diligence is not done by the two sectors, this partnership can do more harm than good to the society. Worldwide, PPPs have been utilized in many parts of the world. However, PPP project implementation in the Sub-Saharan African region lags behind other regions worldwide. See figure 1.

![Figure 1. Number and Value of Private Participation in Infrastructure Projects (1996-2006). Source: The World Bank, PPIAF, ICA (2009).][7]

PPPs must not be confused with privatization which is also used by governments to deliver services. In a PPP scheme, the terms of the partnership ensure that the public sector retains oversight of legal and operating standards that must be adhered to by the private partner. This is very much different from a privatization in which the public sector has little or no say in how the private sector operates a previously state-owned asset [12]. As a result, PPPs tend to be more attractive to governments. Despite its numerous benefits, PPPs must not be viewed as a silver bullet that will solve all public infrastructure problems. There are potential issues which need to be addressed early on during planning and negotiations to ensure success.
This paper examines the current PPP landscape in Africa with a focus on Ghana and presents the existing factors that will make PPPs successful in the continent as well as the potential pitfalls that must be avoided. The paper is divided into six main parts. The first part is the introduction which defines public-private partnerships and summarizes recent governments’ interests in such partnerships. The second part is the background which presents benefits of PPPs, best practices and success stories worldwide as well as the PPP process. The third section presents the current PPP situation in Africa and in particular Ghana. This section highlights the strides made by governments in the region towards PPPs. Parts four and five deal with the factors that will make PPP project implementation successful in Ghana and the potential pitfalls that can prevent success respectively. The conclusions and recommendations are presented in the sixth part.

BACKGROUND

Africa is developing rapidly and so there is the need for increased investment in infrastructure to sustain the economic growth. However, government spending is constrained due to several reasons including the global financial crises. As a result, governments must employ innovative ways to finance infrastructure projects. Government guarantees and foreign borrowing have become prominent features of infrastructure finance in many developing countries. Unfortunately, the debt–servicing difficulties of developing countries have raised fundamental questions about the benefits of foreign borrowing. Bilateral and multilateral donor agencies like the United Nations Development Program (UNDP) advocate PPPs as the solution to the infrastructure deficit in the fast-growing developing cities [21], [22], [3].

PPPs are agreements between the public and private sector to work together to perform and deliver specific services. In a PPP, the strengths of both the public sector and private sector are maximized in project delivery. PPPs are now being favored by governments especially in the developing world due to the following reasons:

i) Reduced design, construction and maintenance costs as a result of efficiencies employed by the private sector which is profit-driven. The strength of the private sector includes efficiency and cost-effective use of resources while the public sector ensures the well-being of the general public is maintained as a top priority.

ii) Timely delivery of projects due to private funds being mobilized in a shorter time. In traditional project delivery, a lot of time is lost in pre-construction fundraising.

iii) In planning PPPs, continued maintenance is guaranteed owing to the fact that these costs are accounted for during the planning. Government oversight reduces the likelihood of deferred maintenance which can increase maintenance costs by as much as 15-40 times [12].

iv) An underlying principle in PPPs is that risks are shared according to the party that can best manage it. PPPs allow governments to share financing, operational and maintenance risks with the private sector which in most cases is more equipped and experienced to manage them. This allows governments to control the growth of budget deficits and channel resources to other developmental programs.

There are several types of PPP contracts. These differ by the rights, obligations and risks assumed by the various parties involved [2]. No two PPP projects are identical. There are three main types of PPP projects [19]. They are:
a) Design-Build (DB) Projects- Fixed price contracts in which the private party accepts design risk costs. The private entity is responsible for designing and building the project which is financed and owned by the public agency. This type of PPP gives room for design innovations that will result in better value for money.

b) Design-Build-Finance (DBF) Projects- Very similar to the DB project except that in this type the private entity finances all or part of the upfront project costs. They are repaid by the public partners through tax revenues, tolls and user fees. The public partners retain ownership of assets.

c) Design-Build-Finance-Operate-Maintain (DBFOM) Project- Also similar to DBF but this type has a higher degree of private entity involvement. The private partners bear the operational risks as well as maintenance costs in addition to design and building costs. This type of PPP provides incentives for better life cycle cost management.

Several other PPP types including but not limited to Build-Own-Operate (BOO), Buy-Build-Operate (BBO) and Lease-Develop-Operate (LDO), Rehabilitate-Operate-Transfer (ROT) and Build-Lease-Transfer (BLT) also exist.

PPP has become politically popular since it provides better value for money of a project, and minimizes the pressure on public budget [4]. However, there are inherent risks and issues that must be addressed to ensure success. PPP projects involve allocation of risks to the party which is best able to manage them making PPPs worthy of consideration by several governments worldwide. Some of the risks that may arise in a transportation project, according to [20], include risks associated with Revenues (Traffic and revenue below projections, competition from alternative projects), Operation and maintenance costs (Excessive costs, Unpredictability of costs), Political constraints (Uncertainties regarding public policies) and Technological constraints (Unproven technology in terms of revenue service).

In the United States and Canada, major strides have been made in PPP project delivery. A very popular example of PPP success story in the United States is the John F. Kennedy (JFK) Terminal 4. This is a privately operated terminal at JFK which was opened in May 2001. This was part of a $1.5 billion redevelopment project with a concession period of 53 years from 1997 [1]. In the state of Connecticut in 2009, the Carlyle Group, one of America’s reputable asset management firms which specialize in private equity, won a 35-year concession to refurbish and operate highway rest areas along the major highways. The investment from the group and its partners will be around 170 million dollars. The Ottawa Paramedic Service Headquarters was also delivered using a Design-Build-Finance-Maintain partnership with the City of Ottawa. The proponent for the project is Forum Equity Partners with a contract that expires in 2034 [17].

The PPP Process

PPP project delivery can be summarized as a process with three main phases namely:

i) Planning;
ii) Procurement; and
iii) Operations.

The Planning Phase involves the public agency identifying the need for investments towards infrastructure development. In this phase, the scope of the project is clearly defined. Based on a specific project’s unique characteristics such as size and complexity, quantitative and qualitative analysis is carried to determine whether the project can be delivered as a PPP. This will involve a value-for-money (VfM) analysis which compares traditional project procurement
to PPP alternatives. Prior to a project being procured using a PPP, the public agency must demonstrate that the PPP delivery approach provides the best value for money.

Procurement is the second phase of the PPP delivery model. This involves the establishment of rules and objectives of the potential partnership, developing operational and service requirements and assembling of resources for project delivery. The procurement phase can be subdivided into three stages; request for qualifications (RFQ), request for proposals (RFP) and closure. The RFQ stage allows the public agency to prepare a shortlist of at least three potential bidders who have the experience and financial capacity to deliver the project [17]. The shortlisted bidders are then given time to prepare proposals based on the RFP documents that will be released by the public partners. The document includes key project information such as concession period, payment mechanisms, rights, roles and obligations of the respective private and public partners. After the most qualified bidder is selected, final negotiations will take place between both parties. The project starts after commercial and financial closure.

The final phase which is referred to as the operations phase involves construction, operations, maintenance and contract expiry or termination. During this phase, there must be consistent monitoring of work being done. There is usually some form of performance reporting requirement depending on the type of agreement between the private and public sector agencies. See figure 2 for a summary of the steps involved in a PPP.

![Figure 2. The PPP Process (*-depends on terms of agreement of public and private sectors)](image)

**CURRENT PPP LANDSCAPE IN AFRICA**

Most governments in the continent see PPPs as the way to tackle problems posed by privatization schemes that have been unsuccessful. Africa has had a mixed record in recent years since this form of innovative financing gained popularity. For several PPP success stories, there may also be a few unsuccessful stories which provide valuable lessons for policy makers and private sector companies who wish to enter into this form of partnership. A successful PPP scheme is the product of good planning, effective communication between partners, the presence and effectiveness of regulatory and institutional frameworks as well as commitment on the part of both parties.

South Africa is the leading country in Africa when it comes to experience in the implementation of PPPs. Since 1994, there have been over 300 projects involving private and public partnerships at the municipal level.

*Success stories in Africa*
In transportation, the N4 Toll road linking South Africa and Mozambique was delivered under a PPP arrangement. Due to financial constraints of both the South African and Mozambican governments, a 30-year concession was signed with Trans Africa Concessions (TRAC) to build and operate the highway. The cost for the project was estimated at about R 3 billion in 1996. Funds were made available by private construction companies, banks and other funds. There are toll discounts for public transport and local users. This facility has boosted economic activities in both countries especially tourism [6].

PPPs are also ideal for other forms of public infrastructure projects. Notably, the involvement of private partners in the operation of the international container terminal at the Dar es Salaam port in Tanzania is a major success story. After initial investment in equipment of about $7 million dollars, the revenue and profits reached 206% and 218% respectively after the first year of the concession. This became possible after increased efficiencies in service delivery and technology [6].

In health care, a PPP scheme was used in developing the Lesotho National Referral Hospital as well as upgrading in three urban filter clinics in 2007. This was through an 18-year design, build, partially finance, equip and operate contract. The project was valued at $107 million [18]. In all these, valuable lessons are there to be learned by other governments who desire to engage in PPPs.

**PPP Landscape in Ghana**

Due to budget constraints, the Government of Ghana (GoG) is unable to keep up with infrastructure development to support the economy. This has resulted in a deficit of about $1.5 billion sustained spending per annum required for the next decade to address this issue [9]. There is therefore the need for innovative ways to finance the various projects that are on the government's development agenda. After research and deliberation by various interest groups, PPPs were considered as a feasible alternative that will ensure people get access to services and infrastructure. Ghana’s first attempt at PPPs was in 2004 but due to the absence of a legal framework and other policy inadequacies, it was not very successful [8]. The GoG adopted a National Policy on PPPs on 3rd June 2011. This policy was to serve as a guide for better organized PPP implementation in the country. With the adoption of a National Policy on PPPs in 2011, the GoG seeks to “improve the quality, affordability and timely provision of public infrastructure and services” for the citizens of Ghana. The Act is now being promulgated to provide the needed legal framework for PPPs [7].

On March 27, 2012, The World Bank Board of Executive Directors approved an interest free credit of $30 million for the Ghana-PPP project. The main objective was to improve the legislative, institutional, financial, technical and fiduciary framework required to ensure successful PPP projects [13]. The project is made up of three main parts including:

1. Institutional capacity building;
2. In-house capacity building for Ghana’s Ministry of Finance and Economic Planning (MoFEP); and
3. Management and monitoring evaluation which will finance consultant services to help the MoFEP.

The closing date for this project is August 31st, 2016. Currently, the PPP Law has been reviewed by a World Bank team and GoG stakeholders. It is being drafted by the Attorney General’s Department with the appropriate legal language and will be presented to Parliament for
enactment in 2014. The enactment of the law will signal GoG’s readiness to partner with private sector’s parties and will boost local and international investors’ confidence. There are several opportunities to close the infrastructure gap through PPPs especially in the area of transportation infrastructure in Ghana.

CRITICAL SUCCESS FACTORS

Since PPP in the transport sector is a relatively new phenomenon in developing countries, it is imperative on the part of governments to put in place an enabling environment for this form of partnership. This will include providing the right legal and institutional frameworks so as to boost private sector confidence and derive full benefits of such arrangements. Also, it is essential that PPP Units are set up by the governments to serve as technical resource centers for the government. The unit will be responsible for ensuring that projects to be carried out using PPPs meet quality criteria as well as ensuring that efficient contract monitoring procedures are in place. Sub-Saharan countries like South Africa, Kenya, Uganda, Nigeria and Mauritius have all taken steps in the right direction by setting up PPP Units [15] which are in most cases tied to the National Treasuries. In Ghana, the PPP Advisory Unit has been set up within the Ministry of Finance and Economic Planning to serve as a transaction advisor for the government.

Enactment of laws such a PPP infrastructure development law provides the necessary legal framework for the implementation of PPP agreements. This helps avoid the unlawful abrogation of contracts especially when there is a change of government, a common practice in Ghana, which leads to the state paying huge “judgment debts” to individuals and private institutions. This has happened in the past partly because the public sector or government fails to enforce procurement laws and hence do not administer contracts to avoid liability. Government must therefore reform the existing procurement process and implement best practices to attract the right private sector players to enhance the infrastructure development agenda.

PPP contracts can be very complicated and so with little or no experience on the part of both public and private sectors, the benefits of PPPs may not be realized fully. In order to garner experience, the government can start to involve the private sector to a large extent in smaller scale projects. As adequate experience in PPP project execution is gained, a transition to large scale PPP projects can be made smoothly.

The terms of agreement, rights, obligations and payment mechanisms must be stated clearly in the contract documents as well as the preliminary stages to avoid complications during project execution. Extensive communication must also exist within and across both parties if partnerships are to be successful. These are common underlying themes of all successful public private partnerships around the globe.

POTENTIAL PITFALLS

In spite of the numerous advantages of PPPs, some schools of thought believe that many of such arrangements do not protect the public interest [14]. Much of the controversy surrounding PPPs in transport project funding and operation is due to the perception that such arrangements
will lead to increased user costs and the possible exclusion of those who cannot afford, for instance, to pay tolls, on roads that had previously been toll free [5]. In countries where PPP is a relatively new culture, the public may be concerned that the lack of public-sector experience with concessions, along with cronyism, endemic corruption, growing financial needs and political interests, can lead decision makers to enter into PPP agreements that will not necessarily meet the public goal of providing reliable transportation systems that benefit all users [5].

In some PPP arrangements like DBFO, the public sector receives an up-front payment and/or shares revenue over the concession term. Private investors submit proposals for development or lease of a transportation facility; valuing the project based on several factors including projected usage and revenues, level of risk transferred to the private sector, and cost of financing. There is however a great deal of uncertainty regarding the public sector’s valuation of these facilities, upon which a bidder is selected [5]. Depending on the type of PPP agreement, the public sector may receive a large up-front payment, and if the contract includes revenue-sharing provisions, the private sector will make annual payments generated from the use of the facility throughout the lease term. The public may be concerned about how these monies are used. For instance, decision makers may use the money to provide short-term budget relief for programs not related to transportation. In other cases where the money is kept in transportation, they might be used for projects outside the geographic region where the facility is located, and in projects that do not benefit the facility users [11]. Such situations can lower the confidence of the public in this type of partnership. Some critics of PPPs posit that there is limited or no opportunities for public participation in the decision making process, and that information on private sector proposals and contracting terms remain confidential, out of reach to the public and some relevant decision makers and stakeholders.

Mostly, the private sector is liable to its investors and must respond to its shareholders, who are expecting a return on their investment. There is therefore a public concern that the private sector will be focused on recouping its investment and generating profit, while neglecting users’ needs and interests. In developing countries, weak legal and institutional frameworks permit the interests of the strongest partner (usually the private sector) to be served under the guise of serving the weak (transportation system users).

Also, in cases where revenue sharing is not specified in the contract, the private sector tends to benefit if revenues become higher than planned for. Usually, by including revenue sharing, the public sector foregoes a higher upfront fee. Lastly, in concession agreements, the public may be apprehensive over the length of lease. For example, in the United States, the Chicago Skyway lease is for 99 years; the Indiana Toll Road lease is for 75 years [5]. The public concern with the length of long-term lease agreements is related to the time during which the facility will be under private management, and the perception that the government will not have the ability to protect the public interest for such a long period of time.

CONCLUSION & RECOMMENDATIONS

In recent times, the traditional role of the Government as the primary infrastructure and public service provider is gradually being supplemented with private sector expertise and financing.
Although not a new method for the provision and financing of public infrastructure and services, many forms of PPPs are relatively new to the developing world. With increasing demand for transportation infrastructure, increased costs of construction coupled with fiscal constraints, the GoG, like many other developing countries are resorting to PPPs to address these challenges in the transport sector. There are numerous advantages in utilizing PPPs and so they tend to be more attractive to governments than the traditional ways of undertaking transportation projects. A successful PPP scheme usually is the product of good planning, effective communication between partners, the presence and effectiveness of regulatory and institutional frameworks, flow of information among stakeholders, as well as a genuine commitment from both parties. When these critical success factors are ignored or the scheme is hastily carried out, PPPs can end up being a costly and fruitless venture. The success and failures of other countries that have taken the lead in the use of PPPs have been captured briefly in this paper. The potential pitfalls identified provide policy and decision makers with the opportunity to put in place precautionary measures to ensure value for money.

For PPPs projects to be successful in the region, agreements must be such that they synergize public and private sector goals. The essential PPP Units for public agencies must have experienced personnel who understand the objectives of the agency and also private contracting conventions. Special legal expertise is also required due to non-standard financing approaches that are sometimes used. Governments must also have clear cut evaluation procedures and mechanisms to ensure private sector adheres to terms of the agreement. PPPs have the potential to improve the current state of infrastructure development within the region and so there is the need for both parties who intend to go into such partnerships to perform detailed pre-agreement research to ensure success.

REFERENCES


