Public Private Partnership for Infrastructure Development

W. S. L. Perera

Department of Civil Engineering, University of Moratuwa, Sri Lanka

Abstract

Investment in infrastructure is a main challenge that a government faces. Therefore in the last three decades, Public-Private Partnership has been a popular investment model in the world. Public-Private Partnership framework mainly consists of policy, legal and investment frameworks. In this paper it's mainly discussed about public private partnership formwork and it's deficiencies for infrastructure development in Sri Lanka.

Keywords — Public Private Partnership framework, Infrastructure, Sri Lanka.

I. INTRODUCTION

Infrastructure typically refers to the technical structures that suport a society, such as roads, water supply systems, sewers, power plants, electrical grids, telecommunication netwroks and so forth. Infrastructur is one of the most important tools for accelerating economic development [1]. Furthermore maintenance of essential public infrastructure is an important ingredient for sustained economic growth and poverty reduction [2],[3].

Investment in infrastructure is a main challenge that a government faces. The availability of sustainable and sufficient infrastructure is of urge demand in order to support national development for economic growth and human prosperity. The adequacy of infrastructure can be achieved when a government has sufficient funding. However, government budget is limited causing government to find another source of funding [4]. Further, governments today face growing demands for infrastructure and however, their ability to meet the needs of their citizens may be constrained by the lack of capital, lack of technical skills, management or governance expertise or limited number of public institutions. The demand for investment in quality social and economic infrastructure is likely to significantly outweigh the fiscal resources of a government and it's challenging [5].

Therefore most of the governments in the developing parts of the world are examining alternative service delivery and assets creation models. Large scale fiscal deficit has limited their capacity to meet growing infrastructure needs and major challenge in the efforts to improve their investment climate [6]. However increasingly,

governments are considering Public Private Partnership (PPPs) to play an important role in the provision and the management of various infrastructure services. PPP is an investment model which has a combination of possible relationships among public and private sector entities [8].

The main benefit to government is PPPs as an off-budget mechanism for infrastructure development as this agreement may not require any immediate cash spending. The other main advantages are relief from the burden of the cost of design and construction, transfer of certain risks to the private sector and the promise of better project design, construction and operation [11]. Simultaneously the private sector considers an optimal whole life cycle cost for the project, which allows the government to get better value for money from the project.

Furthermore PPPs has more potential benefits to the infrastructure projects, which are;

- Increased capital availability for a project: Available public sector funding can be leveraged through long-term financing from private sector resources, with an appropriate means for recapturing the investment included in the contract.
- Improved delivery time: With the enhanced project management skills of the private sector and clearly defined and indicated delivery goals incorporated in the contract, project or service delivery can be provided in substantially shorter timeframe.
- Cost-effective operations: Through workplace rules, management practices and operational efficiencies developed through competition in the marketplace, the private sector can provide costeffective approaches.
- Environmental sustainability: PPPs may be specifically designed to address environmental challenges. Through the application of new technologies provided by the private partner, the concerns about air and water pollution, remediation of hazardous wastes and other environmental concerns can be addressed [5],[7]

II. PPP FRAMEWORK

There are three main frameworks within the PPP investment model which are policy, legal and investment [8], [9]. Policy and leagal framworks come under the regulatory framwork [10].

A. Policy framework

Policy framework is a set of principles and long-term goals that form the basis of making rules and guidelines, and to give overall direction and development of the PPP investment. Following factors are considered within this framework [7], [8].

Rationale for PPP - Fundamental reasons for the selection of PPPs to the project. Both public and private sectors to understand the core rationale for PPPs and how the public sector will go about making them happen.

Guidelines - Guideline gives a detailed plan or explanation to guide a person or institution in setting standards or determining a course of action in other words, guideline is a rule or a principle that provides guidance to the appropriate behaviour. Therefore it's needed to be discuss what guide lines are used in this PPP and how these are used in practice.

B. Legal Framework

Legal framework is a set of principles that forms the basis of making rules and regulations to proceed with the investment clearly and effectively. This gives the private sector the assurance of the effectiveness of any PPP contract that they have entered into with the Government. As an example legislation may be needed to allow private company to charge and collect user fees. Under this section, the following factors should be considered [7], [8].

Mechanism of the payment to the investor – Mechanism of the payment describes how the repayment of the infrastructure investment is planned. It can be tariffs collect from end users, payment as a settlement of a loan per month or annual, shadow toll or vehicle registration fee for road projects.

Investors' Rights & Lenders Rights - It gives what are investor's & lenders rights for the investment for the project.

Repatriation of funds - The mechanism of returns or recover the funds during the concession period for investors and lenders. It specifies the stages of recovery, duration, percentage of recovery etc.

Resolving Contract Disputes - Method used for solving disputes within the contract and the governing law of the dispute resolution.

Government Support or Guarantee and Tax on payments – Government support to the investors to encourage investment to the project. Therefore these projects are release from some taxes, or it gives tax holidays, etc.

C. Investment Framework

Within the PPP rational of the country, need to encourage investors to invest their money in the country. Therefore the government needs to do investment promotions and project investment feasibility [7], [8].

Project investment feasibility – To show the investors how the individual PPP Projects would fit into an overall master plan of the Government and to the list of potential PPP projects and their expected implementation dates, to give confidence to the potential investors.

Investment promotion - Viability gap funding, tax incentive, duty free imports of high capacity and modern construction equipment, long concession periods up to 30 years, land acquisitions and environmental clearance etc. are investment promotion for the PPP project.

Governance for Individual Projects – Need to identify the set out of the framework for decision-making or governance of individual projects, dedicated central point of contract or authority, rules relating to development, construction, financing and operation of PPPs.

III. PPP FRAMEWORK IN SRI LANKA

PPP is important to developing countries like Sri Lanka though there are challenges to adapt PPP policy in Sri Lanka [10]. Lack of state credibility: Political support for successful PPP, Weak regulatory framework: includes government institution and government law, regulations, policies and guidelines, focused on Macro-economic objectives: Budget deficit and the high level of public debt but not concerned about the micro-economic objectives such as "value for money", political instability, underdeveloped capital market and lack of social support are those challenges.

Furthermore the lack of public sector remains critical challenge capacity a implementation of successful partnerships and provide training and capacity building to senior to middle- level government official on PPP project development [6]. Moreover, the lack of establishment of a project development funds, lack of experience for standard bidding document and neediness of revision of procurement guideline, lack of understanding of PPPs among officials in public sector and capacity building for them, impediment in policy framework and lack of viability gap funding in Sri Lankan PPPs context also were highlighted as challenges for successful PPP for Sri Lanka [7].

There are some suggestions to overcome the challenges to adapt PPP in Sri Lanka. Standardized approaches and minimize the transaction time of PPP projects and strong political leadership are necessary for a successful PPP [6]. Furthermore there are two procurement processes for PPP can take the form of a MOU or bidding process. MOU is an unsolicited proposal and fundamentally it rest on the legal system as to how it takes the matter on. In the bidding, rules and regulations need to be set out as to how the bidding process will be carried out. Therefore legal system should be transparent to handle and prevent disputes in the procurement processes [6].

IV.METHODOLOGY

A. Method of Data Collection

There are two types of data gathering sources which are used for this study. Those are Primary Data and Secondary Data. Questionnaire method was selected with limited responses as a primary data collection method. The secondary data sources can be grouped into the following categories; Government or semi-government publications, Earlier Research, Personal records, Mass media.

B. Analysis of Data

Based on theoretical framework of study, the questionnaire was designed with three sections, which are background of PPP, PPP framework and current PPP coverage in Sri Lanka. Likert scale has been used for analysing the data set which was obtained through the questionnaire. This scale was developed based upon the assumption that each statement on the scale has equal attitudinal value', 'importance' or weight in terms of reflecting an attitude towards the issue in question. The procedure for constructing a Likert scale is as follows.

First step is to construct statements that are reflective of the attitudes towards the main issue in question. Statements should be worded to reflect both positive and negative attitudes towards the issue; that is, they should be for, as well as against, the issue [11]. Second Step is to analyse the responses by assigning a weight - a numerical value to the responses. Numerical values were assigned differently to positive and negative statements, for a positive statement the response indicating the most favorable attitude is to be given the highest score. Third step is to calculate each respondent's attitudinal score by adding numerical values assigned in respondents' statement. After that it was compared all respondents' scores for each item. Then the total score is calculated. Finally the percentages have been calculated with respect to the total allocation for each section.

Percentage scores has been evaluated as follows. If the Score falls within; 40% - 50% it's considered as week; if within 50%-60% it's considered to be almost ok; if it falls within 60% - 70% it's a good; and if it's between 70% -80% it's considered to be the best; and Over 80% is very best.

V. RESULTS AND DISCUSSION

In this paper, it's discussed the section of PPP framework in Sri Lanaka. Mainly discused in the ssituation of policy, legal & investment framework of Sri Lanka. As mention in the above section 3, challenges and issues of PPP framework in Sri Lanka were identified though Literature review (secondary data).

A. Policy Framework for PPP

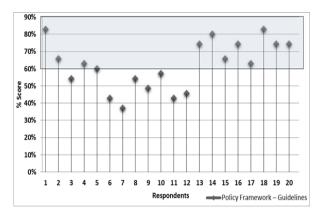


Fig 1: Policy Framework

According to the Fig 1, 60% to 90% results were yield on respondents' knowledge over PPP policy framework. The Guidelines for procurement of PPP infrastructure project is discussed under policy framework. Following graph illustrates the overall view of the Sri Lankan procurement guideline for infrastructure development, existing procurement practice in Sri Lanka, the best procurement method for PPP (MOU or competitive budding), and comparison with other counties in the region (eg. India). From twenty responses, twelve responses were over 60% and three responses were within 50% to 60%. According to the results, the knowledge of the guidelines and the procurement method has a score of "best".

B. Legal framework

According to the questioner, it gives a general view of the legal framework. In this section, it mainly discusses the concession agreement and the development of it and the knowledge of the legal background of a PPP for infrastructure projects in Sri Lanka. According to Fig 2, most of the people have less knowledge compared to other sections. The results are within 60% to 75%. According to the results, the knowledge of the concession agreement

and mechanism of the payment to investor has a score of "good".

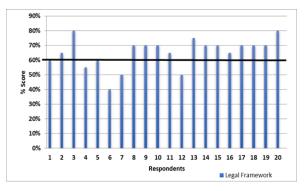


Fig 2: Legal Framework

C. Investment Framework

In this section is discussed the view and the knowledge of investors and the promotion which should be given to them. Therefore the questionnaire is based on the investment procedures of PPP for infrastructure projects, current investors' promotions for PPP projects in Sri Lanka, lack of viability gap funding (the government support is extended to the project, but it's in the form of equity shares, subsidies, grants), long concession periods like 25 to 30 years (eg; infrastructure projects), allowing duty free imports of high capacity and modern construction equipment to the PPP projects, public sector involvement for land acquisition and environmental clearance.

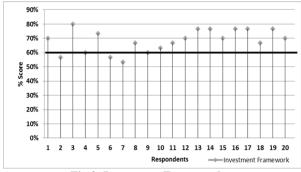


Fig 3: Investment Framework

VI.CONCLUSIONS

According to the results the identified solutions for the deficiencies in PPPs practices are as follows. To develop the policy framework, need to improve the model contracts for each sector by improving the knowledge of the workers in the public sector about the PPP practices. Further the Government/Public sector should streamline the PPPs approval mechanism and improve PPPs guidelines. Sri Lanka already has their PPP unit under Board of Investment. Through that unit, it gives advising in developing concession models, improve guidelines and finding investors for pipe line projects.

To develop the investment framework, the government has to improve viability gap funding for the infrastructure projects, duty free importation of high capacity and modern construction equipment and introduce long concession periods, tax holidays and tax incentives.

Therefore the results from the PPP framework is to emphasize the importance of the Public Private Partnerships as an investment model for infrastructure development in Sri Lanka and need to improve policy, legal and investment frameworks to use the investment model efficiently and effectively.

ACKNOWLEDGMENT

I wish to express my sincere gratitude to the Department of Civil Engineering, University of Moratuwa, for giving me the opportunity to undertake this research study for the fulfilment of my Master of Business Administration in Project Management degree. This paper is based on part of the MBA research.

REFERENCES

- [1] M. Regan, Infrastructure for economic growth and development: the financing gap, Commonwealth Ministers Reference Book, 2009, pp-137-140 http/issuu.com/henleymedia/docs/cmrb 2009
- (2011) Australia, Australian Government Ausaid [online], Available: http://www.ausaid.gov.au/keyaid/infra.cfm.
- [3] E, Glennie, Public-private partnerships for infrastructure in the Asia and Pacific region: priority issues and challenges Commonwealth Ministers Reference Book, 2009, pp 149-150
 - http/issuu.com/henleymedia/docs/cmrb2009
- [4] Z. R Tamin, P.F. Marzuki, and S.F. Rostiyanti, "Analysis and Improvement of Policy Framework for Public Private Partnership of Toll Road Provision in Indonesia", 2011 Available: http://www.lppm.itb.ac.id/reaserch
- [5] Federation of chambers of commerce and industry of Sri Lanka Blog, "Promoting a Conductive Climate for Trade and Investment in Infrastructure Development", 2011, [Online], Available: http://www.blog.fccisl.lk
- [6] D. Madawela, "Public Private Partnerships, Best Way Forward for Sri Lanka". Research Intelligence Unit Publications, 2007, pp 1-44
- Board of Investment, Sri Lanka, Public Private Partnerships Awareness Workshop, 2009
- [8] Asian Development Bank (ADB). Public Private Partnership Hand Book, 2008. http://www.adb.org/Documents/Handbooks/Public-Private-Partnership/Public-Private-Partnership.pdf
- [9] United Nations, Guidebook on Promoting Good Governance in Public-Private Partnerships, United Nation Economic Commission for Europe. New York and Geneva, 2008.
- [10] R. Appuhami, S Perera and H Perera, "Coercive Policy Diffusion in a Developing Country: The Case of Public Private Partnerships in Sri Lanka", Journal of Contemporary Asia, Vol. 41, No. 3, 2011, pp. 431–451, http://dx.doi.org/10.1080/00472336.2011.582713
- [11] R. Kumar, Research Methodology a Step-by-Step Guide for Beginners, (Dorling Kindersley (India) Pvt. Ltd., 2009. Transportation Division, United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), Public Private Partnerships in Infrastructure Development a Primer, 2008.