



Challenges in Implementing Public Private Partnerships (PPPs) Projects in the Road Sector in Zambia

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Abstract- The uptake of Public – Private Partnerships (PPPs) in the road sector in Zambia has been limited, despite the Government of the Republic of Zambia's initiatives as far back as 2009 when the PPP Act was enacted. The paradox is that there was no study that had been conducted to determine the challenges in the implementation process. This study sought to find out the main challenges in the implementation process and to offer possible solutions. To achieve this objective, the researcher carried out a detailed literature review and utilized a purposively sampled population of experts in a semistructured interview and questionnaire survey. The Statistical Package for Social Sciences (SPSS) and the Pareto's Principle were used to analyse the collected data. The study confirmed the prevalence of implementation challenges in the road sector in Zambia. From the fourteen identified and short-listed implementation challenges, the study identified nine as the major challenges requiring attention, with the three leading ones being: (1) non-financial viability of the concessions due to low traffic volume; (2) lack of time, resources, knowhow and authority within the staff of implementing agencies to originate and implement PPPs; (3) inconsistent and unclear PPP Policy.

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Challenges in Implementing Public Private Partnerships (PPPs) Projects in the Road Sector in Zambia

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Abstract- The uptake of Public – Private Partnerships (PPPs) in the road sector in Zambia has been limited, despite the Government of the Republic of Zambia's initiatives as far back as 2009 when the PPP Act was enacted. The paradox is that there was no study that had been conducted to determine the challenges in the implementation process. This study sought to find out the main challenges in the implementation process and to offer possible solutions. To achieve this objective, the researcher carried out a detailed literature review and utilized a purposively sampled population of experts in a semi-structured interview and questionnaire survey. The Statistical Package for Social Sciences (SPSS) and the Pareto's Principle were used to analyse the collected data. The study confirmed the prevalence of implementation challenges in the road sector in Zambia. From the fourteen identified and short-listed implementation challenges, the study identified nine as the major challenges requiring attention, with the three leading ones being: (1) non-financial viability of the concessions due to low traffic volume; (2) lack of time, resources, knowhow and authority within the staff of implementing agencies to originate and implement PPPs; (3) inconsistent and unclear PPP Policy. Based on the research, it was recommended that for PPP Projects to be effective in the road sector in Zambia, there was need for implementing agencies to categorize the non-economically and economically viable toll roads and incentivize the former as part of the long term solution. Two PPP Models were recommended to encourage investment in the road sector in Zambia: the Design Finance Build and Transfer Model for non-economically viable Projects and the Design Finance Build Operate and Transfer Model for economically viable Projects.

Furthermore, the study recommended capacity building in all implementing agencies and creation of specialized 'swat teams' to work with implementing agencies on specific transactions as 'quick wins' solution for PPP projects in the road sector.

1. INTRODUCTION

This study was necessitated by limited presences of PPPs in the Road Sector in Zambia despite the Government of the Republic of Zambia's (GRZ) initiatives as far back as 2009. Globally, developed countries such as the United Kingdom (UK), France, Japan and Singapore; the BRIC countries like China and India and other rapidly/or developing Asian countries

such as Indonesia, Malaysia, South Korea, Hong Kong, Australia and Thailand among others, have generated a lot of interest in PPPs/ Private Finance Initiative (PFI) in their quest to generate additional sources of capital and/or as a means of enhancing value for money for enhanced public service delivery (Lengwe, 2014)'.

Similarly, European Investment Bank (EIB) in 2010 reported a growing interest in the use of PPP within Europe for the period of 1990 – 2009 as depicted in Figure 1.

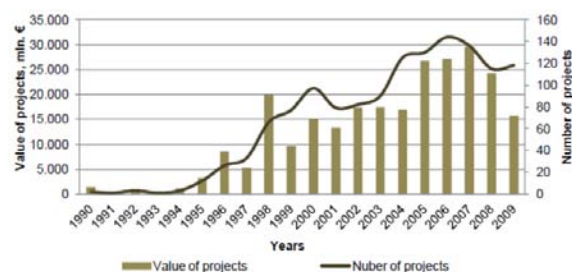


Figure 1: European PPP Trend, 1990-2009, Source: Adopted from EIB

In Africa, Zimbabwe and South Africa have an importance experience in PPPs in the road sector. Unlike Zimbabwe and South who have implemented PPP projects in the road sector, Zambia has never executed a PPP transaction in the road sector. Zambia's exposure to PPPs had not been in the road sector. The measures in place to improve the road network such as Link Zambia 8000, Pave Zambia 2000, Lusaka 400 and Copper belt 400 were all on the government balance sheet. However, the rate of investment in the road sector was inadequate to meet the demand for good road network. Zambia's population was growing at a rate of 3.1% per annum (CSO, 2017), but the pace of infrastructure development was slow, resulting in the infrastructure gap.

The infrastructure gap and its negative impact on economic growth, job creation and social cohesion in Zambia, had been conspicuous for many years. Improved infrastructure in the Road Sector in Zambia was a necessary condition for successful economic growth. However, the GRZ had been experiencing a financial crisis. Worse still, most road projects under

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implementation were on GRZ balance sheet and could not devote an increased capital expenditure to accelerate public infrastructure delivery. Debt financing was not an option either due to lack of fiscal space. The paradox was that there was no study that had been conducted to determine the challenges in the implementation process of PPPs to bridge the financial gap.

Specific Objectives of the study were:

1. To establish the Road Projects under PPP in Zambia;
2. To find out the challenges faced in the implementation of PPPs in the Road Sector in Zambia; and
3. To recommend the possible solutions required to mitigate the challenges faced.

II. SIGNIFICANCE OF THE STUDY

The Research was significant because its findings could be used to refine PPP models in the Road Sector in Zambia. It provided a feed back to Policy Makers on what could be done to make PPPs successful in the Road Sector in Zambia.

a) Operational Definitions

There is no single definition of the term “public private partnership”. The term should be viewed as a spectrum of possible relationships between public and private actors for the co-operative provision of traditionally public-domain services (Li, 2000).

Scope: This study was limited to PPP Projects in Road Sector in Zambia.

III. CONCEPTUAL FRAMEWORK

Public – Private Partnership (PPP) is a tool of governance. All over the world, many countries use this governance method to manage public infrastructure (Massoud et al 2002). This study used the concept of New Public Management to conceptualize the challenges in the implementation of PPPs in the Road Sector in Zambia. New Public Management (NPM) can be defined “as a body of managerial thought or as an ideological thought system based on ideas generated in the private sector and imported into the public sector” (Larbi, 1999).

Through NPM, public services are carried out by the private sector with structural, organizational and managerial changes. Palmer (2009) argues that NPM focuses on the management of public services by the private sector with management changes to maximize efficiency and profitability. The transfer of such responsibilities from a Public institution to a private institution is facilitated by formation of a PPP transaction. However, PPPs (dependent variables)

depend on other variables (independent variables) to flourish.

This study investigated the presences of such independent variables in the implementation process of PPP Projects in the road sector in Zambia. Fourteen (14) independent variables were identified and condensed from the literature view and the researcher's own observation. The absence of such independent variables in the implementation process was noted as a challenge.

Figure 1 shows the conceptual framework and the interaction of variables.

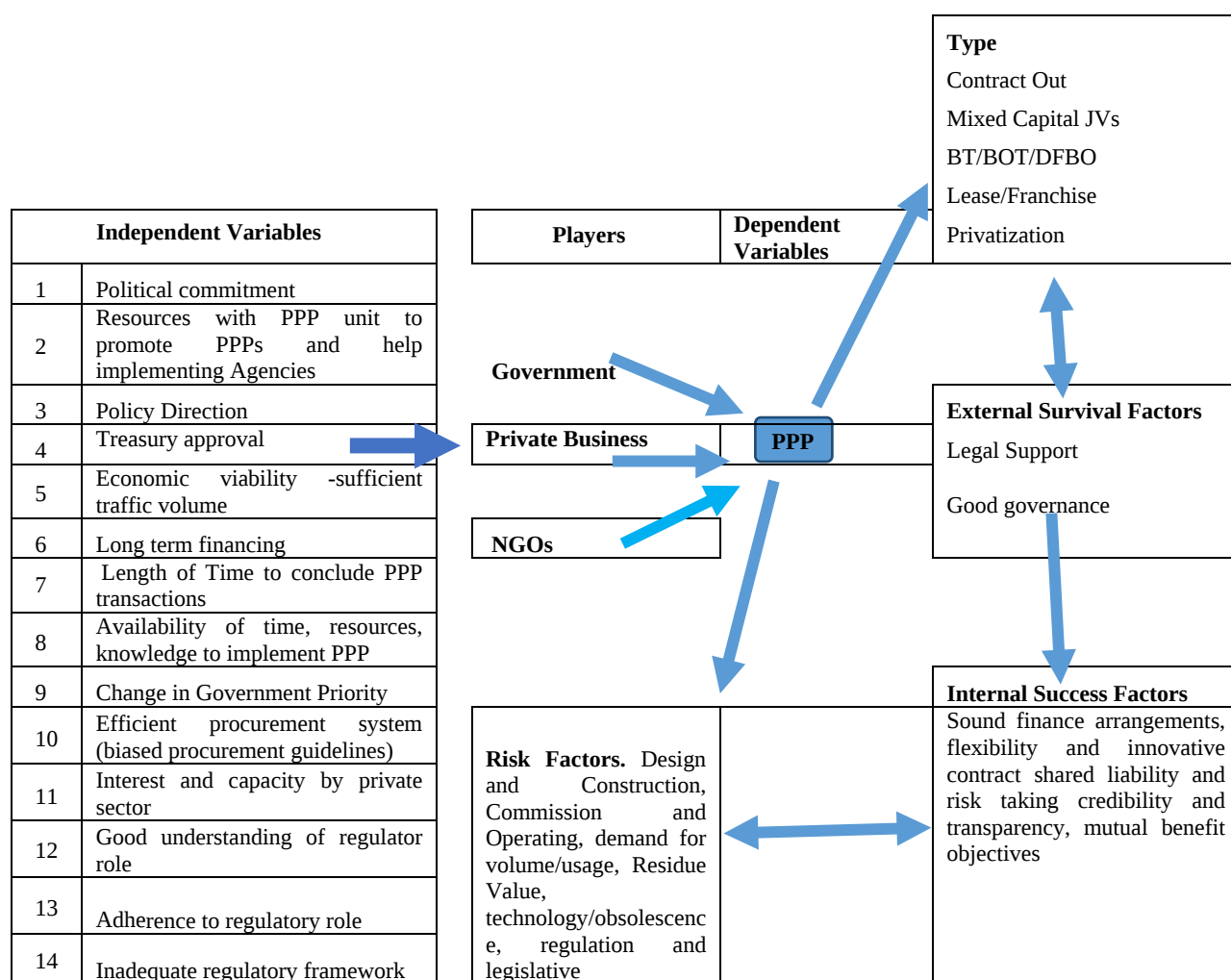


Figure 1: Conceptual Framework

IV. RESEARCH DESIGN

The study involved a field survey which was non- experimental in design. The Researcher had no control over or manipulated independent variables, but measured the variables and their effects using statistical methods. The study showed the cause and effect relationship between variables which impact on PPPs in the Road Sector in Zambia.

Quantitative methods were used in order for the Researcher to collect statistical information about PPP road funded Projects and challenges experienced. Qualitative method was used in order to collect information which could not be obtained using quantitative method. The use of quantitative and qualitative methods was required because the study required several methods to capture adequate data in order to achieve desired results. The Researcher used both primary and secondary data. Primary data was obtained using questionnaires and interviews while secondary data was obtained from journals and books. The tool that was employed in the initial identification

process of respondents was institution to institution survey. The Researcher had no control over the variables but merely reported the findings of the variable under investigation.

a) Sampling Frame

In Zambia, there were six (6) institutions involved directly or indirectly in road construction and maintenance. These were:

1. Road Development Agency (RDA) which was the overall road authority whose mandate is to design, construct and maintain the road network in Zambia;
2. National Road Fund Agency (NRFA) which was involved in resource mobilization and financing of Projects;
3. National Council for Construction (NCC) which dealt with registration of contractors and regulation of the construction industry in Zambia;
4. Road Transport and Safety Agency (RTSA) which dealt with road safety;
5. The Ministry of Infrastructure and Housing was responsible for the road sector policy; and,

6. PPP Unit which was the institution mandated for formulation of PPP policy and guidelines among other responsibilities.

The population size for experts in these institutions were RDA-101, MHID-56, NRFA -9, NCC-27, PPP Unit - 8 and RTSA-12, making a total population size of 213. It was from these institutions that 28 respondents (experts) were drawn to make a sample of 28.

The study included also 7 management staff from 5 different private institutions: Consultants; Contractors; Banks; Insurance Companies and National Pension Scheme Authority (NAPSA) who were identified as having participated in PPP transactions in the Road Sector in Zambia. This was because this category was the custodian of finances which gave an insight into the study. The findings were therefore generalized to PPPs in the Road Sector in Zambia.

b) Sample Size

For ease of generalization of the results to the road sector in Zambia, the study had a sample size of 35 respondents drawn from the key Government Institutions responsible for road maintenance and construction in Zambia and the PPP Unit. It also included 7 key informants from the private sector.

c) Sampling Procedure

To get information from the 35 respondents, this study used expert sampling which was non-probabilistic. Expert sampling is a sampling technique where respondents are chosen in a non-random manner based on their expertise on the subject being studied. The rationale was that since experts were very familiar with PPP Projects in Zambia, their opinion would be credible. Purposive sampling was used to collect information from seven key informants from the private sector.

V. RESEARCH INSTRUMENT

Questionnaires were used for collection of data. The questionnaires were suitable because the respondents were educated and did not need an interpreter. It gave the respondents enough time to think over the questions before attempting to answer. It was also convenient for use in data analysis using statistical methods for data collection.

Face to face interviews were used to gather information that needed clarification by the respondents so as to get further insights on some issues that were unclear in the questionnaire, and to help come up with a detailed report. Thus, face to face interviews were used when getting information from key informants.

VI. DATA ANALYSIS

Qualitative and quantitative techniques were used in analysis of data. The responses from

questionnaires were analyzed using the Statistical Package for Social Sciences (SPSS) and the Pareto's Principle. The results generated using SPSS were interpreted quantitatively. Content analysis methods were used to analyze qualitative data from the interviews conducted.

a) Ethical Aspect

The Researcher got permission from Controlling Officers to conduct research in their respective institutions. The Researcher wrote letters to respondents requesting for their participation in the study. Participants that agreed to take part in the research were assured of the right to maintain their privacy. Participants were also assured of the ethical boundaries such as anonymity and confidentiality.

b) Limitations of the Study

The results from the study were not generalized to other sectors which implemented the PPP programs in Zambia because expert sampling was used, which is a non-probability sampling.

VII. RESULTS

The Study revealed that there were no PPP projects that had been implemented in the road sector. The only notable concession in the road sector was Kasomeno Mwenda agreement which was signed in August 2016 but concessionaire had not mobilized one year later. Thus, it was concluded that there were no PPP projects that had been fully implemented in the road sector in Zambia.

The study confirmed the prevalence of implementation challenges in the road sector in Zambia. From the fourteen (14) identified and short-listed implementation challenges, the study identified nine (9) as major and requiring attention using the Pareto principle or the "80-20 rule. Pare to principle states that 20% of the population controls 80% of the wealth. The major challenges were: (1) Non-financial viability of the concessions due to low traffic volume; (2) lack of time, resources, knowhow and authority within the staff of implementing agencies to originate and implement PPPs; (3) Inconsistent and unclear PPP Policy (4) Non availability of long term financing; (5) PPPs take too long to materialize; (6) Lack of Interest by the private sector to implement PPP Project; (7) Low Interest from the private sector to take on PPP Projects due to unstable economic environment; (8) Lack of funds and treasury approval; and (9) Low political commitment.

Using the Pareto's Principle, the study identified the other five (5) challenges as insignificant. These were:

1. Inadequate understanding of the Regulator role by PPP unit, technical committee and the council at 4.7%;
2. Change in priority by Government at 4.2%;

3. Lack of Adherence to the regulatory framework by road authorities at 4.2%;
4. Biased procurement guidelines towards traditional methods at 2.4%; and,
5. Inadequate regulatory framework at 2.4% of the respondents.

The results showed that the greatest challenge for implementation of PPPs in the road sector in Zambia was lack of commercial viability resulting from low traffic volume. It was however reported that non commercial viability of the consessional transaction could not be a stumbling block to PPPs in the road sector.

a) Long Term Recommendations

It was recommended that as a long term measure the implementing agencies should:

- 1) Categorize PPP transactions as non-economically or economically viable toll roads and incentivize the former with one or a combination of the following benefits:
 - a. *Viability Gap Financing*: A budgetary fund to provide financial subsidy for Projects that have high socio-economic value but are not sufficiently commercially viable to be delivered on a PPP basis. A certain percentage of the total Project cost can be subsidized by the Government either as part of a capital contribution during construction or in the form of annuity payments during operation. To this effect there is need to review the PPP Policy framework to make such provisions;
 - b. *Fiscal Incentives*: There was need to make provisions permitting PPP investors to benefit from various fiscal incentives such as reduced import tax on capital; goods; and various tax holidays to reduce the cost of implementing the Project and to enhance viability of Project;
 - c. *Special Incentives (Non-Fiscal)*: Any specific Project may get special incentives or other non-fiscal incentives to support the implementation of policy objectives or to enhance the ease and efficiency of delivering the Project. These may include exemption from specific provisions related to insurance regulations, banking regulations and foreign exchange regulations; and,
- 2) Build capacity in all implementing agencies. The respondents indicated that PPP process was a complex one which required a combination of special skills mix in financial analysis and modeling, transaction structuring, commercial legal expertise, sector knowledge and transaction management which were nonexistent in some implementing agencies.

b) Short Term Recommendations

The study recommended the following short term measures to be implemented by implementing agencies:

- 1) Creation of dedicated PPP Sub-Units in the implementing agencies that would be staffed with trained staff to handle PPP projects.
- 2) Creation of specialized 'swat teams' to work with implementing agencies on specific transactions.

From the results, economically viable concessions were recommended to take Design-Build-Finance-Operate- Maintain while non-economically viable should take Build-Operate-Transfer (BOT) with various inceptions.

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