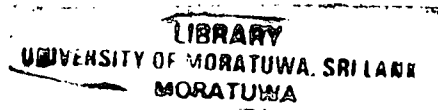


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**PUBLIC -PRIVATE PARTNERSHIPS FOR
INFRASTRUCTURE DEVELOPMENT IN SRI LANKA**

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**Dissertation submitted in partial fulfillment of the requirements for the Degree of
Master of Business Administration**

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DECLARATION

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ABSTRACT

Public- Private Partnerships (PPPs) is becoming a popular investment model since late 1980s and 1990s in the world. PPPs in the delivery of public services have become a phenomenon which is spreading around the globe and generating great interest among governments, investors and other key project stakeholders. PPPs avoid the often negative effects of either exclusive public ownership or outright privatization. This is seen as a win-win situation for both public and private entities where they undertake large budget projects. This balanced approach is especially welcomed in public services which touch on every human being's basic needs & economical development of a country.

Basically in this research, it is attempted to address three main objectives, which are to identify the current PPP coverage on infrastructure projects in Sri Lanka, to identify current deficiencies in PPP practices and areas which resist PPP being an attractive investment model in infrastructure developments in Sri Lankan context and to propose an improved PPP framework/model that can be use effectively and address the identified problems in infrastructure developments in Sri Lanka. (Based on Indian PPP framework)

Based on theoretical framework in this research, a structured questionnaire was introduced for collecting data. Then, the data set has been evaluated using Likert Scale and giving weights for that and the total percentage of score.

To get the maximum benefit from PPPs to a country, there are three main needs that motivate the governments to encourage into PPPs for develop infrastructures, Those are, first attract private capital investment, secondly increase efficiency and use available resources more effectively, thirdly reform sectors through a reallocation of roles, incentives, and accountability, better customers service, employee morale, transfer of technology and training for the people.


In contrast, the Indian context/ framework of PPP practice has been compared against the deficiencies in the local PPP set up that is to suggest improvements to the Sri Lankan PPP framework.

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LIST OF ABBREVIATION

BOI	Board of Investment
BOT	Build, Operate & Transfer
BOO	Build, Own & Operate
BOOT	Build, Own, Operate & Transfer
BTO	Build, Transfer & Operation
CBSL	Central Bank of Sri Lanka
CEB	Ceylon Electricity Board
CPC	Ceylon Petroleum Corporation
DBFT	Design, Build, Finance & Transfer
DBFO	Design, Build, Finance & Operate
FDI	Foreign Direct Investment
FII	Foreign International Investment
GDP	Gross Domestic Products
LDO	Lease, Develop & Own
MOU	Memorandum of Understanding
PPP	Public Private Partnerships
PPIAF	Public- Private Infrastructure Advisory Facility
RLT	Rehabilitation, Lease & Transfer
SLR	Sri Lanka Railway
TEU	Twenty –Foot Equivalent Unit
UN	United Nation



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1 INTRODUCTION

1.1 Research Background

Infrastructure development has been the most important factor in any country that could lead the country's socio-economic standards to a higher level. Generally, all developing countries have been limited in the area of infrastructure developments because of they are trying to maintain other core functions such as industries, agriculture and utilities to run smoothly.

In an increasingly competitive global environment, all governments in around the world are focusing on new ways to fund the projects, develop infrastructure and deliver excellent public service. Public-private partnerships (PPP's or P3's) are becoming a common tool to bring together the strengths of both sectors. In addition to maximizing efficiencies and innovations of private enterprise, PPP's can provide much needed capital to finance government programs and projects, thereby freeing public funds for core economic and social programs.

Public-Private Partnerships (PPPs) has become a popular investment model since late 1980s and 1990s in the world. PPPs in the delivery of public services have become a phenomenon which is spreading the globe and generating great interest. On the other hand, why is PPPs, now attracting such interest? Overall answer is that PPPs avoid the often negative effects of either exclusive public ownership or altogether privatization on the other hand. This is win-win situation for both public and private entities. This balanced approach is especially welcome in public services which touch on every human being's basic needs & economical development of a country.

The rate of infrastructure development or the volume of infrastructure development in a country can be mentioned as directly proportional to the countries rate of economic development. Therefore most governments look at the possibilities of sustainable mechanisms of funding infrastructure projects.

In a country's perspective infrastructure can be bi-categorical; namely social and economic. For examples ports, airports, roads and highways, water resources, telecommunications, energy generation, transmission and distribution, urban transport

and Railway will categorize under economic infrastructures and users are expected to pay for these services.

Such as Health services, Education-primary and secondary, Public Buildings, Urban development, roads, Police stations and Courts are come under social infrastructures. Government has to pay for these social infrastructures. By offering these facilities to the public, there is no direct income to the government. Government has to allocate more funds to develop these infrastructures. Therefore, most of the government cannot bear these spends government alone.

As a result of that governments have realized a common field that they can get the help of the private sector to fund these infrastructure developments in the country. Therefore most of the countries in the world, PPPs are used as best investment method for both category of these infrastructures development. These economical and social infrastructure developments is essential for creating new avenues for investment, improving accessibility across regions and opening new markets to the world.

Developed countries such as United Kingdom, New Zealand, Australia, Japan and other European countries are benefiting PPPs investment model and used this model to develop their economic infrastructures effectively. Specially Asian region countries such as India, China, Thailand and Malaysia currently engaging with PPPs more than other regional developing countries.

In recent past, Sri Lankan government has made considerable approach towards this investment method by changing the underlying government funded infrastructure development projects. The development of economical infrastructure through Public Private Partnerships has been identified as a key development strategy, as well as to relieve the budget of the burden of financing. Public-Private Partnerships (PPPs) need to be promoted in developing infrastructure facilities to maintain a more sustainable debt level in the medium-term.

Under these circumstances of the existing practice of the government financing infrastructure projects tends to widen the budget deficit and increase outstanding government debt. PPPs are becoming a popular method of financing infrastructure projects in developing and emerging market economies. (CBSL Annual Report,2007)

Not only 2007 annual report, 2008 and 2009 annual reports are also highlighted PPPs are needed for infrastructure development in Sri Lanka.

Based on the Annual Report 2008, the continuous budgetary support for infrastructure development, despite fiscal constraints, is laudable, while more efforts to catalyze greater private financing through Public Private Partnerships (PPPs) are needed to supplement government investment and for a sustained development of infrastructure. (CBSL Annual Report, 2008)

Annual report 2009 has said the government has declared its intention to transform Sri Lanka into a Naval, Aviation, Commercial, Energy and Knowledge hub and develop the country into a strategically important economic centre in the region. In doing so, it is imperative to complete the ongoing mega infrastructure projects as planned, to realize the full benefits of peace and to enable the fast tracking of development activities. To fast track the implementation of infrastructure projects, and to ensure their maintenance and management in a sustainable manner and to reduce the burden on the government budget, it is important that private sector participation is also promoted. One option available for this is to encourage Public-Private Partnerships (PPPs) in identified infrastructure projects. In order to attract the private sector investments towards infrastructure projects, it is essential for the government to clearly identify the specific projects in which the private sector can participate and to create a helpful environment for the private sector to actively engage in providing infrastructure facilities. (CBSL Annual Report, 2009)

According to the publication of BOI in August 2006, Sri Lanka officially inaugurated a PPPs unit within Board of Investment (BOI) in Sri Lanka. The Projects within the BOI are now being structured on PPP basis. Accordingly the government has launched a multi-focused programme of infrastructure development as highlighted in the ten – year Horizon Development framework 2006-2016 and in government's Randora Programme. Under national level highway projects comprise the southern Expressway, Colombo-Kandy expressway and Colombo Outer circular Road in 2007. These programmes have been designed in order to develop a regionally balanced network of economic infrastructure with investments channeled through the Consolidated Fund, private and foreign direct investments and Public Private Partnerships. (CBSL Annual Report, 2007)

1.2 Problem Statement

For a country to become a developed country either by developing manufacturing or agriculture or services, require a considerable upward growth in its economic infrastructure. For example transport facilities, communication, power generation etc.

For a country like Sri Lanka, ruling government funding for such projects by means of treasury funds, foreign loans and grants is not possible all times. Then how we face the challenge of funding our desired infrastructure projects without squeezing the governments and community?

By looking at other developing and developed countries in the region and around the globe, one interesting approach is seen as an attractive infrastructure development project funding mechanism. That is Public Private Partnerships.

Having learnt that there have been few projects been delivered under this model in Sri Lanka, this research is trying to look at the reasons for the slow moving progress of such new projects.

Based on the above problem following three objectives were selected as roots for the findings of this research.



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1.3 Research Objectives

1. To identify the current PPP coverage on infrastructure projects in Sri Lanka
2. To identify current deficiencies in PPP practices and areas which resist PPP being an attractive investment model in infrastructure developments in Sri Lanka.
3. To propose suggestions that will effectively address the identified problems in the existing setup and, which could be adopted during infrastructure developments in Sri Lanka in future.

1.4 Methodology in Brief

The Methodology begins with identifying a suitable instrument for this research study and develops the same to suit for meeting the research objectives mentioned in the earlier section.

The prime objective of this method is to map the existing PPPs coverage on the country's infrastructure development funding mechanism, learn the deficiencies in PPPs framework and study the Indian context/ framework of PPPs practice to suggest improvements to the existing Sri Lankan PPPs framework.

Further, by studying through literature it was elaborated the principle in detail and identified the concept of Public Private Partnerships, PPPs Models, world regional trends of PPPs and reasons for encouraging PPPs as an infrastructure projects funding Mechanism.

Moreover, through few success stories around the globe it was tried to define the procedural catalysts that would enhance the momentum of PPPs projects being capitalized



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In the first section, it will be looked at the existing data on infrastructure projects done in Sri Lanka in comparison with to the rest of the country's infrastructure developments.

To identify the procedural deficiencies in current PPPs practices in Sri Lanka, and experience survey is suggested. This will enable to extract the expertise views in improving the existing framework.

In the later part of the study, India is considered as a framework model and compares the current Sri Lankan PPPs setting with Indian practice so as to define and suggest improvements to the Sri Lankan PPPs practice which can be seen as an effective investment method for infrastructure developments projects.

1.5 Scope and Limitation

The scope of this research spreads over the most widely used sub models in infrastructure projects such as Built –Operate-Transfer (BOT), Built-Own-Operate and Transfer (BOOT) etc.

With regard to secondary data, data appearing in Central Bank of Sri Lanka (CBSL) publications, World Bank, common wealth and ADB publications were used. In the event of finding reliability, secondary information through various study reports and papers were also consider as a part of inputs to the study. The survey was done by participating people who has knowledge and experienced in PPPs in the infrastructure development.

1.6 Thesis Structure

According to the first sections of this chapter, it has been examined the theoretical approach of PPPs and how it has been structured to use as a solution for funding of large infrastructure projects.



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In the literature review section, it has explained the Sri Lankan context of the PPPs practices, global presence of PPPs and especially Indian approach of PPPs with regard to infrastructure projects.

The next sections have been dedicated to discuss the research method being adopted in the study and ways of approaching the study objectives.

As described in the earlier sections, the knowledge of Private Public Partnerships projects in Sri Lanka is limited and constrained within to a community whom have being involved in such projects, the study has been designed to directly speak to a set of such people and get their views with regard to current practices and its effectiveness over the infrastructure development projects.

Further, India is using PPPs for infrastructure development projects over a long period and it has been able to successfully complete large number of projects, the Indian model of PPPs has been taken to the discussion and compared worth the local frameworks and organization.

This thesis report concludes an introduction to the situation and background is described in the Chapter 1. Research problem, identification of research objectives also presented in the same chapter. Detail elaboration of literature is discussed in the Chapter 2. Chapter 3 gives a clear idea of research methodology which consists of research purpose, approach, strategy, data collection, analysis methods and validity of research. Then Chapter 4 will present the data and in depth analysis to interpret the results. Findings, conclusions, recommendations and future research opportunities in the field will be discussed in the last Chapter (Chapter5) to end the research documentation.



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2 LITERATURE REVIEW

2.1 Introduction

The key objective of this chapter is to elaborate the research topic in-terms of theoretical framework and constituents in PPPs, various PPPs models available for practice, global PPPs usage in infrastructure projects, discusses PPPs framework , possible risks and issues that could found in implementation and thereby learn how adaptable of this proposed model in local infrastructure projects.

Being India is a country who using this PPPs models in financing infrastructure projects very successfully, special emphasis was given to learn the key success factors in Indian PPPs context so that to do a gap analysis comparing it with Sri Lankan practice.

2.2 Concept of PPP for Infrastructure Development

Asian Development Bank PPPs hand book has stated PPPs is a range of possible relationship among public and private entities in the context of infrastructure and other services. (ADB PPPs hand book, 2007) This is further describing by United Nation PPPs guidebook which is defined innovative methods used by the public sector to contract with the private sector, who bring their capital and their ability to deliver projects on time and to budget, while the public sector retains the responsibility to provide these services to the public in a way that benefits the public and delivers economic development and an improvement in the quality of life. (UN Guidebook, 2007) Furthermore Yong highlighted John Laing plc view for PPPs is long term partnership to deliver better value for money to the taxpayer and further aims of PPPs are financing, designing, implementing and operating public sector facilities and services through private sector financing (Yong, 2009).

Many PPPs specialist and researchers identify the importance of PPPs for infrastructure development. Yong has presented German PPPs Task Force definition of PPPs as long term collaboration between the public sector and private sector business for aiming at increasing the efficiency of infrastructure projects. (Yong, 2009) The green paper on PPPs and community law on public contracts and


concession was presented European Commission in 2004 refers PPPs is form of cooperation between public authorities and the world of business which aim to ensure the funding, construction, renovation, management and maintenance of an infrastructure of the provision of a service (Yong, 2009).

2.3 Background of PPPs

Effective PPPs point out that the public and the private entities each have certain advantages, relative to the other, in performing each sector. In PPPs public sector contribution has been identified as transfer of assets, capital investment through tax revenue, provide social responsibility, environmental awareness, local knowledge and giving political support for the project. The private sector's role is mainly identified as contributing investment with clear goal of profit, to make use of their expertise in management, operation and innovation. Furthermore private sector involvements can also be a factor to increase efficiency in investment and operations in infrastructure (ADB PPPs hand book, 2007).

Raganelli and Fidone have paid more attention to the outstanding features of the PPPs, which are summarized as follows. In relation to various aspect of the project, it is relatively long duration of the collaboration between private and a public partner, second one is project financing is guaranteed by the private sector, through sometimes complex relations between the various subjects. However, quotas of public financing may be added to the private financing. Thirdly while private economic operator participates in design, construction, implementation and financing phases of the project, The public sector concentrate public interest, quality of services provided, price policy and guarantees control over respecting these objectives. Fourth feature is the risks relating to the project are shared between the public and the private partner. Thus risks are transferred to the later which are usually by their nature, undertaken by public administration.(Raganelli and Fidone, 2007) It is further reinforced by the UN Guidebook and discussed three main characteristic of PPPs which are Long-term service provisions; time period is up to 30 years if possible, Partial transfer of risk to the private sector; and different forms of long-term contracts drawn up between legal entities and public authorities. (UN Guidebook, 2007). Madawala summarizing speech of Mrs. Matthias and it is further emphasized characteristic of PPPs which are stated as follows.

Table 2.1: Element of the value chain Vs PPPs Approach

Element of the value chain	PPPs approach
Design	<ul style="list-style-type: none"> •Private Sector; Usually Innovative designs are received from private sector
Construction & Maintenance	<ul style="list-style-type: none"> •Contract awarded by the private investor usually a long term contract including maintenance
Time of completion	<ul style="list-style-type: none"> •Complete on time. Usually rewards for early completion.
Allocation of Risks	<ul style="list-style-type: none"> •Risks transferred to those best able to manage them
Total estimated costs/operation costs & cost recovery	<ul style="list-style-type: none"> •Integration of service needs; capital costs, operation & maintenance costs treated in one package to obtain the efficient customer service & also recovery of cost.
Value for money	<ul style="list-style-type: none"> •More. Lead to project Cost savings.
Capital Cost  Drain on Government Budget	<ul style="list-style-type: none"> •Paid over the life of the contract. •Paid over the life of the Asset. Off balance sheet and paid from revenue earned from project. Govt. can utilize funds for other requirements.
Technology	<ul style="list-style-type: none"> •Involves private sector knowledge and superior technology in consideration at the design stages.
Mutual interest & benefit	<ul style="list-style-type: none"> •Win-Win situation
Tariffs	<ul style="list-style-type: none"> •Usually lower and affordable
Customer Service	<ul style="list-style-type: none"> •Usually high, efficient & customer oriented. Involves modern management practices.
Employee morale	<ul style="list-style-type: none"> •Usually high
Project financing	<ul style="list-style-type: none"> •Introduce new sources of private capital
Transfer of Technology & Training	<ul style="list-style-type: none"> •Transferred from private sector to the state sector

Source:(PPPs best way forward for Sri Lanka,2007)

According to the Mrs. Mathias speech, she had introduce the main element of the procurement method process as “element of the value chain” and features of those elements within the PPPs approach. (Madawala, 2007)

2.3.1 PPP models

Public private partnerships are model lying in between the two extremes of conventional procurement and the full privatization. Based on that, all the possible combinations among those two extremes are counted to be PPPs. Yong had given his views as following diagram.

Within the conventional procurement method assets remain with government and within the full privatization assets transferred to the private sector.(Yong, 2009)

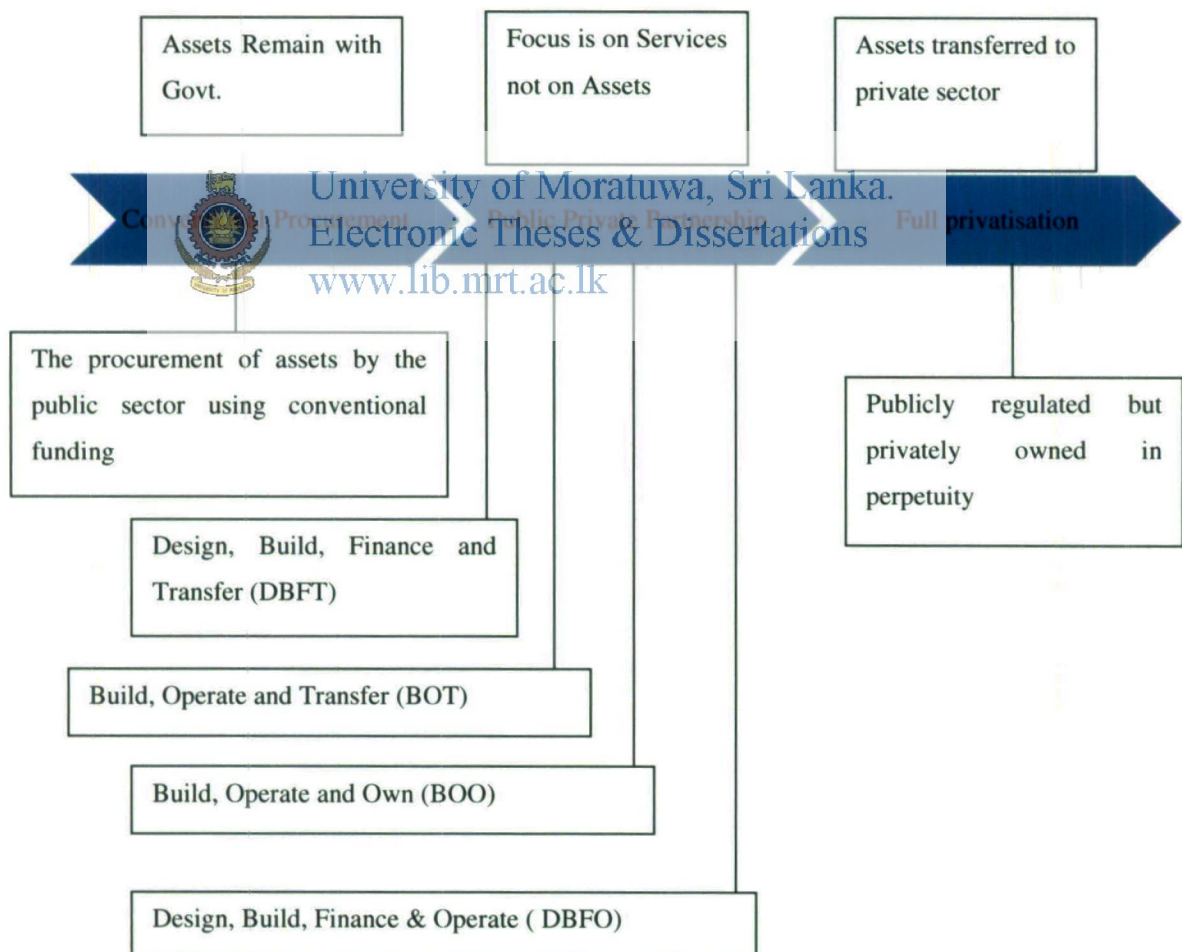


Figure 2.1 Financing of Infrastructure Project through Traditional Method Vs PPPs Models

There are number of predefined PPPs structures, varying based on its responsibility transferring, project ownership handling, time frame and facilities granted by respective governments to private parties, that could be adopted in varyingly from project to project. Major options available for the PPPs projects facilitation in infrastructure include the following models. Those are DBFO, BOO, BOT, BOOT, BTO, LDO and OM contracts. (Mastle and Izaguirre, 2008)

Furthermore Yong discussed important frameworks and need of them. Those are Policy, Legal, Investment and operational framework. Within the policy framework help both public and private sectors to understand the core rationale for PPPs and how public sector will go about making them happen. Within the legal framework give the private sector the assurance of the effectiveness of any PPPs contact that they have entered into with the Government. Within investment framework show the investors how the individual PPPs projects fit into an overall master plan of the Government and show the list of potential PPPs projects and their expected implementation dates to give confidence to potential investors. Finally within the operational framework set out for decision-making or governance of individual projects, rules relating to development, construction, financing and operational of PPPs and identify the central point of contract or authority. (Yong, 2009)

2.4 Infrastructure Development

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 importing tools for accelerating economic development in developing and transcion economic.(Regan, 2009) This is futher strnthening by Glennie by her viwe of infrastructure is ecellent for economic growth and poverty reduction.(Glennie, 2009) Further reinforces that statement by Austrialian govenment aids Infrastructure development is development and maintenance of essential public infrastructure is an important ingredient for sustained economic growth and poverty reduction. (AusAIDS, 2011)

As a government which is facing challenges to infrastructure development. Literature were discussed those challenges.

2.4.1 Challenges for governments in developing infrastructures

Investment of the infrastructure is the main challenge of Government facing. This is further strengthening by Tamin & Marzuki (2011) by their views on infrastructure development states that *“the availability of sustainable and sufficient infrastructure is an urge demand in order to support national development for economy growth and human prosperity. The adequacy of infrastructure can be achieved when government has sufficient funding. However, government budget is limited causing government to find another source of funding”*. (Tamin & Marzuki, 2011) The national council for PPPs in 2011 describes further, governments today face growing demands for infrastructure and however, their ability to meet the needs of their citizens may be constrained by lack of capital, lack of technical, management, or governance expertise or limited public institution. The challenge simply stated is the demand for investment in quality social and economic infrastructure is likely to significantly outweigh the fiscal resources of governments. (FCCISL, 2011)

Further describing above statements, large number of governments in 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 their efforts to improve their investment climate. However increasingly, governments are viewing PPPs to play an important role in the provision and the management of various infrastructure services. (Madawala, 2007)

2.4.2 Benefits to the private investors involvement through PPPs in infrastructure developments

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 and 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. 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. (UNESCAP, 2008)

In fact, the National Council for PPPs discussed in further potential benefits of PPPs which are follows

Increased capital available 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 enhance 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 cost-effective approaches.

Relationship to millennium development goals: PPPs provide a methodology that can be used to meet a number of the millennium development goals, including improved and more cost-effective service systems that aid in the eradication of poverty and hunger, promote universal primary education, provide for gender equality, and improve a number of health concerns.



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Environmental Sustainability: PPPs may be specifically designed to address environmental challenges. Through the application of new technologies provide by the private partner and concerns about air and water pollution, remediation of hazardous wastes and other environmental concerns can be addressed. (NCPPP, 2011)

It is further emphasized by following reasons for growing involvement of private sector which includes increased efficiency in project delivery and operation, availability of additional resources to meet the increasing needs of investment in infrastructure services, access to advance technology and sustainable development in infrastructure facilities and services. (UNESCAP, 2008)

2.5 Global PPP Context

2.5.1 Evolution of PPP

Public-Private Partnerships (PPPs) has become a popular investment model since late 1980s and 1990s in the world. PPP was first adopted in the United Kingdom and subsequently spread to Australia, Canada, Europe and Middle East. After that Singapore has endorsed PPPs as a model for financing social infrastructure projects. In turn, this has revived hopes that PPPs can be used to support infrastructure growth elsewhere in Asia Pacific (KPMG,2007). Private participation in infrastructure is not new, however PPPs in their present forms may be viewed as a relatively new addition to an ever-evolving relationship between the public and private sectors (UNESCAP, 2008).

Furthermore following graph shows spread of the country according to the partnership structure vs. area of partnership

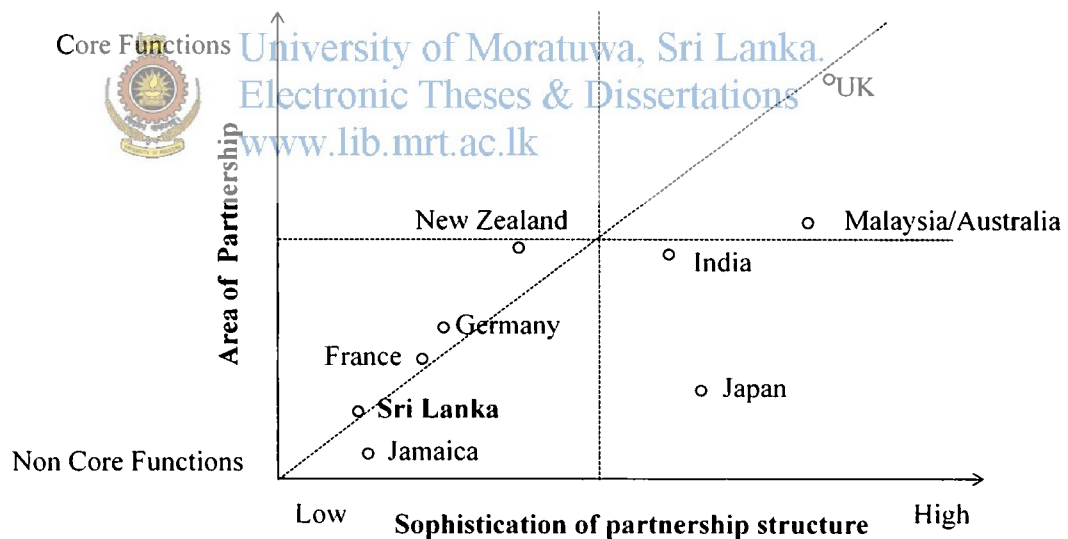


Figure 2.2: Development of PPPs in the World

Source: (BOI PPPs Awareness Workshop, 2009)

According to the Figure 2.2, Asian countries like India and Malaysia are in higher level for using PPPs compared to the Sri Lanka.

2.5.2 Spread by volume

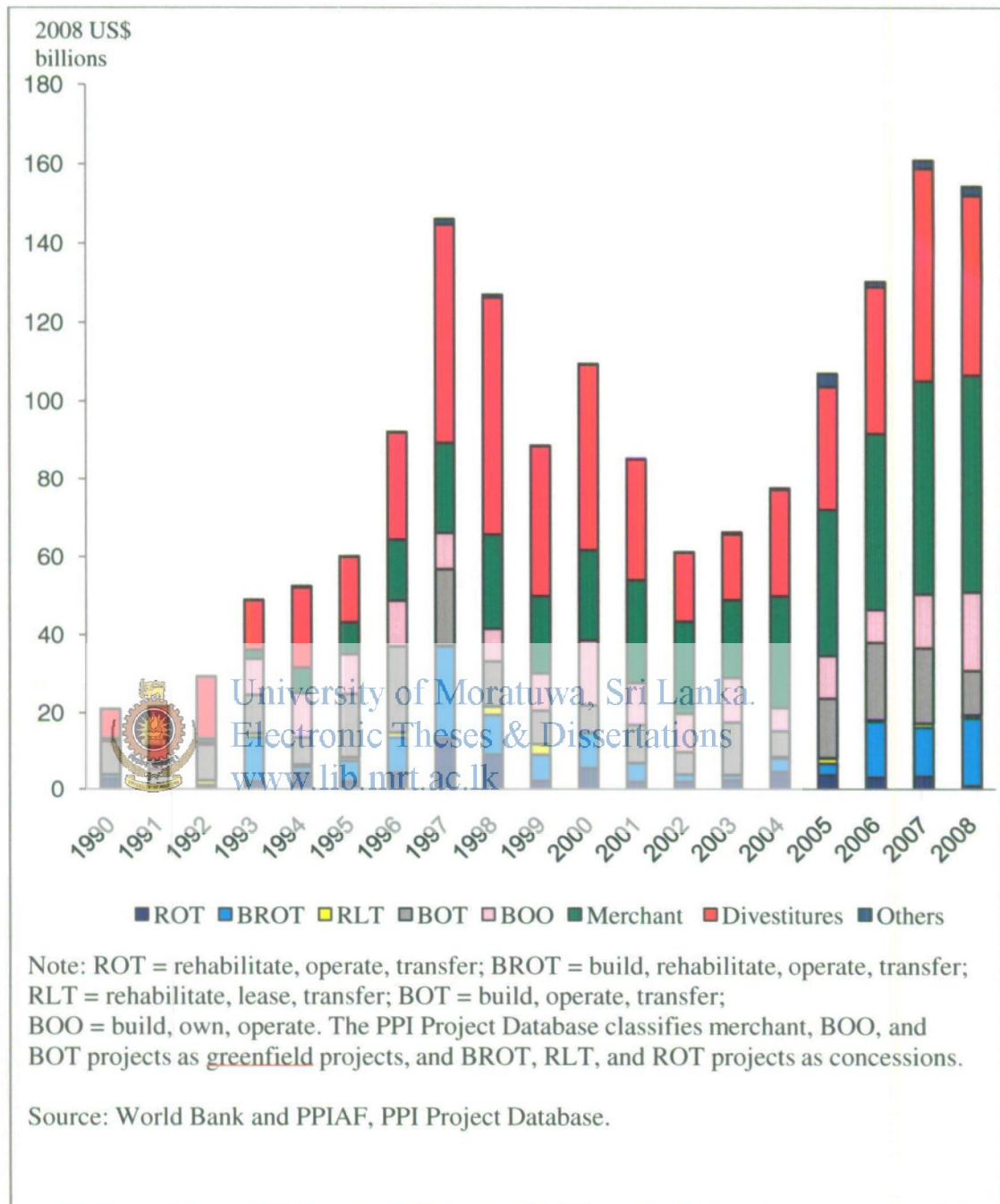


Figure 2.3: Investment commitments to infrastructure projects with private participation in developing countries, by subtype of PPI, 1990–2008

According to the above Figure 2.3, it gives detail data from year 1990 to 2008. The graph shows PPP model and the value spent for the each year. BOO and BOT models are popular as Greenfield projects.

2.5.3 Spread by no of projects

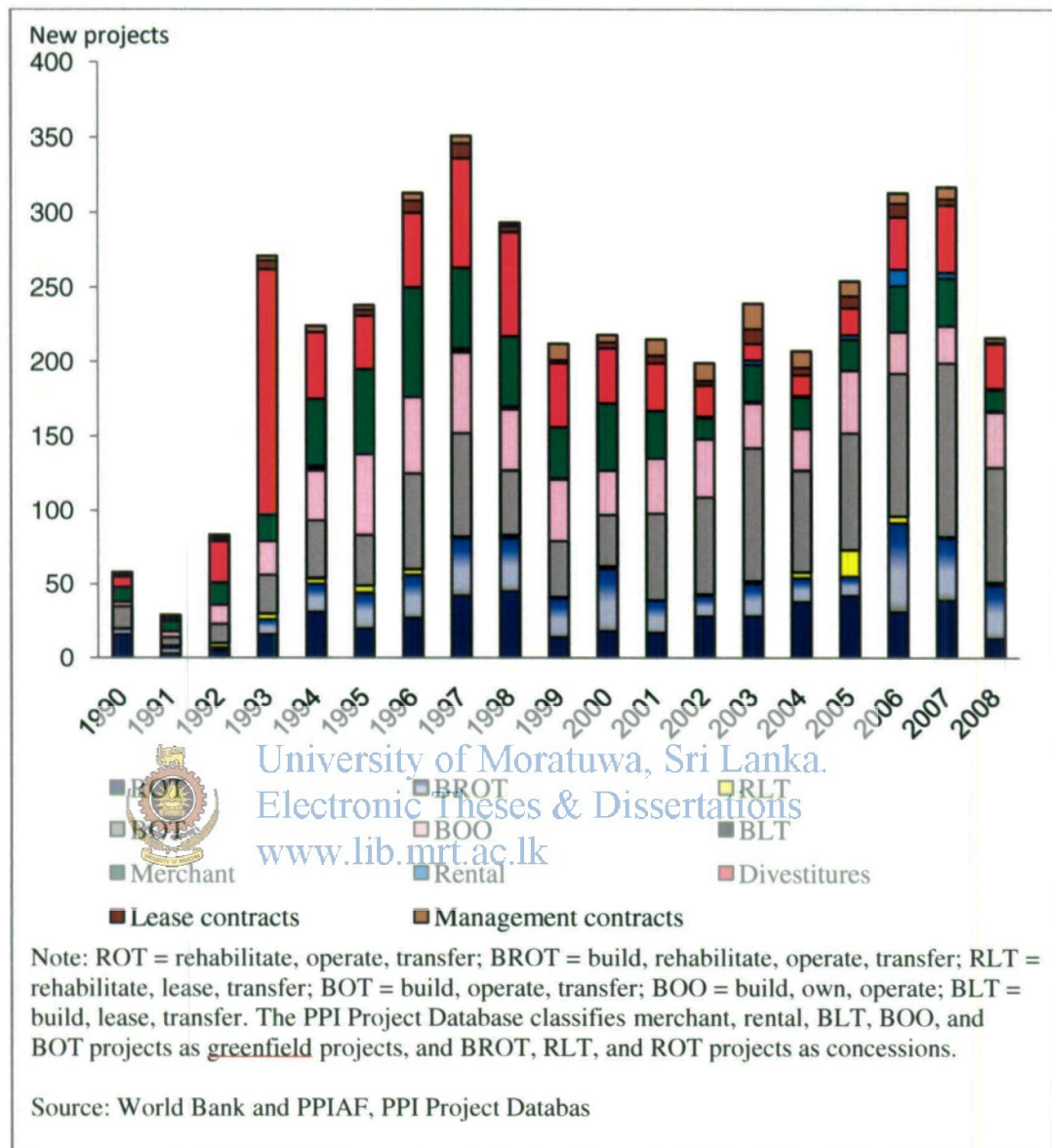


Figure 2.4: New infrastructure projects with private participation in developing countries, by subtype of PPI, 1990–2008

From 1996 to 1998 there is a growth of no of projects. From 1999 to 2004 it has decies around 150 nos. After 2005 there is a considerable booming.

2.5.4 Spread by industry

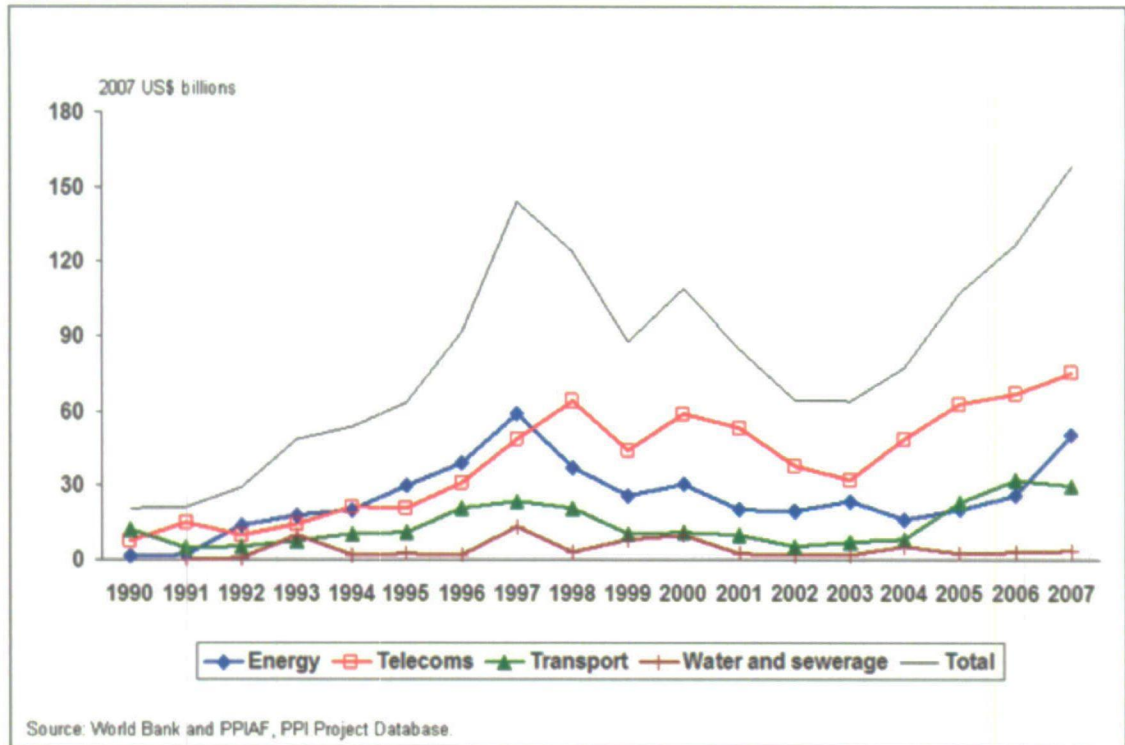


Figure 2.5: Investment Commitments to infrastructure projects with private participation in developing countries by sector, 1990-2007.

According to the graph, private participation for Energy and telecom are higher than other sectors. Airports, railways, roads and seaports are subsectors in transport section.

2.5.5 PPP framework in Global

As discussed in section 2.3.1 within the PPP framework consist of policy, legal, investment and operational frameworks.

2.5.5.1 Policy & Legal framework

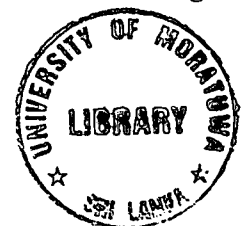
Some governments undertake PPPs without an overall PPPs policy, which leads to ill defined goals and a greater likelihood of problems with the projects. Therefore the UN PPPs guide book says, PPPs process requires sound policies that lay down clear objectives and principles, identifies projects, sets realistic targets and the means of achieving them, with the overall aim of winning the support of the population for the PPPs approach (UN Guidebook, 2007). Indian Government is moving from the role of Developer and operator to facilitator, Regulatory Framework in Place,

Autonomous regulatory authorities and tariff authorities set up to create better PPPs environment .According to the Gujral speech in 2009 to encourage PPPs in India, government improved their public sector for setting-up of a PPPs Unit in Department of economic affairs, approval mechanism streamlined for PPPs in the central sector through setting –up of a PPPs Appraisal Committee (PPPAC), Pipeline of PPPs projects being developed for that Government has setup a Rs. 100 Cr fund and eleven consultants have been appointed, formulate Guidelines, Model Concession Agreement developed for each sector, Legal & policy Scheme developed to support PPPs. (Gujral, 2009)

Further emphasizing above Indian PPPs specialist highlighted their legal and policy framework in his speech. Those factors are

- Introduce scheme for support to public private partnerships in infrastructure, July 2005: Administrated by Ministry of Finance provides financial support in the form of grants, one time or deferred, to infrastructure projects undertaken through PPPs with a view to make them commercially viable.
- Guidelines for formulation, Appraisal and Approval of PPPs projects: Notified by the Ministry of Finance, Department of Economic Affairs in January 2006 with the objective of streamlining the system for appraisal and approval of Projects to be undertaken through the PPPs route.
- India has developed policy framework for each states Eg. Karnataka, Uttar Pradesh, Assam, Delhi, Madhya Pradesh, Haryana, West Bengal
- Legislations enabling the creation of infrastructure development boards to further the development of infrastructure in Gujarat, Andhra Pradesh and Punjab.
- Model concession agreement developed for each sector Eg. Roads, Ports, Metro Railways, Airports and redevelopment of railway stations (Gujral,2009)

The legal processes in many jurisdictions are insufficient, overly complex and fail to provide sufficient security and incentives to investors in PPPs arrangements. Furthermore investors in PPPs need predictability and security in legal frameworks, which means fewer, simpler and better rules. In addition, the legal framework needs to take account of the beneficiaries and empower them to participate in legal processes, protecting their rights and guaranteeing them access in decision- making (UN Guidebook, 2007).



Furthermore summarizing Neeta Agalawal speech by Madawala the legal framework of a developing country may be inadequate requiring overhaul in line with a PPPs conducive legal and regulatory regime. Reforming of the entire set could take place over a long period of time. It is a challenge for legal professional to stay for rapidly changing environment. Explain by using example, in legal professional to find their purchasing new volumes of 'company Law' every four months due to the dynamic environment where prevailing laws are being brought into line with the most efficient global practice. Therefore Indian regulations are being converted into more investor friendly structures that attract those seeking to fund projects. The legal system may need rationalization or updating. In fact, at present India is implementing E-governance projects across the county in order to accommodate such procedures like the law of evidence where electronic forms of signature can be recognized as documents of records. (Madawala,2007)

2.5.5.2 Investment framework

Within investment framework show the investors how the individual PPPs projects fit into an overall master plan of the Government and show the list of potential PPPs projects and their expected implementation dates to give confidence to potential investors. (Yong, 2009)

Indian government gives following investment promotion to attract investors to the country Viability Gap funding for project is 40% of the cost of the project as a grant. Fiscal Incentives, Tax Holidays, Tax Incentive (long term debt finance and Equity), Liberalized Foreign Direct Investment environment, 100% Foreign Direct Investment permitted in Roads, Ports, Airports, Electricity Sector, 74% to 100% Foreign Direct Investment permitted for various Telecom Services, 49% Foreign Direct Investment in Domestic airline and other incentives are also help to find investors for projects, Long concession period –up to 30 years, Duty free import of high capacity and modern construction Equipment (Gujral, 2009)

2.6 Sri Lankan PPP Contexts for Infrastructure

2.6.1 Infrastructure development in Sri Lanka

Madawala summarizing speech of Dr. P.B. Jayasundara, existing processes have been far below the expectations of the country and the benefits have not spread beyond the Western Province. As a result, there has emerged a deep imbalance. According to the Table 2.2 Government has invested 6% of GDP at the year 2010. From total, 5% of GDP for economical infrastructures, and other 1% for social infrastructures. In Sri Lanka commonly used for traditional procurement methods for infrastructure development. Funds are from loan or a grant. After 1997 private sector involvement is there for power sector and later port construction and telecom sector also adopted. From 2001 to 2010 1% of GDP increases for investing economical infrastructure and considerably low rate for developing infrastructures. Further emphasizing Madawala summarizing speech of Srinivas Sampath, large –scale fiscal deficit has limited their capacity to meet growing infrastructure needs and has emerged as a major challenge in their efforts to improve their investment climate. (Madawala, 2007)

2.6.1.1 Spread by the Investment

Table 2.2: Government Investment in Infrastructure

Year	Economic		Social		Total	
	Rs. Bn	% of GDP	Rs. bn	% of GDP	Rs. bn	% of GDP
2001	54.9	3.9	14.6	1.0	69.5	4.9
2002	51.7	3.4	15.7	1.0	67.4	4.4
2003	58.7	3.2	19.2	1.1	77.9	4.3
2004	61.3	2.9	29.0	1.4	90.3	4.3
2005	77.5	3.2	60.4	2.5	137.9	5.7
2006	106.8	3.6	48.4	1.6	155.2	5.3
2007	141.2	3.9	55.0	1.5	196.2	5.5
2008	168.9	3.8	60.2	1.4	229.1	5.2
2009	256.4	5.3	53.9	1.1	310.3	6.4
2010	280.8	5.0	56.2	1.0	337.0	6.0

Source: CBSL Annual Report, 2010

2.6.2 History of PPPs

2.6.2.1 Evolution of PPPs

With referring Sri Lanka Board of Investments (BOI) PPPs unit's cyber information, private sector involvement for implementation in BOT/BOO type projects are very less during the past two decade. There have been several shortcomings for implementation of PPPs projects in Sri Lanka. The absence of good governance, unstable political and macro-economic environment, the lack of basic legal framework, a poor institutional and regulatory framework and weak risk management strategies are those shortcomings. In the early 1990's, the Secretariat for Infrastructure Development (SIDI) and the Private Sector Infrastructure Development Corporation (PSIDC) try to implement PPPs in Sri Lanka. In the mid-1990's, the SIDI was absorbed by the BOI and renamed the Bureau of Infrastructure Investment (BII). (Madawela, 2007) In August 2006, it was officially inaugurated the PPPs unit within Board of Investment in Sri Lanka. The Projects within the BOI are being structured on PPPs basis.

According to the Dr. P.B. Jayasundara, the success record of PPPs in Sri Lanka is not satisfactory. The first road project that was identified to be on a PPPs model was the Katunayake Expressway, but time has taken-up for discussing and these options was not successful (Madawala, 2007).

Following Table No.2.3 shows completed projects using private involvement and Table No.2.4 shows pipe line projects for PPPs approach under BOI. Road projects and water supply projects still not adopted for PPPs.

2.6.2.2 Project Completed

Table 2.3: PPPs Projects completed during 1997 to 2005 in Sri Lanka

	Project	Implementing Agency	Total Estimated Cost US\$ in Million	Project Proponent	Investment Method	Capacity
1.	Diesel Power Plant at Sapugaskanda	CEB	62.00	Asia Power (Pvt) Ltd	O&M	51 MW Diesel
2.	Barge Mounted Power Plant at Colombo Port	CEB	72.00	Colombo Power (Pvt) Ltd.	NG	60 MW Barge
3.	Combined Cycle Power Plant at Kelanitissa	CEB	103.00	AES Kelanitissa (Pvt) Ltd Hayleys	BOT	163 MW Diesel based combined cycle
4.	Diesel Power Plant at Matara	CEB	21.00	Ace Power Generation Matara (Pvt) Ltd.	BOO	20 MW Diesel
5.	Diesel Power Plant at Horana	CEB	27.00	Ace Power Generation Horana(Pvt) Ltd.	BOO	20 MW Diesel
6.	T-off located in Puttalam	CEB	62.00	Heladanavi (Puttalam) Ltd.	BOT	100 MW
7.	T-off located in Ambilipitiya	CEB	61.00	Ace Power Embilipitiya (Pvt) Ltd	BOO	100 MW
8.	Mahaweli Mini Hydros	CEB	50.00	Irrigation Dept. MASL	NG	50 MW
9.	Expansion of the Queen Elizabeth Quay – SAGT	SLPA	240.00	P & O Group John Keells	BOT	1 Million TEUs
	TOTAL		698.00			

Source: http://www.boi.lk/ppp/project_page.shtml

2.6.2.3 Pipe Line Project

Table 2.4: PPPs Pipe Line Projects in Sri Lanka

	Project	Implementing Agency	Total Estimated Cost US\$ in Million	Investment Method
1.	IT Park Malabe	Mahapola Trust Fund / SLIIT	80	DBFO
2.	Mixed Development Project at Kandy Industrial Park	BOI/UDA/SLR	NG	DBFO
3.	Knowledge City Henegama	BOI	100	DBFO
4.	Laying of Fiber Optic Cable for Sri Lanka Railways	Sri Lanka Railway(SLR)	NG	NG
5.	Augmentation of Water & Waste Water Facility at Seethawaka Industrial Park	BOI	8.5	DBFO
6.	Development of Mass Rapid Transit (MRT) System for Colombo Metropolitan Area	BOI/UDA/SLR	1,000	DBFO
7.	Textile Processing Zone/Industrial Park at Horana	BOI	30	DBFO

Source: http://www.boi.lk/ppp/project_page.shtml

2.6.3 PPPs framework in Sri Lanka

There are key challenges faced by the public sector agencies in the effective implementation of PPPs in developing country like Sri Lanka. First one is internalizing partnership process within the public sector, secondly preparing the partnerships environment, Project identification and project development, preparing the business case, securing competitive bids, negotiation and award and finally supporting implementation and operations. (Madawala, 2007)

2.6.3.1 Policy, legal and investment framework

Summarizing the Dr. P.B. Jayasundara speech the first policy question is why the designing, procurement and recruiting of consultants takes such horrendous lengths of time. Further emphasizing the above statement summarizing the Srinivas Sampath speech by Madawala, PPPs projects must have explicit government approval for the process, because PPPs projects require long term legal and financial commitments. Public sector agencies are often weak for risk allocation and commercial framework, and therefore they will have to make special efforts in developing a good understanding of the overall commercial framework of projects and risk allocated of the project. Need to standardized approaches and should be developed to minimize the transaction time of PPPs projects and strong political leadership is necessary for successful PPPs. During Sirinivas speech highlighted some more factors like lack of public sector capacity remains a critical challenge in implementation of successful partnerships and provide training and capacity building to senior to middle- level government official on PPPs project development (Madawala, 2007).

Summarizing Neeta Agarwal speech, the law that authorizes and enable the replacement of public provision of infrastructure facilities or service by private ownership, implementation and operation through PPPs legislate replacement of public monopoly by competition through the procurement. Further there are two procurement processes for PPPs 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 preventing disputes. (Madawala, 2007).

Summarizing Pauline Matthias speech in PPPs Awareness Programme 2009, lack of the project development funds and requirement of establishment of a project Development fund, lack of experience for standard bidding document and neediness of revision of procurement Guideline, lack of understanding 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 were highlighted. (Matthias,2009)



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3 METHODOLOGY

3.1 Introduction

In order to reach the expected outcomes of this research study, there should be well defined methodology that will progressively lead the study from the unknowns to know.

This chapter will provide a detail approach about how the research is conducted and conclusions are made. This chapter covers the theoretical aspects of a research study such as selecting a study design, theoretical frame working, selecting a target sample, data collection methods and data analysis approach.

Further it has discussed the validity and reliability of method selected so that its effect on final outcomes of the study.

3.2 Selecting a Study Design

Within the context of research studies there are few most commonly used study designs. The various designs have been classified by examining them from three different perspectives;

- The number of contacts within the study population
- The reference period of the study
- The nature of the investigation

Every study design can be classified from each one of these perspectives. The terminology has used to describe them and it is not universal but the names of designs under each classification are universally used. (Kumar, 2007).

The first step in selecting a proper concept must begin with the answer for “What is to be measured?” the definition of the problem based on exploratory research or managerial judgment indicates the concept to be investigated. However, a precise definition of the concept may require a description of how it will be measured. Also it is understood that there is frequently more than one way to measure a particular concept.

Concepts pertaining to the set objectives in this research are shown below for clarity and improved focusing in the next steps of the research;

- To identify the **current PPPs coverage** on infrastructure projects in Sri Lanka
- To identify **current deficiencies in PPPs** practices and areas which resist PPP being an attractive investment model in infrastructure developments in Sri Lankan context.
- To propose **suggestions** that will effectively address the identified problems and could be adopted during infrastructure developments in Sri Lanka. (Based on Indian and other countries PPPs framework.)

3.3 Method of Data Collection

There are two major approaches in gathering data about different research studies. Some data is already exists to draw, such as demography related data, market related data etc and some require specially acquiring from the sources. These two broad data gathering sources are named as; Primary Data and Secondary Data.(Kumar, 2007)

Since this research is about to gather various PPP expertise suggestions, requirements, concerns with regards to current position of PPPs in Sri Lanka and area need to improve for effectively use this method.

Therefore it is obviously the relevant data shall be collected trough primary & secondary data collection technique.

3.3.1 Primary Data

Following are the three major methods to do the primary data collection;

1. Observation
2. Interviewing
3. Questionnaire

With the above approaches, this research will follow the Questionnaire.

3.3.1.1 Questionnaire

Public- Private Partnerships are not popular in Sri Lanka. Therefore PPPs projects were carried out during last two decades and very limited people were involving

these infrastructure projects. As a result of that, there is a lack of knowledge about this area in Sri Lanka. Due to these practical difficulties, Questionnaire method was selected with limited responds around twenty as a primary data collection method. One of the main advantages of the Questionnaire is that it provides uniform information, which assures the comparability of data. There are other advantages as well of the Questionnaire in general (Kumar, 2007)

- It is less expensive
- It offers greater anonymity

Disadvantages of a Questionnaire are

- Application is limited
- Respond rate is low
- There is a self selecting bias
- Opportunity to clarify issues is lacking

3.3.2 Secondary Data

Because of lack of knowledge of the people for PPPs, Secondary Data collection methods were used to gather data. This information which is includes other countries as well as data related to Sri Lanka. There are occasions when data has already been collected by someone else and need only to extract the required information for the purpose of the study. There are list of the many secondary sources that can be grouped into following categories.

Government or semi-government publications -There are many government and semi-government organizations that collect data on a regular basis in a variety of areas and publish it for use by members of the public and interest groups through web sites & annual reports.

Earlier Research - For some topics, an enormous number of research studies that have already been done by others can provide you with the required information.

Personal records - Some people write historical and personal records that may provide the information need. For this research data collect through workshops organized by relevant organization in Sri Lanka and personal view of speakers those how participated the workshops.

Mass media - Reports published in newspapers, magazines and so on can be considered as mass media. Using PPP related publications were used to collect data.

3.3.3 Target Data Sample

The target data sample for this research is a mixture of primary and secondary data. As the concepts in objectives defines, to study the current PPPs coverage on infrastructure projects in Sri Lanka it will be examined at the Central Bank annual Report (2000 to 2009) and Board of Investment publications.

It is understood that there are other sources of secondary data, such as World Bank reports, ADB reports, Commonwealth Secretariat Development reports that can be used as a source. However to minimize the complexity in the analysis the data sample constrained only to earlier sources.

When come to the second and third objective it requires data from primary sources as well as secondary sources to study on current deficiencies. The primary source of data sample in this context is very limited as we are looking for expert judgment on the existing practice.

Four key personnel with varying degree of infrastructure project coverage, industry experience and capacity were used to get knowledge of the study area. Those the key attributes of the personnel's selected and interviewed for the purpose of collecting data to the questionnaire preparation.

After that using those information & secondary data prepared a questionnaire for collecting primary data.

Indian context of PPPs in infrastructure project practices was used as a guide line in identifying the deficiencies in the existing PPP practice and future improvements.

3.4 Theoretical framework of Study

The PPPs framework is formulated with a collection of micro frameworks that support the final system in varying degrees. The contribution of each sub framework is depends on the country's socio-economic governance and legal background. In general scope wise those frameworks affect the final outcome differently. Also it can

affect the effectiveness of the process adopted within PPPs approach for infrastructure project funding.

As described Public –Private Partnerships framework can be identified as a collection tool of sub frameworks. Those frameworks are namely Policy framework, Legal Framework and Investment Framework.

These frameworks contribute in varying degrees to the final outcome and therefore above framework should include in the implementation of successful PPP project. The potential PPPs project will exist with a public policy framework, which includes specific legal and regulatory settings.

Within a sound sub set of procedural frameworks, it should be able to effectively elaborate the financial need of the infrastructure project such a way that a private investor would find it worth investing.

3.4.1 PPP Unit

PPP unit is established as a point of coordination, quality control, accountability, and information related to PPPs either within a single sector or across a range of sectors. These units are created as a new agency or within a ministry such as the finance ministry, which is seen to be at arms' length from the sector to be reformed. For private proponents, the units provide transparency and consistency. In terms of public and stakeholders, the units are able to disseminate information and provide specialized management of a specialized process. (ADB PPPs hand book, 2008)

3.4.2 Policy framework

Policy framework is 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.

Rationale for PPPs - 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 rule or principle that provides guidance to appropriate

behavior. Therefore need to discuss about what are the guides used in this PPP and how are these used in practices.

3.4.3 Legal Framework

Legal framework is set of principles that form the basis of making rules and regulation 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 the Government. As an example legislation may be needed to allow private company to charge and collect user fees. Under this section following factors should be conceded.

Mechanism of the payment to investor – Mechanism of the payment describe, how repayment of investment to the infrastructure. It can be tariffs collect from end user, settlement of payment as 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 specified stages of recovery, duration, percentage of recovery etc.

Resolving Contract Dispute - Method used for solving dispute within the contract and 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.

3.4.4 Investment Framework

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

Project investment feasibility –To show the investors how the individual PPP Projects 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 potential investors.


Investment promotion - Viability gap funding, tax incentive, Duty free import of high capacity and modern construction Equipment, Long concession period up to 30 years, Land acquisition and environmental clearance and etc. are investment promotion for the PPP project.

Governance for Individual Projects – Need to identify 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

3.5 PPP Gap Analysis

By working through all above PPP knowledge bases, success stories, risks and issues, it all can be summarized to a matrix which simply elaborates the gaps in various regional PPP practices. Table 3.1 show the gap analysis of different PPP contexts across Asia.

Table 3.1: PPPs Gap Analysis

Institutional Arrangement 	PPP Cell	Knowledge center & SBD	Identification and Maturing of Project	Competitive Bidding	Approval Process & Mechanism	Conductive Regulatory and policy Regime
India(After reform India)	Y	Y	Y	Y	Y	Y
Pakistan	Y	Y			Y	Y
Sri Lanka	Y					
China	Y	Y	Y		Y	Y
Thailand	Y		Y	Y	Y	
Malaysia	Y		Y	Y	Y	

Source: PPP Workshop, 13 August 2009: Presentation, Ernst & Young

Based on the secondary data available for various infrastructure development projects completed under PPPs, Table 3.1 describes the position of Sri Lanka compared to other countries. As described through the data of the Table 3.1, it is clearly seen that the countries which are benefitted from this PPPs approach have developed systematic and structured processes and organizations to promote this

area. However Sri Lanka is lagging behind with many deficiencies compared to others.

3.6 Analysis of Data

Based on theoretical framework of study, Questionnaire is based on five sections.

- General Background of PPP
- Policy Framework
- Legal Framework
- Investment Framework
- Current PPP coverage in Sri Lanka-Sectors

Secondary data are used to compare Sri Lanka & India. Sample questionnaire is attached in Appendix 7.

Likert scale has been used for analyzed data set which was obtained through the questionnaire. This scale is 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 was as follows



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First step was constructing 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 was, they should be for, as well as against, the issue.

Second Step was analyzing the responses by assigning a weight- a numerical value to the responses. Numerical values were assigned differently to positive and negative statements for positive statement the response indicating the most favorable attitude was to be given the highest score. Example as follows. (Kumar, 2007)

Table 3.2 Sample of Likert Scale

Likert Scale	Strongly Agree	Agree	Uncertain	Disagree	Strongly disagree
Weight	1	2	3	4	5

Likert Scale	Never	Rarely	Moderately	Often	Always
Weight	1	2	3	4	5

Third step was calculating each respondent's attitudinal score by adding numerical value assigned in respondent statement. After that it was compared all respondents' scores for each item to identify non-discriminative items. However in this case Non-discriminative statements do not help to distinguish respondents with respects to attitude as almost everyone responds to them in the same way. (Kumar, 2007)

After that total score has been calculated. Finally percentages have been calculated with respect to total allocation for each section.



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$$\text{Percentage Score} = \frac{\text{Total Score}}{\text{Total allocation for each section}} \times 100$$

Equation 3.1: Percentage Score

Percentage Score has evaluated as follows. If the Score within 40% - 50%- week, 50%-60% - almost ok, 60%- 70% good and 70% -80%- best, over 80%- very best

4 ANALYSIS AND DISCUSSION OF RESULTS

4.1 Analysis Results

According to the methodology described in earlier, the results were obtained through structured questioner, interviewing few experienced personnel in the Sri Lankan PPPs context and secondary data. Some results obtained through the decision making process and it has not been practiced in real-time projects.

Due to the sensitivity and confidential reasons some information gathered during the survey has been requested not to be exposed to the public as raw data. This study concentrate on the information received as results and as a norm it was decided to maintain the confidentiality of respondents, only the generic information pertain to respondents were included to the study. Other than that, the verbal information collected from each respondent, reference was made to various publications such a respondent have published with regard to subject matters.

The respondents in different organizations done PPPs different parts and some organizations have only theoretical background. E.g Respondent A works closely in policy making, monitoring, advising, promoting PPPs projects, not only infrastructure projects but also IT, education etc. Respondent B has done various feasibility for PPPs projects in his industry and has not particularly performed any project due to various issues. Respondent C is an organization leader whom has been working closely with government infrastructure projects including PPPs projects. Respondent D represent a local contracting company whom has been involving in various infrastructure projects, and also have worked with government organization during feasibility studies in PPPs projects etc. Sample questioner which was used for data collection, annexed in the appendix 7.

Results were tabulated according to the objectives of this research & tables were attached in the Appendix. Following section will describe the results obtained;

4.2 Results Summary

Public Private Partnerships are not very common in Sri Lanka. Therefore total respondents are very limited. Some data collect through interviewing experience persons, participating workshops and other secondary data resources as mention in

Chapter 3. Mainly primary data collected through questionnaire. Questionnaire was attached Appendix 7

4.2.1 General Information of Respondents

Out of these twenty responds ten from work under contractor, four from work under client, three from work under investors, two from work under consultants and one from work under contractor as well as investor. Following Figure 4.1 illustrate percentage of respondent from each category. Four of them are over twenty years experience, three of them are within fifteen to twenty years experience and others are less than fifteen years experience. According to Appendix 1, all respondent covered their knowledge through during work, through workshops/session and from PPP studies. As mention in the Appendix 1 most of the respondent work with Government funded /Donors funded project. Some are engaged with joint venture /partnerships and PPPs projects.

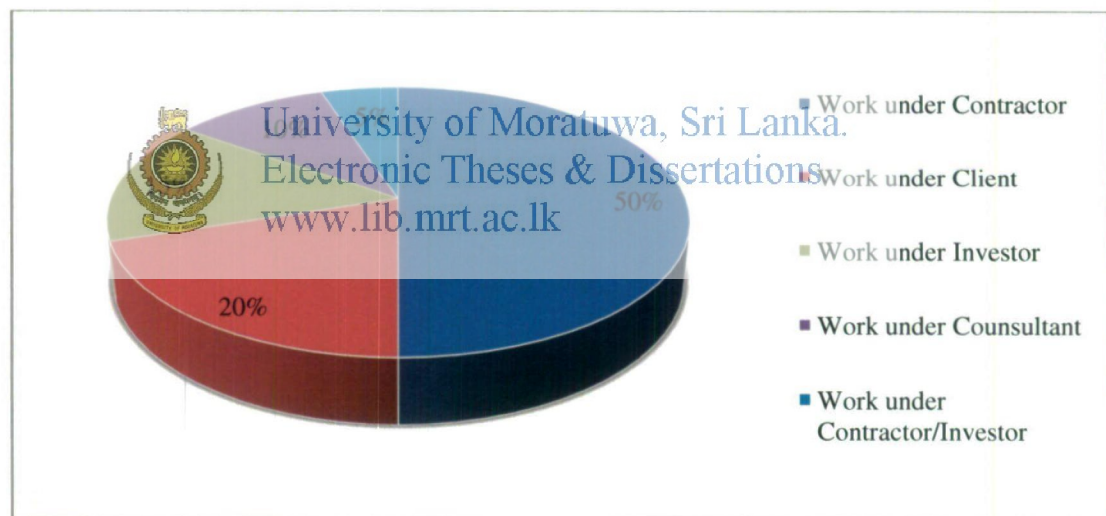


Figure 4.1: Respondent Profile

4.2.2 General Background of Public Private Partnership for Infrastructure Development

Following graph in Figure 4.2, illustrate the general knowledge of the respondent regarding PPPs. The overall results are within 60% to 80% range. Therefore this gives an indication that the data set used here in the following sections are valid on the basis that the respondents participate for this survey have acceptable knowledge

level on PPP for infrastructure development. On the other hand they were accepted PPP is a useful investment method for infrastructure development.

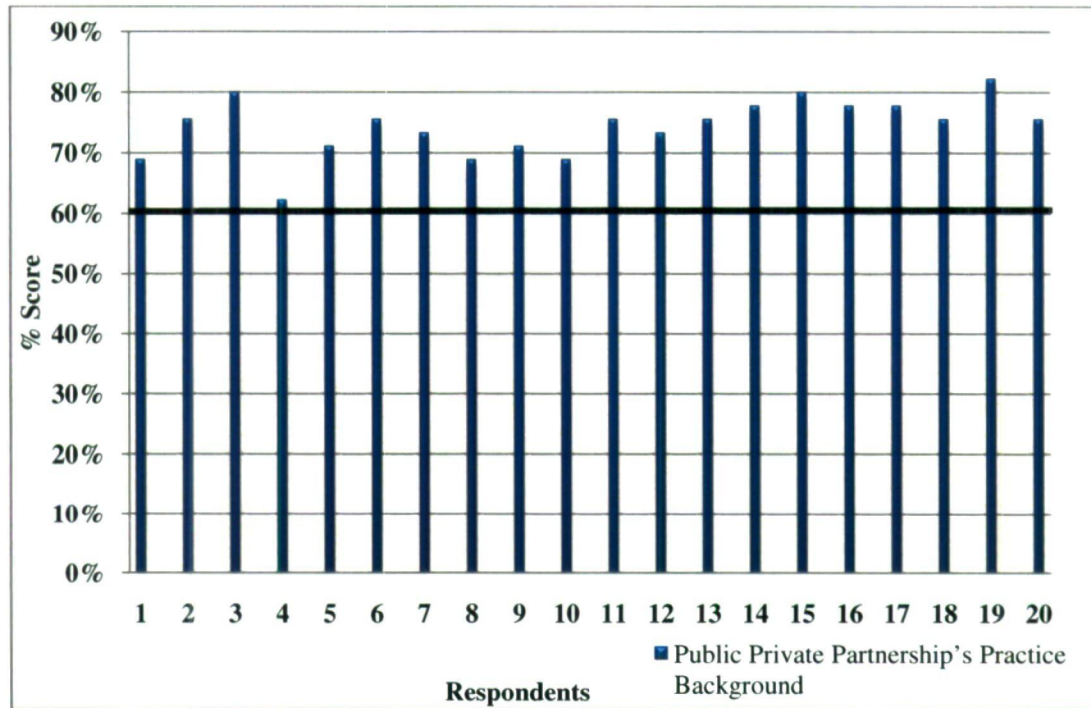


Figure 4.2: Background of PPP's Practice
 According to Appendix 2 all respondents have given high score to following.

- Private sector involvement to reduce budget deficit

From 20 responds 19 responds are given more than 60% score for the statement. Further emphasizing section 2.6.1, large –scale fiscal deficit has limited their capacity to meet growing infrastructure needs.

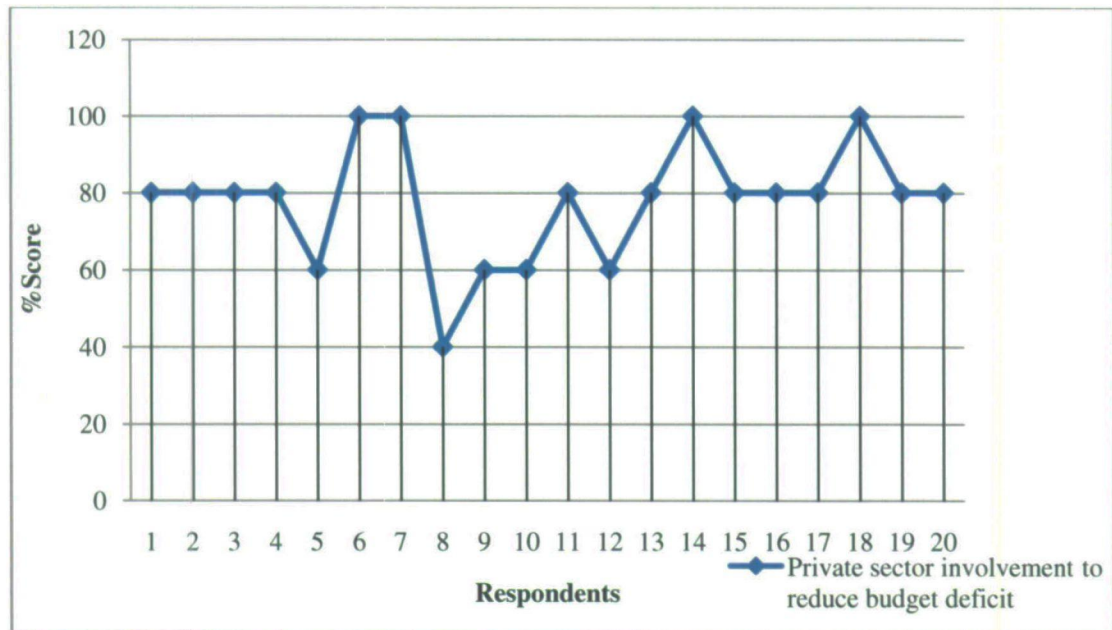


Figure 4.3: Responds for Private sector involvement to reduce budget deficit

4.2.3 Current PPP coverage in Sri Lanka



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According to the Appendix 6, most of the respondents was following sectors covers from some extent on power, plant, port and telecommunication. According to the graph shown in Figure 4.4 60% to 90% responds says PPPs is important practice for Sri Lanka for its upcoming infrastructure projects. According to the Appendix 6, PPPs has not been a popular investment model for infrastructure development so far due to lack of knowledge in PPPs. Section 2.6.3.1 discusses same in Mr. Sirinivas speech, factors like lack of public sector capacity remains a critical challenge in implementation of successful partnerships and provide training and capacity building to senior to middle- level government official on PPPs project development.

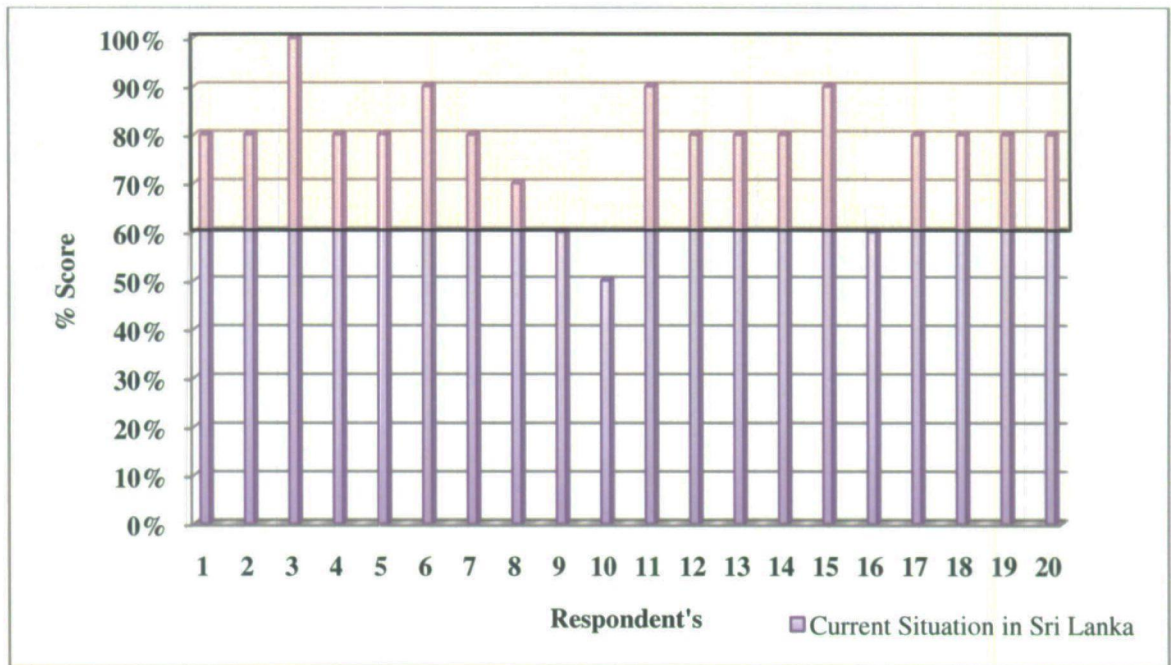


Figure 4.4: Current Situation in Sri Lanka

According to responses evaluation in Appendix 6, it was seen that the PPP has not been able to be a good investment approach for infrastructure developments in Sri Lanka. Because of private investors in Sri Lanka, look for shorter or medium term payback periods normally 9 to 10 years for mega projects and also time is the key factor and the priorities.

4.2.4 Situation of Policy, Legal & Investment Framework of Sri Lanka

This section is discusses policy, legal and investment framework of public private partnerships in Sri Lanka.

4.2.4.1 Policy Framework for PPPs

The Guidelines for Procurement of PPPs infrastructure project is discussed under policy framework in Appendix 3. Following graph gives the overall view of the Sri Lankan guide line for infrastructure development, existing PPPs procurement practice in Sri Lanka and compared with India.

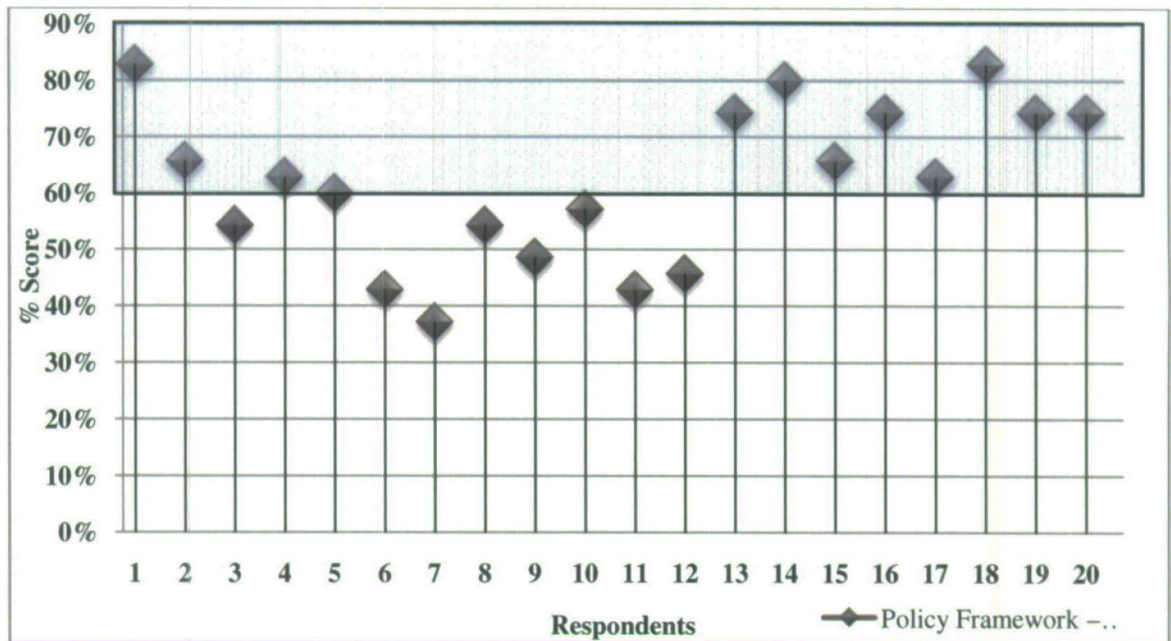


Figure 4.5: Policy Framework in Sri Lanka

According to the graph shown in Figure 4.5, 60% to 90% results were yield on respondents' knowledge over PPPs policy framework. From twenty respond twelve responds are over 60% and three responds within 50%.to 60%. Therefore knowledge of the guide line and procurement method is reasonable for the results. Not only that further detail results are given as follows.

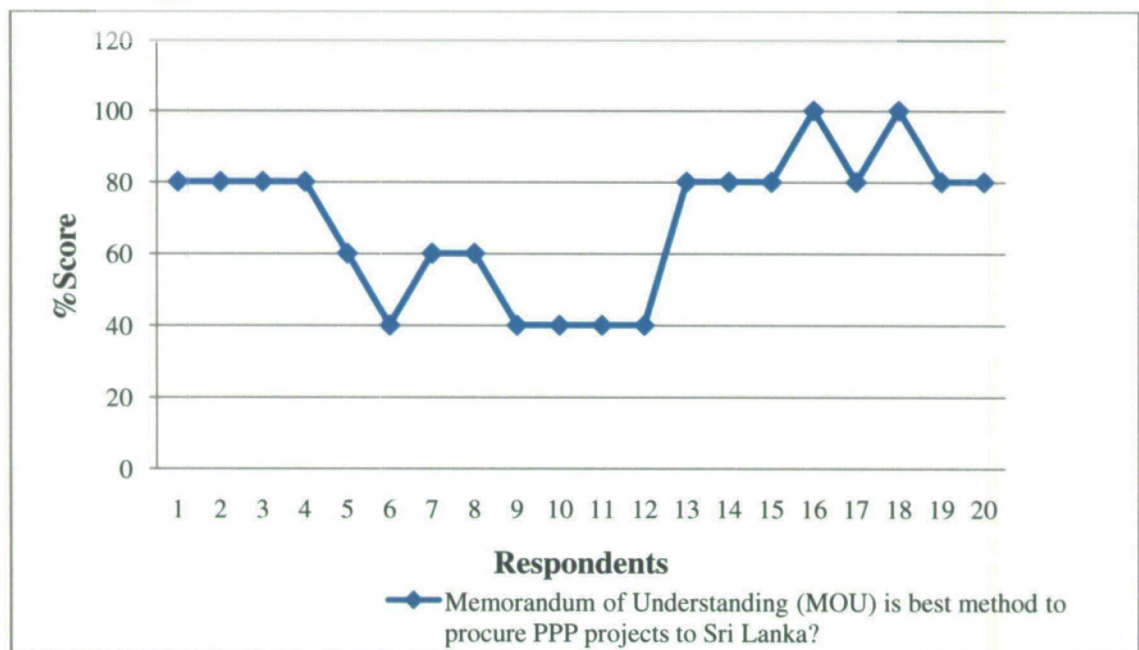


Figure 4.6: Memorandum of Understanding (MOU) is best method to procure PPP projects to Sri Lanka

From 20 respond 5 responds are less than 60% and they are not accept the statement.

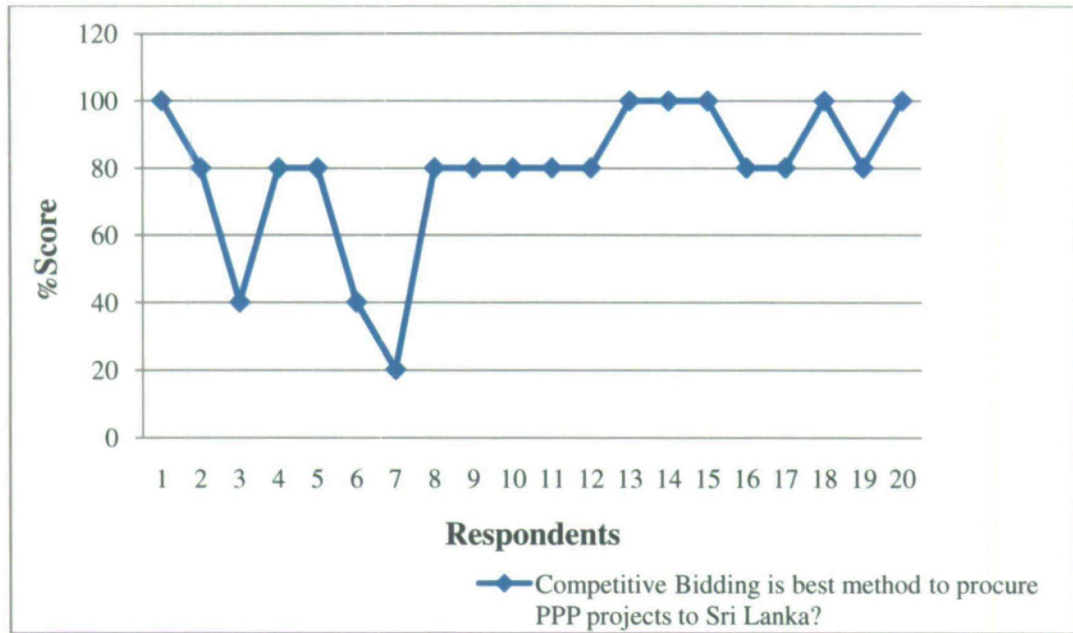


Figure 4.7: Competitive Bidding is best method to procure PPP projects to Sri Lanka
 From 20 respond 3 responds are less than 60% and they are not accept the statement.
 According to the Figure 4.6 and the Figure 4.7 competitive bidding is best procurement method for PPPs.

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According to the questioner it gives general view of legal framework in Appendix 4. Within this section mainly discusses of concession agreement & development of concession. From 20 responds 18 are agree with the statement.

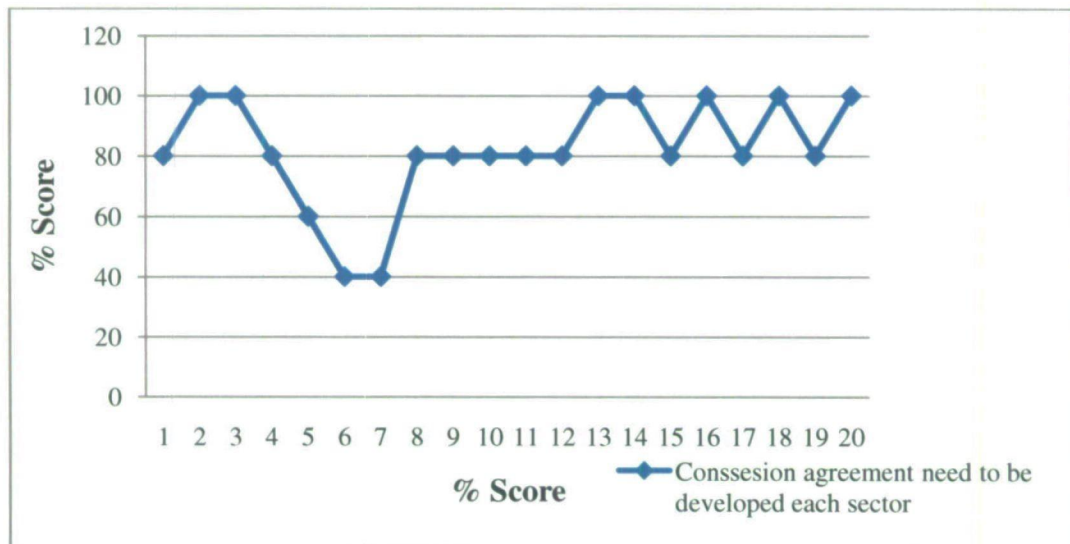


Figure 4.8 Concession agreement development in each sector

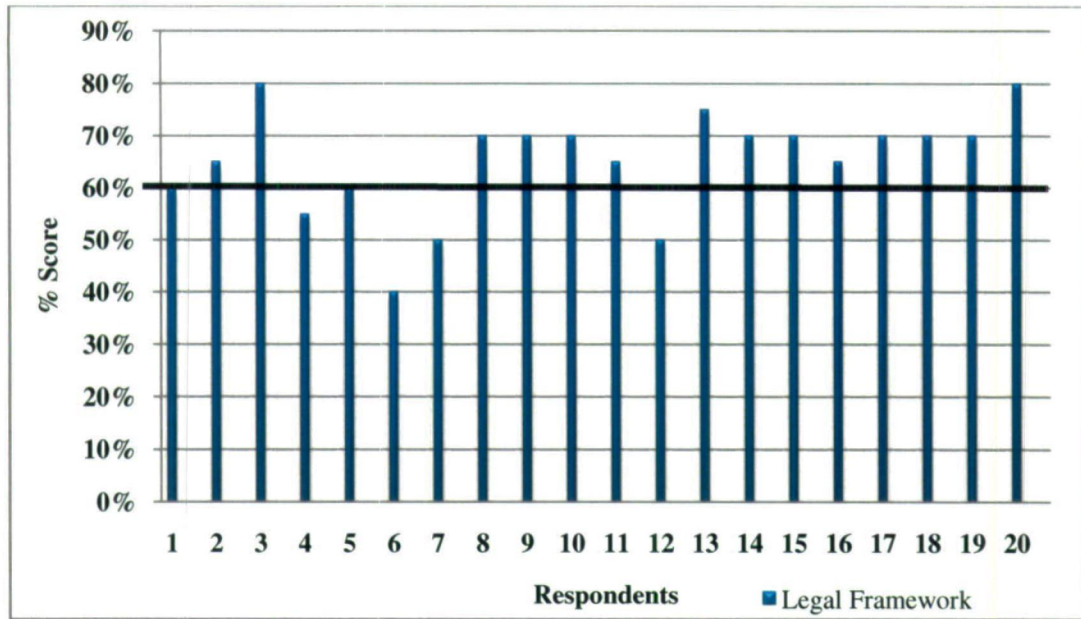


Figure 4.9: Legal Framework in Sri Lanka

Figure gives overall view of the legal framework of Sri Lanka. As shown in Figure 4.9, most of the people have less knowledge compared to other section. The results are within 60% to 75%. Within the concession agreement, Mechanism of the payment to investor, Investor's rights, resolving dispute, etc., are includes.



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4.2.4.3 Investment Framework

How to attract investor and promotion should be given to them, were discussed in this section.

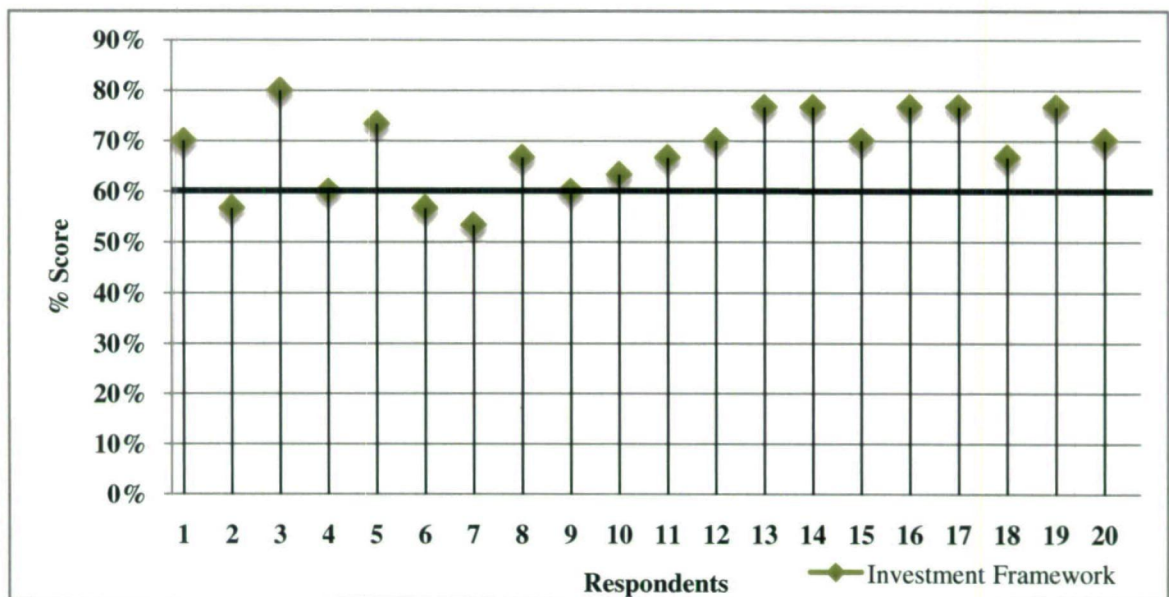


Figure 4.10: Investment Framework in Sri Lanka

According to the results graph in Figure 4.7, 60% to 90%, most people suggest all suggested promotion are need for develop the PPPs practice in Sri Lanka. Suggestions were attached Appendix 5

4.3 Discussion of Results

According to the general information shows the selected sample has considerable knowledge of PPP background. They have improved their knowledge during work, sessions and specific studies.

4.3.1 Current PPP Coverage in Sri Lanka

Questionnaire responds Appendix 6 as well as literature reviewed; currently PPPs adapting sectors could be identified. Those sectors are port, power generating, and some industrial park and telecommunication sector. Table 2.3 describes what are project done so far. But here we are discussing infrastructure development. According to that port and power generating could be mainly considered. According to the Central Bank annual report 2009 government has recently engaged with Colombo South Harbour Project through PPPs method.

Most of the people said PPPs is still not success in Sri Lanka. There are so many sectors not adopted but need to be adopted PPPs practice in Sri Lanka. After the war there is rapid development in the country, Highway, Railway, Airport and Port like huge infrastructures are expanding using loan/donor funds. As mentioned in the Chapter 1, annual report 2009 has said the government has declared its intention to transform Sri Lanka into a Naval, Aviation, Commercial, Energy and Knowledge hub and develop the country into a strategically important economic centre in the region. In doing so, it is imperative to complete the ongoing mega infrastructure projects as planned, to realize the full benefits of peace and to enable the fast tracking of development activities. To fast track the implementation of infrastructure projects, and to ensure their maintenance and management in a sustainable manner and to reduce the burden on the government budget, it is important that private sector participation is also promoted. One option available for this is to encourage Public-Private Partnerships (PPPs) in identified infrastructure projects. In order to attract the private sector investments towards infrastructure projects, it is essential for the government to clearly identify the specific projects in which the private sector can participate and to create a helpful environment for the private sector to actively

engage in providing infrastructure facilities. Next section discusses what those deficiencies are not adopt PPP in Sri Lanka.

4.3.2 Current Deficiencies in PPP

According to the results most of the respond suggest government/public sector should not invest for infrastructure all the time. But most of the time government fund and donor /lone fund used to invest for infrastructure project. It can be identified clearly from results, because most of respondent work with government or donor funded projects. If government invests huge infrastructure projects, budget deficit also goes up in the country. It clearly said in results in PPPs background section in Appendix 2

To the investing infrastructure project, private sector targets their profit, but country like Sri Lanka there is uncertainty to make profit in some sector. But port, power generation, telecom, & water supply sectors can make profit. Because of customers demand is very high for those sectors. When we consider private sectors angel more risk is transfer to them. Therefore in highway sector there is risk to collect toll within the concession period. Therefore private sector requests long concession period for highways. There is a common acceptance within the industry that private sector management is better than public sector, therefore customer service also better in private sector than public sector. Further private sector can recover their cost, offering good customer service as well. If government invest to huge infrastructures like expressways/highways, government need to find more funds to upfront the budget. It is disadvantage of traditional procurement method.

Sri Lanka does not have proper guideline for PPPs projects. This is the main deficiency for the PPPs projects in Sri Lanka. Based on the results shown in Figure 4.5, it can be conclude that Infrastructure sector people do not have proper knowledge for PPPs and the guide lines. Lack of knowledge is also considerable effect to the PPPs projects investments. There are two methods used to procure a PPP project in Sri Lanka. One is signing MOU first and doing work after that mutual understanding of two parties sign the agreement. This method has disadvantages to county. Results from the questionnaire were same as with the interview results. But most of the time MOU used for PPPs projects in Sri Lanka. Competitive bidding

process is used in less. Those two methods are depending on no of investors. If country has considerable number of investors government can go for competitive bidding.

Legal background is yet to be established however enforcement of agreements within the Sri Lankan legal framework would hold unless agreements specify international courts where Sri Lanka would be at a disadvantage in a foreign country. Results shows in the Figure: 4.8 and Figure 4.9 show that the PPPs legal background in the Sri Lankan context is not in satisfactory situation. Lack of modeling concession agreement was highlighted in the results as well as interviews.

Results shows investment promotions also improve to attract investors to the country. Duty free imports facilities are already introduced by BOI Sri Lanka. But Government has to support for viability gap funding, introducing long concession period, government involvement for land acquisition & environmental clearance process should be improved. Lack of knowledge for investment promotion also effect to improve PPP projects.

4.3.3 Propose Suggestions for Effectively Address the Identified Problems

To improve PPPs practice in our country, Indian practice can be studied closely and get idea from them. Purpose of consider India for this research was as a South Asian country, India has better improvements in PPPs projects compared to other regional countries.

The chapter two section 2.5.5 in literature review gives how to develop PPPs practice in India Government was moving from the role of Developer and operator to facilitator, Regulatory Framework in Place, Autonomous regulatory authorities, & tariff authorities set up, Model contracts in Power, Roads, Ports, Airports & Railways, create stable policy environment & encouraging PPPs in India. Therefore Sri Lanka should be changed the role developer and operator to facilitator as well. Furthermore Sri Lanka should improve model contract for each sector. To do that need to improve public sector people's knowledge of PPPs practice.

To encourage PPPs in India, government improved public sector for setting-up of a PPPs Unit in Department of economic affairs, approval mechanism streamlined for PPPs in the central sector through setting –up of a PPPs Appraisal Committee

(PPPAC), Pipeline of PPPs projects being developed for that Government has setup a Rs. 100 Cr fund and eleven consultants have been appointed, formulate Guidelines, Model Concession Agreement developed for each sector, Legal & policy Scheme developed to support PPPs. In Sri Lanka also should be streamlined of PPPs approval mechanism and improved PPPs guidelines. Sri Lanka already has their PPP unit under Board of Investment. Through that PPP unit gives advising and finding investors for pipe line projects.

Indian government gives following investment promotion to attract investors to the country, Viability Gap funding for those projects, 40% of the cost of the project as a grant. Fiscal Incentives, Tax Holidays, Tax Incentive (long term debt finance and Equity), Liberalized Foreign Direct Investment environment, 100% Foreign Direct Investment permitted in Roads, Ports, Airports, Electricity Sector, 74% to 100% FDI permitted for various Telecom Services, 49% FDI in Domestic airline and other incentives are also help to find investors for projects, Long concession period –up to 30 years, Duty free import of high capacity and modern construction Equipment. Sri Lanka also improve viability gap funding for the infrastructure project and Long concession period for that projects.



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5 CONCLUSION & RECOMMENDATION

5.1 Conclusion

The basic objectives were in research to identify the current PPPs coverage on infrastructure projects in Sri Lanka, to identify current deficiencies in PPPs practices and areas which resist PPPs being an attractive investment model in infrastructure developments in Sri Lankan context and to propose an improved PPPs framework/model this will effectively address the identified problems and could be adopted during infrastructure developments in Sri Lanka based on Indian PPPs framework.

As the results of the study compared with the theoretical frame work for PPPs practice and general idea of expertise, Public Private Partnerships for infrastructure development is important and essential practice for the country like Sri Lanka. The country is developing their economy after thirty years war. Therefore, to develop the economy, country needs to be good economical infrastructure system like expressways, airport, port and power plant etc. Model contract, model concession agreement, regulatory, policy and legal framework development is essential for each sectors to effect investor's attraction to the country.

The factors discussed in chapter four, section 4.3.2, the current deficiencies in PPPs practice in the country need to be overcome to develop the PPPs practice and make that practice to be helpful to the county economy. In 2007 annual report published by Central Bank of Sri Lanka says "*Development of economic infrastructure through PPP has been identified as a key development strategy, so as to relieve the budget of the burden of financing*"

While changing the role of India Government from developer and operator to facilitator, they have achieved their goals. Then they have further develop the PPPs practices though practical experience which were they had to faced.

Therefore Sri Lankan government should be tried to change their role from developer and operator to facilitator.

5.2 Limitation of the study

The study has been carried out by selecting samples of people in each and every sectors mention in chapter four, section 4.2.1, interviewing four personnel for those sectors and preparing questionnaire. Twenty responds were collected from questionnaire, because of limited people were know about this PPPs projects. Also few answers were seems to be contradictory by investigating the other responds and those contradictions were eliminated by careful observation and selecting over 60% score.

There was a difficulty to access for the some contract data related to pipeline project developing in infrastructures. The organizations were not interested in publishing these data. The facts were collected from experienced interviewers, participating workshops, other literature review and questionnaire responds. Sri Lankan expertise except foreign investors and contractors have limited practical knowledge for PPPs practice because in Sri Lanka was completed limited projects up to now.

5.3 Recommendation



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The basic objectives were in this research to identify the current PPPs coverage on infrastructure projects in Sri Lanka, identify current deficiencies in PPPs practices and areas which resist PPPs being an attractive investment model in infrastructure developments in Sri Lankan context and to propose an improved PPPs framework/model this will effectively address the identified problems and could be adopted during infrastructure developments in Sri Lanka. Recommendation for this project is implement identified solutions for deficiencies in PPPs practices as follows

Sri Lankan government/public sector should be changed the role developer and operator to facilitator, improve model contract for each sector and to do that need to improve public sector people's knowledge of PPPs practice.

Government/Public sector should be streamline of PPPs approval mechanism and improve PPPs guidelines. Sri Lanka already has their PPPs unit under Board of Investment. Through that unit gives advising, developing concession models, improve guide lines and finding investors for pipe line projects. Not only that government has to improve viability gap funding for the infrastructure project,

introduce long concession period, gives tax holidays, tax incentive and duty free import of high capacity and modern construction equipment.

There are three main advantages that motivate governments to enter into PPPs for infrastructures are:

1. To attract private capital investment (often to either supplement public resources or release them for other public needs)
2. To increase efficiency and use available resources more effectively.
3. To reform sectors through a reallocation of roles, incentives, and accountability, Customers service, Employee morale, Project financing, Transfer of technology & training

Therefore overall view of this research is Public Private Partnerships is important investment model for infrastructure development in Sri Lanka

5.4 Future Research

To further research, researchers can be deeply study through each sector, and identified deficiencies and advantages to introduce this practice to that sector.

On the other hand, infrastructure and services developing through PPPs such as fisheries, Plantation, mineral mining, transportation and health care etc. Researchers can be identified deficiencies and advantages to introduce this practice to that sector.

Researchers can be studied PPPs models like BOT, BOOT, BOO etc. which were already used in Sri Lanka. Then can be identified deficiencies and solution for further improvements.

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APPENDIX

Appendix 1: General Information											
Q. No	Question/ Response	Respondents' Inputs									
		1	2	3	4	5	6	7	8	9	10
1	What is your current employer?	a/c	a	a	c	b	a	d	a	c	a
2	How long your Career experience (in years)?	e	b	b	b	b	d	a	b	a	b
3	What is your current position?	d	d	d	b	b	d	b	b	b	b
4	How do you classify your highest educational qualification?	c	d	c	d	d	c	d	d	c	c
5	How do you learned/ got to know PPP's (Public Private Partnership ex: BOT, BOOT, Projects) practices?	b/e	d	b	b	b	b	d	b	d	a
6	What is your last five three years "project mix" (number of projects) with regard its investment/ funding mechanism (score out of 100%)										
	a. Government funded /Donors			85	10		100	20	70	100	100
	b. Private investor	50	80		90			80	20		
	c. Joint venture/ Partnerships	30	10	10					10		
	d. PPP (BOT, BOOT, etc)	20		5							
	e. Other		10			100					

Appendix 1: General Information *Continued.....*

Q No	Question/ Response	Respondents' Inputs									
		11	12	13	14	15	16	17	18	19	20
1	What is your current employer?	a	d	a	b	c	a	a	a	b	b
2	How long your Career experience (in years)?	b	b	b	e	d	e	d	b	e	a
3	What is your current position?	b	b	d	d	b	b	b	b	d	b
4	How do you classify your highest educational qualification?	c	d	c	c	d	d	c	c	c	c
5	How do you learned/ got to know PPP's (Public Private Partnership ex: BOT, BOOT, Projects) practices?	b	a	b	b/e	b	b	b	a	b/e	d
6	What is your last five three years "project mix" (number of projects) with regard its investment/ funding mechanism (score out of 100%)										
	a. Government funded /Donors	70	80	85	80	10	80	70	100	80	100
	b. Private investor	10	20			90	10	10			
	c. Joint venture/ Partnerships	10		10	10		10	10		10	
	d. PPP (BOT, BOOT, etc)	5		5	10					10	
	e. Other	5						10			

Appendix 2: Public Private Partnership's Practice Background																						
Q. No	Question/ Response	Respondents' Inputs																				
		1	2	3	4	5	6	7	8	9	10											
1	As per your understanding, should government bodies invest in infrastructure projects all the time?	1 to 5	b	2	d	4	d	4	b	2	d	4	e	5	c	3	b	2	d	4	d	4
2	Do you think that can private investors meet their objectives in investing in infrastructure projects?	1 to 5	b	2	a	1	b	2	b	2	b	2	a	1	b	2	b	2	b	2	b	2
3	Will PPP be/ is PPP a better approach to ascertain private investments in for infrastructure projects when consider the final project outcome	5 to 1	c	3	b	4	b	4	b	4	b	4	b	4	b	4	c	3	b	4	b	4
4	When the private sector is invested in the infrastructure, Risks are transferred to the private sector than public sector.	5 to 1	b	4	b	4	c	3	d	2	b	4	a	5	c	3	a	5	b	4	d	2
5	Integration of service needs (capital cost, operation and maintenance cost in one package (PPP practice)), gives efficient customer service & also recovery of costs.	5 to 1	b	4	a	5	b	4	b	4	b	4	a	5	c	3	a	5	b	4	c	3
6	It is the government who has to find more funds in upfront budget when the use of tradition procurement method in Infrastructure development.	5 to 1	b	4	a	5	a	5	c	3	c	3	c	3	a	5	c	3	c	3	a	5
7	Public –Private Partnerships give knowledge of management & technology transfer to the country and government	5 to 1	b	4	c	3	a	5	b	4	a	5	d	2	b	4	a	5	b	4	a	5
8	Public –Private Partnerships is one of the best method to reduce Budget deficit in the government	5 to 1	b	4	b	4	b	4	b	4	c	3	a	5	a	5	d	2	c	3	c	3
9	Public –Private Partnerships give win –win situation to the Public sector & the private sector	5 to 1	b	4	b	4	a	5	c	3	c	3	b	4	b	4	b	4	b	4	b	4
	Total Score		31	34	36	28	32	34	33	31	32	31										
	% Score		69 %	76 %	80 %	62 %	71 %	76 %	73 %	69 %	71 %	69 %										

Appendix 2: Public Private Partnership's Practice Background *Continued....*

Q. No	Question/ Response	Respondents' Inputs										
		11	12	13	14	15	16	17	18	19	20	
1	As per your understanding, should government bodies invest in infrastructure projects all the time?	1 to 5	b 2	c 3	c 3	d 4	d 4	c 3	d 4	c 3	d 4	d 4
2	Do you think that can private investors meet their objectives in investing in infrastructure projects?	1 to 5	d 4	c 3	b 2	b 2	b 2	b 2	b 2	b 2	b 2	b 2
3	Will PPP be/ is PPP a better approach to ascertain private investments in for infrastructure projects when consider the final project outcome	5 to 1	c 3	b 4	c 3	b 4	b 4	c 3	b 4	c 3	b 4	b 4
4	When the private sector is invested in the infrastructure, Risks are transferred to the private sector than public sector.	5 to 1	a 5	a 5	c 3	b 4	c 3	b 4	b 4	c 3	b 4	c 3
5	Integration of service needs (capital cost, operation and maintenance cost in one package (PPP practice)), gives efficient customer service & also recovery of costs.	5 to 1	c 3	c 3	a 5	c 3	b 4	b 4	c 3	b 4	b 4	c 3
6	It is the government who has to find more funds in upfront budget when the use of tradition procurement method in Infrastructure development	5 to 1	b 4	b 4	b 4	a 5	a 5	a 5	a 5	a 5	a 5	a 5
7	Public –Private Partnerships give knowledge of management & technology transfer to the country and government	5 to 1	b 4	b 4	a 5	b 4	a 5	a 5	b 4	a 5	a 5	b 4
8	Public –Private Partnerships is one of the best method to reduce Budget deficit in the government	5 to 1	b 4	c 3	b 4	a 5	b 4	b 4	b 4	a 5	b 4	b 4
9	Public –Private Partnerships give win –win situation to the Public sector & the private sector	5 to 1	a 5	b 4	a 5	b 4	a 5	a 5	a 5	b 4	a 5	a 5
	Total Score		34	33	34	35	36	35	35	34	37	31
	% Score		76 %	73 %	76 %	78 %	80 %	78 %	78 %	76 %	82 %	69 %

Appendix 3: Policy Framework

Q. No	Question/ Response	Respondents' Inputs										
		1	2	3	4	5	6	7	8	9	10	
1	Do you have experience to work using procurement guidelines for works (Infrastructure Projects)?	5 to 1	a 5	c 3	b 4	c 3	b 4	c 3	e 1	b 4	d 2	c 3
2	Do you have experience to work using procurement guidelines for Private Sector Infrastructure projects (PPP Projects) in Sri Lanka?	5 to 1	b 4	e 1	e 1	c 3	c 3	e 1	e 1	e 1	e 1	d 2
3	Do you have experience to work using procurement guidelines for Private Sector Infrastructure projects (PPP Projects) in other countries?	5 to 1	b 4	e 1	e 1	d 2	e 1	e 1	e 1	e 1	e 1	d 2
4	Do you think PPP guidelines are sufficiently modeled in order to improve the funding deficiency in infrastructure projects in Sri Lanka?	1 to 5	c 3	e 5	d 4	c 3	c 3	c 3	d 4	c 3	d 4	d 4
5	Do you think Memorandum of Understanding (MOU) is best method to procure PPP projects to Sri Lanka?	1 to 5	d 4	d 4	d 4	d 4	c 3	b 2	c 3	c 3	b 2	b 2
6	Do you think Competitive Bidding is best method to procure PPP projects to Sri Lanka?	5 to 1	a 5	b 4	d 2	b 4	b 4	d 2	e 1	b 4	b 4	b 4
7	Do you think India has improved their guidelines to success for PPP projects?	5 to 1	b 4	a 5	c 3	c 3	c 3	c 3	d 2	c 3	c 3	c 3
	Total Score		29	23	19	22	21	15	13	19	17	21
	% Score		83%	66%	54%	63%	60%	43%	37%	54%	49%	60%

Appendix 3: Policy Framework *Continued....*

Q. No	Question/ Response	Respondents' Inputs									
		11	12	13	14	15	16	17	18	19	20
1	Do you have experience to work using procurement guidelines for works (Infrastructure Projects)? 5 to 1	e 1	d 2	a 5	b 4	c 3	b 4	d 2	a 5	a 5	a 5
2	Do you have experience to work using procurement guidelines for Private Sector Infrastructure projects (PPP Projects) in Sri Lanka? 5 to 1	e 1	d 2	c 3	d 2	c 3	c 3	d 2	c 3	c 3	c 3
3	Do you have experience to work using procurement guidelines for Private Sector Infrastructure projects (PPP Projects) in other countries? 5 to 1	e 1	e 1	e 1	b 4	e 1	e 1	e 1	b 4	e 1	e 1
4	Do you think PPP guidelines are sufficiently modeled in order to improve the funding deficiency in infrastructure projects in Sri Lanka? 1 to 5	c 3	b 2	c 3	a 1	d 3	d 4	d 4	c 3	d 4	c 3
5	Do you think Memorandum of Understanding (MOU) is best method to procure PPP projects to Sri Lanka? 1 to 5	b 2	b 2	d 4	d 4	d 4	e 5	d 4	e 5	d 4	d 4
6	Do you think Competitive Bidding is best method to procure PPP projects to Sri Lanka? 5 to 1	b 4	b 4	a 5	a 5	a 5	b 4	b 4	a 5	b 4	a 5
7	Do you think India has improved their guidelines to success for PPP projects? 5 to 1	c 3	c 3	a 5	a 5	b 4	a 5	a 5	b 4	a 5	a 5
	Total Score	15	16	26	28	23	26	22	29	26	26
	% Score	43%	46%	74%	80%	66%	74%	63%	83%	74%	74%

Appendix 4: Legal Framework												
Q. No	Question/ Response		Respondents' Inputs									
			1	2	3	4	5	6	7	8	9	10
1	Do you have knowledge of legal background of PPP for infrastructure projects in Sri Lanka?	5 to 1	c 3	d 2	c 3	e 1	d 2	e 1	e 1	d 2	c 3	d 2
2	Do you think current legal background is in satisfactory level for PPP projects in Sri Lanka?	1 to 5	b 2	d 4	d 4	c 3	d 4	c 3	c 3	d 4	d 4	d 4
3	Do you think concession agreements are in satisfactory situation in PPP infrastructure projects in Sri Lanka?	1 to 5	c 3	b 2	d 4	c 3	c 3	b 2	d 4	d 4	c 3	d 4
4	Do you think model Concession Agreement (Mechanism of the payment to investor, what are the Investors' Rights, How will repatriation of funds Lenders Rights, Resolving Contract Dispute, Tax on payments, Government Support or Guarantee, Handling changes in contracts, other operational & maintenance requirements) need to be developed in each sector (Roads, Water Supply, Power plants etc.) in Sri Lanka	5 to 1	b 4	a 5	a 5	b 4	c 3	d 2	d 2	b 4	b 4	b 4
Total Score			12	13	16	11	12	8	10	14	14	14
% Score			60%	65%	80%	55%	60%	40%	50%	70%	70%	70%

Appendix 4: Legal Framework *Continued...*

Q. No	Question/ Response		Respondents' Inputs																			
			11	12	13	14	15	16	17	18	19	20										
1	Do you have knowledge of legal background of PPP for infrastructure projects in Sri Lanka?	5 to 1	d	2	e	1	c	3	d	2	c	3	e	1	c	3	d	2	c	3	c	3
2	Do you think current legal background is in satisfactory level for PPP projects in Sri Lanka?	1 to 5	d	4	c	3	c	3	d	4	c	3	d	4	d	4	c	3	d	4	d	4
3	Do you think concession agreements are in satisfactory situation in PPP infrastructure projects in Sri Lanka?	1 to 5	c	2	b	2	d	4	c	3	d	4	c	3	c	3	d	4	c	3	d	4
4	Do you think model Concession Agreement (Mechanism of the payment to investor, what are the Investors' Rights, How will repatriation of funds Lenders' Rights, Resolving Contract Dispute, Tax on payments, Government Support or Guarantee, Handling changes in contracts, other operational & maintenance requirements) need to be developed in each sector (Roads, Water Supply, Power plants etc.) in Sri Lanka	5 to 1	b	4	b	4	a	5	a	5	b	4	a	5	b	4	a	5	b	4	a	5
Total Score				13		10		15		14		14		13		14		14		14		16
% Score				65%		50%		75%		70%		70%		65%		70%		70%		70%		80%

Appendix 5: Investment Framework

Q. No	Question/ Response	Respondent's Data										
		1	2	3	4	5	6	7	8	9	10	
1	Do you have knowledge of investment procedures of PPP for infrastructure projects in Sri Lanka?	5 to 1	c 3	2	c 3	d 2	c 3	e 1	d 2	d 2	d 2	d 2
			d									
2	Do you think current investors' promotions are in satisfactory level for PPP projects in Sri Lanka?	1 to 5	c 3	d 4	d 4	d 4	e 5	d 4	c 3	d 4	c 3	c 3
3	Do you think investments are not been successful because of Lack of viability gap funding (the government support is extended to the project, be it in the form of equity shares, subsidies, grants)?	5 to 1	b 4	b 4	a 5	b 4	c 3	d 2	c 3	b 4	c 3	b 4
4	Do you think Long concession period like 25 to 30 years, need for PPP investment to success the PPP infrastructure projects?	5 to 1	a 5	d 2	a 5	b 4	c 3	b 4	e 1	c 3	b 4	d 2
5	Do you think allowing for duty free import of high capacity and modern construction Equipment to the PPP projects is a good investor's promotion to invest in Sri Lanka?	5 to 1	b 4	b 4	a 5	d 2	b 4	b 4	b 4	a 5	b 4	b 4
6	Do you think public sector involvement for Land acquisition and environmental clearance is in satisfactory level for PPP infrastructure projects in Sri Lanka?	5 to 1	d 2	e 1	d 2	d 2	b 4	d 2	c 3	d 2	d 2	b 4
	Total Score		2 1	1 7	2 4	1 8	2 2	1 7	1 6	2 0	1 8	1 9
	% Score		70 %	57 %	80 %	60 %	73 %	57 %	53 %	67 %	60 %	63 %

Appendix 6: PPP Coverage in Sri Lanka

	% Score	Total Score	Do you think PPP projects are not popular in Sri Lanka, Because of lack of knowledge for PPP investment method?		As your knowledge, is PPPs importance/essential for infrastructure development in Sri Lanka?		As your knowledge, what are the key sectors adopt in PPPs in Sri Lanka?
			5 to 1		5 to 1		
1	80%	8	b	4	b	4	Power, Highway, water
2	80%	8	b	4	b	4	Education, power Generation/electricity, Telecommunication/ICT, transportation
3	100%	10	a	5	a	5	Sea ports, power generation,
4	80%	8	b	4	b	4	Specially the road sector development and other internal transportation can be developed with PPP. Railway and the inland aviation should be developed under this. Power Sector, etc... Furthermore mining of the other resources and be arranged through this system
5	80%	8	b	4	b	4	Road, Tourism, Construction
6	90%	9	b	4	a	5	Roads (Highways) , Agri business, Fishing
7	80%	8	b	4	b	4	Highways, Electricity, Harbor, Air Ports, Sport Facilities, Entertainment Facilities
8	70%	7	b	4	c	3	Water Supply, Irrigation Schemes, Electricity, Ports, Highway, Transport



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Appendix 5: Investment Framework <i>Continued...</i>														
Q. No	Question/ Response	Respondent's Data												
		9	10	11	12	13	14	15	16	17	18	19	20	
1	Do you have knowledge of investment procedures of PPP for infrastructure projects in Sri Lanka?	5 to 1	d 2	d 2	d 2	e 1	b 4	b 4	c 3	a 5	b 4	c 3	b 4	b 4
2	Do you think current investors' promotions are in satisfactory level for PPP projects in Sri Lanka?	1 to 5	c 3	c 3	d 4	e 5	c 3	d 4	c 3	d 4	d 4	d 4	d 4	c 3
3	Do you think investments are not been successful because of Lack of viability gap funding (the government support is extended to the project, be it in the form of equity shares, subsidies, grants)?	5 to 1	c 3	b 4	b 4	b 4	b 4	b 4	b 4	c 3	b 4	b 4	b 4	b 4
4	Do you think Long concession period like 25 to 30 years, need for PPP investment to success the PPP infrastructure projects?	5 to 1	b 4	d 2	b 4	b 4	a 5	b 4	a 5	b 4	b 4	c 3	b 4	c 3
5	Do you think allowing for duty-free import of high capacity and modern construction Equipment to the PPP projects is a good investor's promotion to invest in Sri Lanka?	5 to 1	b 4	b 4	c 3	b 4	b 4	b 4	b 4	b 4	b 4	b 4	b 4	b 4
6	Do you think public sector involvement for Land acquisition and environmental clearance is in satisfactory level for PPP infrastructure projects in Sri Lanka?	5 to 1	d 2	b 4	c 3	c 3	c 3	c 3	d 2	c 3	c 3	d 2	c 3	c 3
Total Score			18	19	20	21	23	23	21	23	23	20	23	21
% Score			60%	63%	67%	70%	77%	77%	70%	77%	77%	67%	77%	70%

Appendix 6: PPP Coverage in Sri Lanka <i>Continued.....</i>							
	% Score	Total Score	Do you think PPP projects are not popular in Sri Lanka, Because of lack of knowledge for PPP investment method?		As your knowledge, is PPPs importance/essential for infrastructure development in Sri Lanka?		As your knowledge, what are the key sectors adopt in PPPs in Sri Lanka?
			5 to 1	5 to 1			
9	60%	6	d	2	b	4	Hydro Power, Port, Diesel and other power plant
10	50%	5	d	4	c	3	Hydro Power ,Port
11	90%	9	b	4	a	5	Electricity, Ports, Highway,
12	80%	8	b	4	b	4	Transport Sector
13	80%	8	b	4	b	4	Hydro Power ,Port, telecom
14	80%	8	b	4	b	4	Hydro Power ,Port, IT Park
15	90%	9	a	5	b	4	Hydro power, Other electricity power generation, Ports,
16	60%	6	c	3	c	3	Electricity
17	80%	8	b	4	b	4	Electricity, port
18	80%	8	b	4	b	4	Hydro Power ,Port, telecom
19	80%	8	b	4	b	4	Hydro Power ,Port
20	80%	8	b	4	b	4	IT, Hydropower, See Port

Appendix 6: PPP Coverage in Sri Lanka *Continued.....*

	% Score	Total Score	Do you think PPPs in successfully use for those projects in those sectors?	What are the sectors PPPs can be used but not adopted in Sri Lanka?
1	80%	8	Timing is the key factors and priorities	Highway, water, sewerage
2	80%	8	Currently only transportation and power generation there are few projects completed, but rest cannot see any remarkable outcome	Tourism, Aviation(air port development), community development (housing/city development project)
3	100%	10	No	Health Care, Highways (toll systems), Sea Ports and container handling, Air Ports and Aviation, Railway, Mono Rail in Main Cities, Expressways, Oil (if and when applicable), Gas, Water supply and drainage, Power Generation, Tourism, Transport, Communication, Education, Power & Energy Generation, Livestock, Fisheries, Production, Imports and Exports (industrial, Mineral, Consumer Goods, Intermediate Goods and Investment Goods)
4	80%	8	It depends. How the each party react. Normally private investors in Sri Lanka look for shorter or medium term payback periods. Normally 5 to 10 years for mega project. Furthermore all these depend according to the mechanism. If policies change after the existing government then there will barriers to the project proponents' in respect to recover the investments	
5	80%	8	Yes	

Appendix 6: PPP Coverage in Sri Lanka <i>Continued.....</i>				
	% Score	Total Score	Do you think PPPs in successfully use for those projects in those sectors?	What are the sectors PPPs can be used but not adopted in Sri Lanka?
6	90%	9	Highways - No Agri Business –to a limited extend	Fishing
7	80%	8		Sport Facilities, Electricity, Entertainment Facilities
8	70%	7		Highway, Ports, Irrigation, Transport (Bullet Trains,etc.)
9	60%	6	Not in some sector, PPPs relatively new to Sri Lanka and some areas still to be developed to win-win situation for both parties (govt & Investors)	Highways, Sports, Internal Air Port, Waste Management.
10	50%	5	Yes	Highways
11	90%	9	No	Highway
12	80%	8	Yes	Banking
13	80%	8	No	Highway, Transportation, Port,
14	80%	8	yes	Air Port, Highway, Transportation, Port,
15	90%	9	yes	Water Supply, Hydro power, Other electricity power generation, Ports, Highway, Transport
16	60%	6		
17	80%	8	No	Railway ,Highway, port, Air Port
18	80%	8	yes	Highway, Transportation, Port,
19	80%	8	No	Road, Tourism, Construction Agri business, Fishing
20	80%	8	No	Transportation, Highways, Telecom

Appendix 7: Sample Questionnaire

Public –Private Partnerships for Infrastructure Development in

Sri Lanka

Survey Done By:

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Section 1- General Information

Please underline the correct/ most relevant answer/ suggestion

1. What is your current employer?
 - a. Contractor
 - b. Client
 - c. Investor
 - d. Consultant

2. How long your Career experience (in years)?
 - a. 0-5
 - b. 5-10
 - c. 10 -15
 - d. 15 – 20
 - e. more than 20

3. What is your current position?
 - a. Entry level Engineer/ Architect/QS
 - b. Senior Engineer/ Senior Architect/ Residential Engineer/ Project Engineer/Senior QS
 - c. Financial Advisor / Procurement Specialist /PPP Projects Advisor/ Investment consultant
 - d. Project Manager/ Construction Manager /Senior Manager /Director

4. How do you classify your highest educational qualification?
 - a. Certificate
 - b. Diploma
 - c. Graduate
 - d. Post Graduate

5. How do you learned/ got to know **PPP's** (Public Private Partnership ex: BOT, BOOT, Projects) practices?
 - a. Did not specifically learnt/ used
 - b. During work/ from other co-workers
 - c. Self studying
 - d. Through Workshops/ Sessions
 - e. From specific PPP studies

6. What is your last five three years “project mix” (number of projects) with regard its investment/ funding mechanism (score out of 100%)
 - a. Government funded /Donors
 - b. Private investor
 - c. Joint venture/ Partnerships
 - d. PPP (BOT, BOOT, etc)
 - e. Other


Section 2 -Public Private Partnership's Practice Background

Please underline the correct/ most relevant answer/ suggestion

1. As per your understanding, should government bodies invest in infrastructure projects all the time?
a. Strongly Agree b. Agree c. Uncertain d. Disagree
e. Strongly disagree

2. Do you think that can private investors meet their objectives in investing in infrastructure projects?
a. Strongly Agree b. Agree c. Uncertain d. Disagree
e. Strongly disagree

3. Will PPP be/ is PPP a better approach to ascertain private investments in for infrastructure projects when consider the final project outcome
a. Strongly Agree b. Agree c. Uncertain d. Disagree
e. Strongly disagree

4. When the private sector is invested in the infrastructure, Risks are transferred to the private sector than public sector.

a. Strongly Agree b. Agree c. Uncertain d. Disagree
e. Strongly disagree

5. Integration of service needs (capital cost, operation and maintenance cost in one package (PPP practice)), gives efficient customer service & also recovery of costs.
a. Strongly Agree b. Agree c. Uncertain d. Disagree
e. Strongly disagree

6. It is the government who has to find more funds in upfront budget when the use of tradition procurement method in Infrastructure development.
a. Strongly Agree b. Agree c. Uncertain d. Disagree
e. Strongly disagree

7. Public –Private Partnerships give knowledge of management & technology transfer to the country and government
a. Strongly Agree b. Agree c. Uncertain d. Disagree
e. Strongly disagree
8. Public –Private Partnerships is one of the best method to reduce Budget deficit in the government
a. Strongly Agree b. Agree c. Uncertain d. Disagree
e. Strongly disagree
9. Public –Private Partnerships give win –win situation to the Public sector & the private sector
a. Strongly Agree b. Agree c. Uncertain d. Disagree
e. Strongly disagree

Section 3 - Policy Framework

10. Do you have experience to work using procurement guidelines for works (Infrastructure Projects)?
a. Always b. Often c. Moderately d. Rarely e. Never
11. Do you have experience to work using procurement guidelines for Private Sector Infrastructure projects (PPP Projects) in Sri Lanka?
a. Always b. Often c. Moderately d. Rarely e. Never
12. Do you have experience to work using procurement guidelines for Private Sector Infrastructure projects (PPP Projects) in other countries?
a. Always b. Often c. Moderately d. Rarely e. Never
13. Do you think PPP guidelines are sufficiently modeled in order to improve the funding deficiency in infrastructure projects in Sri Lanka?
a. Strongly Agree b. Agree c. Uncertain d. Disagree
e. Strongly disagree
14. Do you think Memorandum of Understanding (MOU) is best method to procure PPP projects to Sri Lanka?
a. Strongly Agree b. Agree c. Uncertain d. Disagree
e. Strongly disagree

15. Do you think Competitive Bidding is best method to procure PPP projects to Sri Lanka?

- a. Strongly Agree b. Agree c. Uncertain d. Disagree
e. Strongly disagree

16. Do you think India has improved their guidelines to success for PPP projects?

- a. Strongly Agree b. Agree c. Uncertain d. Disagree
e. Strongly disagree

Section 4- Legal Framework

17. Do you have knowledge of legal background of PPP for infrastructure projects in Sri Lanka?

- a. Always b. Often c. Moderately d. Rarely e. Never

18. Do you think current legal background is in satisfactory level for PPP projects in Sri Lanka?

- a. Always b. Often c. Moderately d. Rarely e. Never

19. Do you think concession agreements are in satisfactory situation in PPP infrastructure projects in Sri Lanka?

- a. Strongly Agree b. Agree c. Uncertain d. Disagree
e. Strongly disagree

20. Do you think model **Concession Agreement** (Mechanism of the payment to investor, what are the Investors' Rights, How will repatriation of funds Lenders Rights, Resolving Contract Dispute, Tax on payments, Government Support or Guarantee, Handling changes in contracts, other operational & maintenance requirements) need to be developed in each sector (Roads, Water Supply, Power plants etc.) in Sri Lanka

- a. Strongly Agree b. Agree c. Uncertain d. Disagree
e. Strongly disagree

Section 5 – Investment Framework

21. Do you have knowledge of investment procedures of PPP for infrastructure projects in Sri Lanka?

- a. Always b. Often c. Moderately d. Rarely
e. Never

22. Do you think current investors' promotions are in satisfactory level for PPP projects in Sri Lanka?

- a. Always b. Often c. Moderately d. Rarely e. Never

23. Do you think investments are not been successful because of Lack of **viability gap funding** (the government support is extended to the project, be it in the form of equity shares, subsidies, grants)?

- a. Strongly Agree b. Agree c. Uncertain d. Disagree
e. Strongly disagree

24. Do you think Long concession period like 25 to 30 years, need for PPP investment to success the PPP infrastructure projects?

- a. Strongly Agree b. Agree c. Uncertain d. Disagree
e. Strongly disagree

25. Do you think allowing for duty free import of high capacity and modern construction Equipment to the PPP projects is a good investor's promotion to invest in Sri Lanka?

- a. Strongly Agree b. Agree c. Uncertain d. Disagree
e. Strongly disagree

26. Do you think public sector involvement for Land acquisition and environmental clearance is in satisfactory level for PPP infrastructure projects in Sri Lanka?

- a. Strongly Agree b. Agree c. Uncertain d. Disagree
e. Strongly disagree

Section 6 – PPP Coverage in Sri Lanka

27. Do you think PPP projects are not popular in Sri Lanka, Because of lack of knowledge for PPP investment method?

- a. Strongly Agree b. Agree c. Uncertain d. Disagree
e. strongly disagree

28. As your knowledge, is PPPs importance/essential for infrastructure development in Sri Lanka?

- a. Always
- b. Often
- c. Moderately
- d. Rarely
- e. Never

29. As your knowledge, what are the key sectors adopt in PPPs in Sri Lanka?

.....
.....
.....

30. Do you think PPPs in successfully use for those projects in those sectors?

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.....
.....

31. What are the sectors PPPs can be used but not adopted in Sri Lanka?

.....
.....



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