



# **MASTER'S PROGRAMME IN URBAN MANAGEMENT & DEVELOPMENT**

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## **Defining an Enabling Environment for the Delivery of Urban Infrastructure in Jamaica via Public Private Partnerships**

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# PUBLIC PRIVATE PARTNERSHIPS IN JAMAICA

Defining The Enabling Environment

SOAPBERRY WASTE WATER TREATMENT PLANT



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To  
*Donna*



For  
Monday morning calls  
Jamaican Coffee  
Bose 'Travels'  
Emails  
Unwavering support  
and  
Our shared dreams for the island of Jamaica



## abstract

A Partnership can be defined as *'a means to an end – a collaborative relationship toward mutually agreed objectives involving shared responsibility for outcomes, distinct accountabilities, and reciprocal obligations'* Picciotto, 2004 in Jobin (2008). This thesis is an attempt to contribute to the full-throated debate regarding the justification for and value received from the Jamaican Government's decision to partner with the private sector for the delivery of urban infrastructure. The paper takes a look at the changing role of the State as expressed via public-private partnerships and explores the benefits and risks that emerge from its employment.

The days of unilateral approaches to urban challenges are changing and as pronounced by Sedjari (2004) *"a new reality is imposing itself"*. This debate extends however, beyond the shores of Jamaica, is decades old and its resolution might not be short in coming. In the meantime however, there are some very real challenges facing the nation for which no potential solutions should go unexplored. Any development strategy that will place us nearer our goals should be accommodated. It is the hope that this paper will shed some light on Jamaica's readiness for a model that is being pursued by both developed and developing States and despite the mixed reviews, will probably remain on the policy agenda for some time to come.

It has been called a procurement option, a tool, a strategy, a concept but in all instances Jamaica's flirtations with public private partnerships are still in its embryonic stage. Weighted down as she is, with a debt to GDP ratio of 108.94%, leaves very little wiggle room for a learning curve that other countries can afford. Recent PPP experiments have created a great deal of concern for issues relating primarily to budget overruns, poor transparency and perceived and actual contravention of procurement guidelines.

This study therefore aims at two main objectives. The first intends to define the macro and micro environment that will enable a healthy public private partnership process and bring all stakeholders into a durable and mutually beneficial arrangement for the successful delivery of infrastructure. The second aims at ascertaining why during the life cycle of the partnerships, the risks tend to revert to the Government of Jamaica (the tax payers). This leads to the heart of the research and the main question that is driving the debate – What are the primary impediments to the successful delivery of urban infrastructure via public private partnerships in Jamaica?

In order to gain critical understanding of what needs to be present in a country that would support and foster an undertaking of this type, a theoretical framework had to be identified. This required a fulsome review of literature and the various schools of thought on the subject, starting with setting the context of the investigation and questioning its relevance to urbanisation and its link to infrastructure. An introduction to the four major stakeholders and the roles they play is explored. Focus is then placed on the arguments presented for and against the use of public private partnerships and the varying experiences behind the success and failures in both developed and developing countries.

The analysis takes place within two general frameworks. The first presents the macro environment which focuses on the legal, regulatory and institutional policy backdrop which determines our readiness to attract investors both domestic and foreign. Second is the micro environment, which directs our attention to the project and the process itself. This involves determining if PPP is the best option for service delivery, if so, the choosing of the best model, assessing economic and financial viability, partner selection, contract structuring, implementation, and monitoring.

To pursue the second objective, an explanatory research methodology is used, which draws on two case studies, namely, the recently completed Phase One of the Soapberry Sewage Treatment in Kingston, Jamaica and the Harnaschpolder Sewage Treatment Plant in Hague, The Netherlands. Both projects are their respective country's first attempt at public private partnerships in the waste water management sector and were executed for the similar purpose of improving the sewage effluent quality being disposed of in their coastal waters.

Data was collected via interviews with the various public and private sector agents, purposively selected based on their contribution to the policy/institutional setting (macro) and planning and execution of each project (micro).

First of all this study has revealed that the "dark side" of PPPs is not a unique experienced for the uninitiated public servants in Jamaica. Taxpayers in several countries, both developed and developing, experienced and inexperienced have felt the bitter brunt of a PPP gone sour in the picking up of the tab. Second it has unearthed almost an equal amount of claims and counterclaims for this seemingly unequally yoked collaboration between the public and private sector. Third, after review of the various schools of thought, I have concluded that the core principles of the partnership should be value for money, transparency and accountability. Fourth, that many failed PPP projects are evidence of flawed use of PPP and inappropriate procedures and not necessarily a reflection of PPP itself and the benefits it can bring.

Notwithstanding the difficulties in concluding this debate, understanding the tradeoffs between public and private service delivery is critical for Jamaica's policy makers and their advisors. The stakes are high – saving taxpayers billions, protecting citizen's faith in rule of law and reducing the debt already saddled on the backs of our children. The study has demonstrated that PPPs for large urban infrastructure projects are risky because of their long planning horizons, complexity, the significant financing requirements and the multi-actor decision making that carries with it many potential conflicts of interest.

What then are Jamaica's primary impediments to project success that this research has identified?

Despite domestic challenges and the need for improvements largely in the area of PPP policy the macro environment of the country is not opposed to or at variance with the needs of PPP investors. From the micro perspective, Soapberry was primarily the subject of poor governance in project planning and implementation. The project has revealed a failure to apply the key value for money principles such as competitive bidding and adequate feasibility analyses. In the final analysis, it is the view of the researcher that the absence of probity, transparency and its counterpart accountability will always lead to projects that fail to deliver be it conventional procurement or public private partnerships. Projects not open to public scrutiny and accountability will always present too great a temptation for the tensions between maximizing private/political interests and the public good. It is here's that Jamaica needs are most wanting and while strengthening PPP "know-how" we must pay great attention to what I consider the weakest link in the urban infrastructure procurement chain.

**Key Words:** Jamaica, Infrastructure, public private partnerships, value for money, risk



## preface

It is probably expected and reasonably so, that this prologue be a bit of a stage setter for the discussion on the “whys and wherefores” of infrastructure, public private partnerships, its relevance to the island of Jamaica, a developing country who is struggling as we speak to restructure and reinforce the viability of its most recent public private partnership. That was the intent but considering you have another 165 pages of such theory and exploration ahead of you, I decided to indulge the ‘other angle’ that is itching to be expressed.

Jamaica is a fascinating island. One full of contradictions that is spoken of mostly in its extremes... its beauty, its music, its sportsmen/women or its crime, its debt, its drug trade etc. For me she is more than just a piece of rock jutting up from the ocean shores of the Caribbean Sea. For me, she is a living organism, that breathes, that supports and sustains the life of 2.7 million members of my family. She is however, in trouble. Throughout this entire year here in the Netherlands I have marveled at the society the Dutch have built, envied its residents for its order, its services, its civility and most of all the level of security and safety even in a “big” city like Rotterdam. I try to remember that whilst Kingstonians like the Rotterdammers emerged from a port city, have also had to rebuild her infrastructure and spirit from the natural and man-made disasters and today supports a population of a similar size, the Dutch have been at it some 792 years longer than we have. The heartbreak however, lies not in a country to country comparison but actually in a Jamaica vs Jamaica comparison. By that I mean comparing where we were, where we are and where we are heading to where we could be.

Post-1962 independent Jamaica enjoyed a wonderful status as the trailblazer, not only of the Caribbean but of almost if not all the countries Britain had granted independence in that era. This little island’s development path and growth was impressive and she became the envy of her neighbouring islands as she charted her way from physical to economic independence. Something however, went terribly terribly wrong and the island that was dubbed “the Pearl of the Antilles” by her European ‘owners’ fell from grace and has continued in that downward spiral for the last thirty years. I have over the last five years developed a real thirst to understand what has led to such a unfortunate turn of affairs. Whilst it is said and I agree that “*we have little else to build the future except with the lumber of the past*” I find that perhaps what will serve Jamaica best is to look to the present and the future. A future that begs the question – can an economic partnership between the public and private sector with a supportive civil society identify and execute worthwhile solutions?

It is my hope that this small piece of work will be but a start of bringing greater understanding to a development model that could have come to our policy makers “*for such a time as this*”. I believe it can serve us well, if we understand its frailties, its vulnerabilities, likewise the potential that lies in its benefits, which comes through perhaps what all country’s success come from - collaboration, teamwork and partnership. There is much to learn, much to do and time is not on our side.

I close with no better words of inspiration and motivation than the reminder from my Father’s favourite Jamaican, our Great Statesman, Sir Norman Manley who said some forty years ago.....

*“The mission of my generation was to win self-government for Jamaica. To win political power which is the final power for the black masses of my country from which I spring. I am proud to stand here today and say to you who fought that fight with me, say it with gladness and pride: Mission accomplished for my generation”. “And what is the mission of this generation?.....*

*It is...reconstructing the social and economic society and life of Jamaica”.*

## acknowledgements

It is nothing less than collaboration that has made this paper about public and private sector collaboration possible. Though the act of expressing appreciation to those who have lent support and assistance in the myriad of ways really does not add or subtract from the content of any written work, it certainly is a wonderful practice for which I crave your indulgence for the next few lines to express my gratitude to :-

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For whatever you have prepared as the next chapter, I am ready because I know You are there.

## glossary

<b>Accountability</b>	The ability of the public (state and citizens) to hold to account those exercising public authority over standards and the use of public funds and resources in the delivery of services.
<b>Affordability</b>	Government expenditure associated with a project, be it a PPP or other mode of delivery, can be accommodated within the intertemporal budget constraint of the government.
<b>Bounded Rationality</b>	Is a concept based on the fact that rationality of individuals is limited by the information they have, the cognitive limitations of their minds, and the finite amount of time they have to make decisions. So because decision-makers lack the ability and resources to arrive at the optimal solution, the theory is, they instead apply their rationality only after having greatly simplified the choices available.
<b>Concession</b>	Long-term contracts usually covering 25 or 30 years in which the private sector is responsible for operations, maintenance and new investment for service delivery. Ownership of the facility may remain with government or be transferred to the government on completion of the construction or at the end of the concession period.
<b>Contestable Market</b>	Exist where an entrant has access to all production techniques available to the incumbents, is not prohibited from wooing the incumbent's customers. The incumbent being the firm that is already in the market.
<b>Contingent liabilities</b>	Costs that the government will have to pay if a particular event occurs. They are therefore not yet recognized as liabilities but can become such.
<b>Conventional procurement</b>	A conventional (traditional) public procurement contract is one in which a public agency secures the finance directly and pays the contractor as works progress.
<b>Competition "for the market"</b>	Use of price competition (bidding) for the right to operate a monopoly franchise as means to select a low cost provider; thus achieving some of the gains of a competitive market.
<b>Competition "in the market"</b>	Reducing barriers to entry in a "natural" monopoly so that new firms can compete in the market.
<b>Corruption</b>	In broad terms, corruption is the abuse of public office for private gain. It encompasses unilateral abuses by government officials such as embezzlement and nepotism, as well as abuses linking public and private actors such as bribery, extortion, influence peddling, and fraud.
<b>Debt to GDP Ratio</b>	A measure of a country's federal debt in relation to its gross domestic product (GDP). By comparing what a country owes and what it produces, the debt-to-GDP ratio indicates the country's ability to pay back its debt. The higher the ratio, the less likely the country will pay its debt back, and the higher its risk of default.
<b>Excludability</b>	defines whether or not it is possible to exclude people who have not paid for a good or service from consuming it. The good is non-excludable if when provided for one person is automatically available for all.

## Glossary (cont'd)

<b>Externalities</b>	Economic, social, environmental or other effects of providing a good/ service where the benefit or cost affects a third party.
<b>Freerider Problem</b>	A situation where some individuals in a population either consume more than their fair share of a common resource, or pay less than their fair share of the cost of its production because of the belief that the service will be available regardless.
<b>Fiscal Deficit</b>	When a government's total expenditures exceed the revenue that it generates (excluding money from borrowings). Deficit differs from debt, which is an accumulation of yearly deficits.
<b>Green field projects</b>	An investment project that is placed in a new location.
<b>Governance Structure</b>	provides a framework within which they make strategic decisions (in relation to the partnership objectives), organizational decisions (regarding the use of financial and non-financial resources), and operational decisions (regarding the delivery of the partnership's outputs).
<b>Merit Goods</b>	Infrastructure and services which the public sector needs to provide to ensure accessibility for all.
<b>Offtake Agreement</b>	An agreement between a producer of a resource and a buyer of a resource to purchase/sell portions of the producer's future production. In project financing, it represents the source of revenue for the project.
<b>Optimism bias</b>	A systematic tendency for project appraisers to be over-optimistic about key project parameters, including capital costs, operating costs, works duration and benefits delivery.
<b>Private Finance Initiative</b>	A UK programme encompassing arrangements whereby a consortium of private sector partners come together to provide an asset-based public service under contract to a public body who pays directly for that service.
<b>Probity</b>	The evidence of ethical behaviour in a particular process. Where ethics, is defined as moral principles or values that guide officials in all aspects of their work while ensuring that improper use is not made of an individual's position.
<b>Project finance</b>	A way of financing capital projects that depends for its security on the expected cash flow of the project itself rather than guarantees from the borrower or third parties.
<b>Public sector</b>	Refers to public agencies and enterprises that are state financed, owned and controlled.
<b>Public Sector Comparator</b>	A hypothetical constructed benchmark to assess the value-for-money of conventionally financed procurement in comparison with a privately financed scheme for delivering a publicly funded service.
<b>Refinancing</b>	The process by which the terms of the finance put in place at the outset

**Glossary (cont'd)**

	of a PPP contract are later changed through negotiation. It usually occurs when construction is complete and the risk profile of a project is much lower.
<b>Risk</b>	A situation involves risk if the randomness facing an economic entity can be expressed in terms of specific numerical probabilities.
<b>Social Partnership</b>	a system of formalised co-operation, grounded in legally binding arrangements or informal understandings, co-operative working relationships, and mutually adopted plans among a number of institutions.
<b>Special Purpose Vehicle</b>	An organization that can be established as a distinct legal entity to bring together the companies involved in a PPP in order to manage the project and share the risks and rewards.
<b>Third Sector</b>	Refers to as all those organisations that are not-for-profit and non-government, together with the activities of volunteering and giving which sustain them.
<b>Transaction Costs</b>	The development costs incurred in the process of doing business, which include for example, staff costs, financing costs, advisory fees for investment firms, lawyers and consultants.
<b>Uncertainty</b>	There is uncertainty where an economic entity cannot assign actual probabilities to the alternative possible occurrences.
<b>Unitary payment</b>	Payment for services delivered by an SPV under a PFI- or PPP-type arrangement.
<b>Value-for-money</b>	The optimum combination of whole-of-life cycle costs, risks, completion time and quality in order to meet public requirements.
<b>Whole-of-life cycle</b>	The full costs of a project including those incurred during the design, construction, operation and maintenance of the facility.

**EXCHANGE RATES**

The exchange rates provided from the Bank of Jamaica web database:

December 2004 on signing of the PPP contracts : USD \$1.00 = \$62.00 JMD

October 2009 completion of thesis : USD \$1.00 = \$89.24 JMD

*Unless stated elsewhere all currency figures refer to Jamaican Dollars.*

## abbreviations

ABS	Ashtrom Building System
BOO	Build Own Operate
BOOT	Build Own Operate Transfer
CWTC	Central Wastewater Treatment Company
DBJ	Development Bank of Jamaica
DFI	Development Finance Institutions
EHU	Environmental Health Unit
EIA	Environmental Impact Assessment
FAA	Financial Administration and Audit Act
FTC	Fair Trade Commission
GOJ	Government of Jamaica
IADB	Inter American Development Bank
IBRD	International Bank for Reconstruction and Development
IFC	International Finance Corporation
IMF	International Monetary Fund
ICHP	Inner City Housing Project
KMR	Kingston Metropolitan Region
MGD	Millions of gallons per day
MIGA	Multilateral Investment Guarantee Agency
MOF	Ministry of Finance
NCC	National Contracts Commission
NEPA	National Environmental Planning Agency
NHT	National Housing Trust
NIBJ	National Investment Bank of Jamaica
NPM	New Public Management
NWC	National Water Commission.
OCG	Office of Contractor General
OECD	Organization for Economic Cooperation and Development

O&M	Operations and Maintenance
OPM	Office of the Prime Minister
OUR	Office of Utility Regulation
PFI	Private Finance Initiative
PIOJ	Planning Institute of Jamaica
PPC	Public Private Comparator
PPP	Public-Private Partnerships
PSC	Public Sector Comparator
SOE	State Owned Enterprises
SPV	Special Purpose Vehicle
UDC	Urban Development Corporation
VFM	Value for Money
WSS	Water Supply & Sanitation
WTP	Wastewater Treatment Plant
WOMC	Waste Water Operations and Maintenance Company

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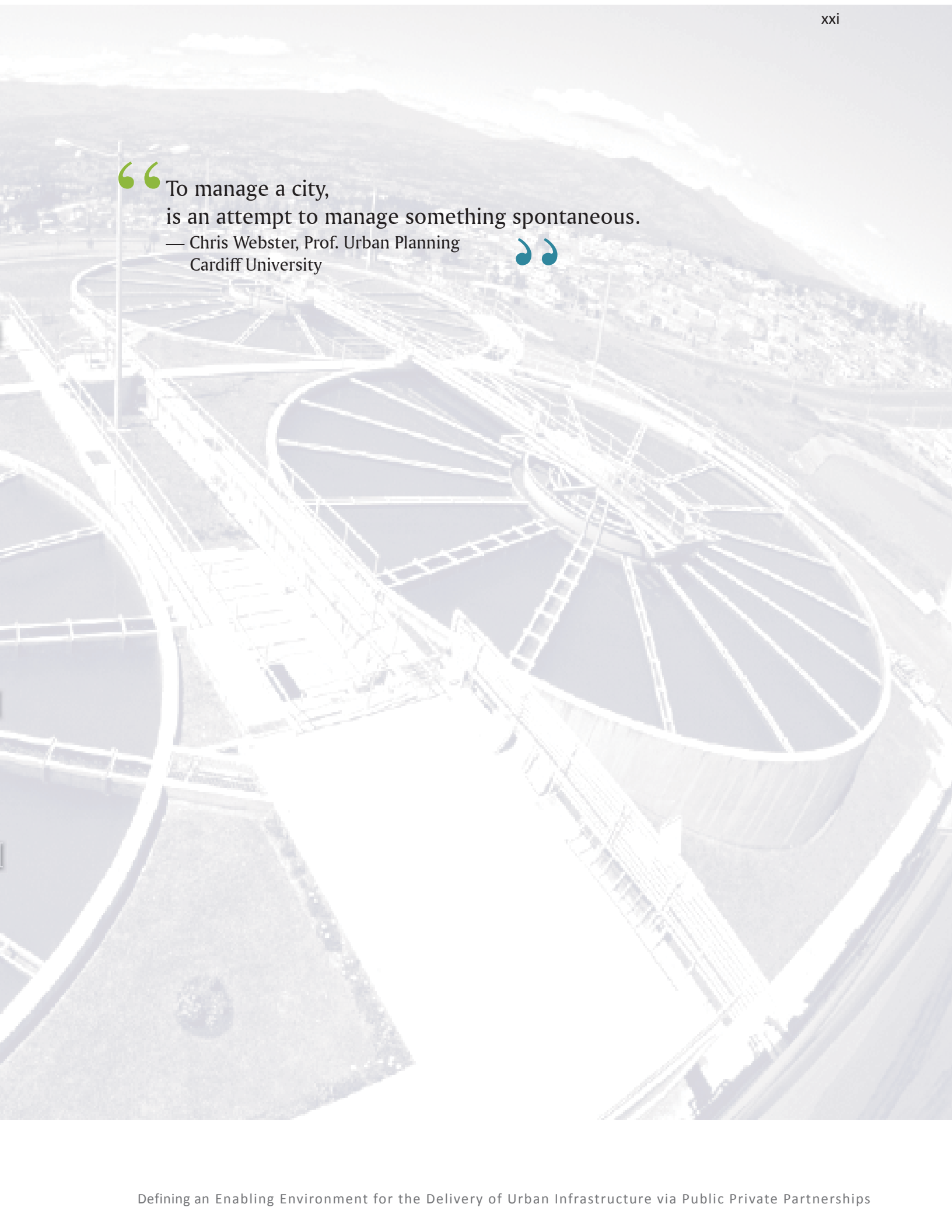
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“ To manage a city,  
is an attempt to manage something spontaneous.  
— Chris Webster, Prof. Urban Planning  
Cardiff University ”

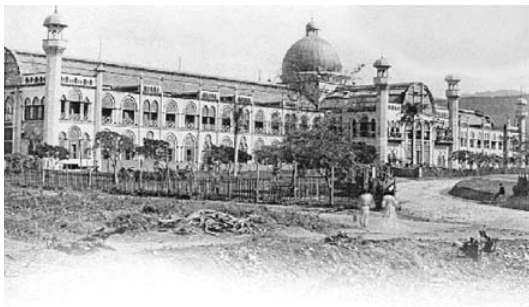




## Chapter 1. INTRODUCTION

Some 171 years ago, African slaves were introduced to freedom in Jamaica and took full advantage of their new found liberties by turning their backs on returning to work for their previous 'owners' on the plantations. Despite many attempts to keep the mills at the plantation turning the Jamaican economy had taken a hard blow. By the early 1890s, there was still cause for concern as even the fledgling banana industry which seemed poised for takeoff had not been able to rescue the struggling nation.

Impressed and inspired by the success of the Great Exhibition at London's Crystal Palace in 1851, a native Jamaican, A.C. St Clair set about to raise support for an international exhibition to promote tourism as an alternative to sugar cane. These exhibits were to display the latest Jamaican made products, the latest advances in sugar production and the manufacturing industry, as well as to demonstrate to Jamaicans the unexploited benefits of their own economic resources. It was



▲ **Figure 1** Jamaica Exhibition Hall

anticipated that the exposure of Jamaica to visitors from as far as the Americas and Europe, would lay the foundation for a steady flow of the future tourists industry. The Exhibition however, suffered from low support from the general populace, who with slavery fresh in their mind's eye, believed the Government had a hidden agenda, so even in the face of an intense public relations campaign the general public remained mostly unresponsive Tortello (Jan 14 2002).

Notwithstanding, the Jamaica International Exhibition opened on time on January 27, 1891 by Prince George of Wales, with both exhibits and visitors from all over the world. It closed three months later on May 2, 1891, though receiving an impressive 302,831 visitors, as a financial failure.

What is of relevance for this study was the approach taken by the then colonial government to collaborate with the local and international business community to use the Exhibition as a marketing launch pad for the tourist industry. In anticipation of a huge increase in visitor arrivals, not only did the Government build new roads and extended others to facilitate exploration of and access to the rest of the island but the Jamaica Hotels Law of 1890 was passed to facilitate the building of huge hotels. The newly installed Governor, leveraged support of £17,000 from the island's private sector. These funds were matched from Government's treasury and lands were made available for the construction of the exhibition centre. Turning deaf ears to the outcry from many quarters, the "*paternal government in its wisdom chose to ignore all criticisms*". (Taylor, 2003) As with most new public ventures optimism was high and pragmatism low.



▲ **Figure 2** Former Myrtle Bank Hotel

This Hotels Law allowed for the exemption of import duties on all building materials, furniture and fittings required for the five hotels to be built. In addition, the government pledged the general revenues and assets of the colony as a guarantee on the principal and interest of any debentures and certificates that companies issued to cover the estimated cost of their undertakings.

The post mortem pronounced the project a structural failure. The five hotels were “*deemed too large for so small and poor a country and no effort was put into [tourist] attractions or to improve its appearance, which if present might not have required a government guarantee*” Taylor (2003) to entice investors. These huge grand hotels soon became white elephants. By 1893, based on terms of the negotiated guarantees, the government was compelled to saddle the public sector with four bankrupt hotels, as the alternative was to pay 3% on the hoteliers’ debentures for three consecutive years. The public sector however, was not ready for the hotel business and under its management fared no better. Even nine years after the exhibition, despite the expense and effort, the island was still lacking a tourism policy and agency to plan, guide and monitor the investments made, much more to conceive of a plan for damage control.



▲ **Figure 3** Constant Spring Hotel

All this occurred at a time of recession when the tax burden borne by the struggling people of the island was made even heavier to reduce the risks to investors in the infant hotel business. Hundreds of pounds became tied up in the initiative. Its critics had claimed that “*the taxpayer would bear any losses under the conditions of guarantee, whereas the speculators would reap any profits*” Taylor (2003). An echo of this past experience is still reverberating today and forms the basis of this research paper.

I consider this to be one of Jamaica’s earliest forays into a public private partnership, which this account attests is by no means a new strategy for development as is purported in some circles. Its all of 118 years, since the Colonial Government attempted to ‘sell’ Jamaica as a tourist destination. The tourism sector is our biggest foreign exchange earner for the last two decades, contributing 7.4% to the GDP of Jamaica (PIOJ). The extent to which the “Great Exhibition” partnership laid the foundations for this is for a different debate; what intrigues, are the striking parallels between the general approach and outcome of the 1890 “partnership” and those entered into today. A public enquiry was commissioned and the questions raised by the legislative council in 1891 bears a stark resemblance to the ones we currently pose for several projects undertaken by the Government of Jamaica with private partners.

- i. Was there solid justification for the project based on proper analysis and forecasting?
- ii. Were the taxpayers of Jamaica asked to provide incentives to investors to facilitate development that cost far more than they received in value?
- iii. To what extent did a lack of transparency and/or trust between citizens and public officials undermine the success of the venture?
- iv. Was there sufficient institutional capacity present among BOTH the private and public sector to support the venture?



This thesis intends to take a closer look at what currently obtains, to determine just how far along that road we have come in initiating, assessing, formulating, executing and implementing public private projects, as the quest to place Jamaica on a solid path to development and growth continues.

## 1.1 thesis structure

This thesis structure provides a concise overview of the paper which is divided into five chapters for ease of navigation and reference: (I) Introduction, (II) literature review, (III) research methodology, (IV) findings and analysis and (V) recommendation and conclusions.

**Table 1** Structure of Thesis

PREFIX	Provides an executive summary of the paper, acknowledgements of primary contributors, a preface sharing the personal interest in the choice of study, a glossary, abbreviations used, the table of contents as a map for maneuvering through the document and the Lists of boxes, tables and figures used.	
CHAPTER 1	Provides a historical backdrop for PPPs in Jamaica, a background to the problem and current context for the study, the potential significance of the research, the primary questions to be answered, the objectives behind the research and the boundaries of the exploration.	INTRODUCTION
CHAPTER 2	Sets out the limitations experienced, and the strategy for capturing valid and reliable information and for guarding against inconsistencies or deviations from the issue.	RESEARCH METHODOLOGY
CHAPTER 3	Reviews the concepts and theories that explain the origin, and structure of PPPs, the argument behind the PPP advocates and opponents and defines an enabling macro and micro environment that supports successful PPPs.	LITERATURE REVIEWS
CHAPTER 4	Presents data collected on the Jamaican approach to wastewater management via PPP which is juxtaposed against the principles identified in the literature review (theory) and the Dutch approach (practice) in order to identify the pitfalls to be avoided and strengths to be reinforced in the Jamaican model.	FINDINGS & ANALYSIS
CHAPTER 5	Presents a final assessment of the Jamaican approach to PPPs and outlines the steps that need to be taken to support project success and eliminate private sector bailouts.	CONCLUSION & RECOMMENDATIONS
REFERENCES	Provides an addendum to the document identifying all the literature reviewed and referenced in the study as well as additional supporting information on the issues.	BIBLIOGRAPHY & APPENDICES

## 1.2 background

Jamaica, a former British colony, became an independent nation in 1962. By the 1970s, the role of the private sector in the development process came under serious question and scrutiny. Under the existing policy of democratic socialism, being heralded at the time, the then Government advanced the position that the State's role was one of paternalism and thus rejected capitalism as a viable system upon which to base the future of the fledgling state, which was trying to make its way without the accustomed intervention of Britain, the former Mother Country.

However, with the entrance of the Structural Adjustment Programmes of International Monetary Fund (IMF) and the World Bank in 1977, Jamaica had to move towards a more free market economy with a significant reduction of the public sector's role. By the 1980s with a change in the ruling party, the new government, had redefined its ideology on the role of the private sector and had a clear policy shift away from the nationalism of the former administration, to one that spoke and acted strongly on the divestiture of public assets to private companies, the encouragement of foreign investment and the incentivizing of local entrepreneurs Garrity and Picard (1996). This was in keeping with the then philosophy of the New Right referred to as Thatcherism or Reaganism.

It was argued by the Government that this policy would make for a more competitive market by introducing more players. This led to the divestment of government lands, banana estates, sugar cane factories, sale and lease of government owned hotels, franchising transport and contracting out of local municipal services such as garbage collection and market maintenance.



▲ **Figure 4** Divested Sugar Plantation

Since 1984, the National Investment Bank of Jamaica (NIBJ) (now the Development Bank of Jamaica) has had primary responsibility for the divestment of public assets and implementing the various modalities of privatisation. However, with what was considered a response to the lacklustre performance of the NIBJ, a Ministry Paper was passed in 1991 to give new energy and direction to the future programme of privatization.

In that paper, the NIBJ was being asked to facilitate various 'privatization' exercises that involved a mix of performance-based management contracts, Build Own Operate, Built Operate Transfer, Concessions, and Joint Ventures in addition to full divestiture of existing assets.

The primary objectives of the Bank were to:-

- Secure greater efficiency
- Optimize the government's management resources
- Reduce fiscal drain from State-Owned Enterprises (SOEs)
- Broaden the base of ownership and competition in the economy
- Improve openness and transparency in the privatization process, and
- Secure enhanced access to foreign markets, technology and capital

### 1.3 problem statement

In light of a daunting economic picture, Jamaica has struggled to achieve the objectives outlined in Ministry Paper #34 (1991). From the accounts of issues raised by the Office of the Contractor General (OCG)<sup>1</sup> and various journalistic exposés on various public private undertakings, the public has been left with many unanswered questions about the value of these initiatives. The failure of these projects to meet the above-mentioned criteria is fingered by:

5. **Huge government bailouts** required during implementation and in some cases where assets were re-acquired with public funds at great expense after divestment. For example, divestment of Air Jamaica - the national airline (US\$1Billion in losses to date)
6. **Huge cost overruns** - Highway 2000 (BOOT project) with losses of USD\$22Million in 2008/09 and USD\$22-33million in unanticipated losses for the financial year 2009/10<sup>2</sup>. Sandals Whitehouse Hotel which saw overruns of USD \$41Million or the JAMALCO joint venture which left the country with USD \$140Million owing to the private partner.
7. **Questionable Governance** – Highway 2000 process led to a class action suit (starting at the Supreme Court to the Privy Council in Britain) by members of the communities affected by the toll road.
8. **Questionable Procurement** – Jamaica Public Service (power company) and the negotiations between Mirant (a company that had declared bankruptcy in the USA prior to negotiations) and the GOJ.



These concerns are only further compounded by Jamaica's current economic health which is more concisely and graphically conveyed by our unenviable position as the world's fourth most indebted country. With that daunting picture, the government is seeking for innovative ways to continue providing urban infrastructure. Our failure to do so will only mean further exacerbation of the downward economic spiral and the ability to do so is part of the answer to stimulating growth.

### 1.4 significance of the study

The paper starts off within the context that Jamaica's current debt load has placed extreme limitations on the Government's capacity to respond to demands for goods and services both in terms of capital investments as well as maintenance needs. The employment of public private partnerships has been attempted in the areas of transport, airline and airport management, electrical distribution and more recently in waste water management. Despite the less than stellar performance of some of these projects, it is anticipated that the Government's pursuit of this

<sup>1</sup> *The OCG 2008 report released at the time of writing (September 28, 2009) informed that the Government of Jamaica racked up \$3.14 billion in contract overruns and at least eight contracts variations on 46 projects valued at \$144 million, executed without prior approval from the National Contract Commission (NCC).*

<sup>2</sup> *Extracted from the Prime Minister's Budget Speech -Financial Year 2009/2010*

level of engagement with the private sector will grow primarily because of its appeal as an option for quicker service delivery that will not show up [immediately] on the country's balance sheet. Though this has not been alluded to by the Government as reason for pursuing this development option, the author believes that the PPP process can add much value to the current public sector modernization programme that has been underway for a few years now.

**Table 2** Indicators **Source:** World Bank PPIAF Website

INDICATORS	JAMAICA	Latin America & Caribbean Average	Upper Middle Income Countries	OECD Average
GNI Per Capita, Atlas Method (current US \$)	3,480	4,291	6,612	33,470
Access to Electricity (% of population)	90	79	84	----
Electric Power Consumption (kwh per capita)	2,406	1,310	2,566	8,769
Improved water source (% of population with access)	93	90	92	99
Improved sanitation facilities (% of population with access)	80	79	84	----
Total Telephone Subscribers per 100 inhabitants	118	62	85	----

Notwithstanding Jamaica's relatively encouraging comparison in service provision as evidenced by Table #2 above, there remains an infrastructure deficit to equitably address the needs of fourteen parishes and to stimulate the country's economic development. The Planning Institute of Jamaica conducted a model simulation to quantify the effect of shifting public resources toward infrastructure. The exercise concluded that a 10% proportional transfer of Government's discretionary budget in favour of infrastructure raises GDP per capita in 2030 by 20.6%, Planning Institute of Jamaica (2009). On the strength of such an assertion, there is much to gain from any exploration into improving infrastructure service delivery and encouraging private capital to play a more meaningful part.

The findings of this research therefore, aim at contributing to a deeper understanding of the role of both the public and private sector in executing public private partnerships in Jamaica. It also aims at recommending changes in current practices by providing policy and project roll out recommendations to ultimately effect a significant reduction in the billions of dollars in losses that are currently being re-directed from debt servicing and other capital investments to 'rescue' public private partnerships projects in Jamaica.

The study could be of relevance to the following:

- **The Office of the Prime Minister** – The Planning and Development Division is currently researching public private dialogue and social partnership models, with a view to establishing a policy to guide improved PPP implementation in Jamaica.
- **The Cabinet Office** – which is responsible for the leading the Public Enterprise Reform who objective is to reduce the major drain that public bodies have had on GOJ budget.
- **The Ministry of Water and Housing** – The Technical Services Department is mandated to administer the GOJ's joint venture housing programme with the private sector and has struggled to achieve the objectives of these partnerships.
- **The Ministry of Education** – Minister with portfolio responsibility for education an-

nounced to the country in July 2009 negotiations with the International Finance Corporation (arm of the World Bank) to assist with financing for 100 new schools via PPPs.

- **The Planning Institute of Jamaica** - leads the process of policy formulation on economic matters, social issues and external co-operation management to achieve sustainable development for the people of Jamaica and will be a very necessary support arm for the rollout of PPP projects.

## 1.5 main research question

In light of these PPP project losses and the many taxpayer “bailout” of these ventures, this study purposes to identify the area(s) of weakness, which brings us to the main question:- **WHAT ARE THE PRIMARY IMPEDIMENTS TO THE SUCCESSFUL DELIVERY OF URBAN INFRASTRUCTURE VIA PUBLIC PRIVATE PARTNERSHIPS IN JAMAICA?**

## 1.6 sub questions

1. Are the necessary country macro frameworks satisfactorily in place to support the successful formulation and implementation of public private partnerships?
2. Are feasibility studies performed prior to contract award that take into account the necessary parameters required for a sound project analysis?
3. To what extent are Jamaican taxpayers being asked to accept risks to facilitate development that costs more than they receive in value?
4. To what extent do the Government’s policies make provision for good governance from project concept to completion?
5. What are the most relevant lessons from successful international public private partnerships that could guide the Jamaican experience?

## 1.7 research objectives

The objectives of this study are twofold. The first intends to: ***Define the macro and micro environment that will enable a public private partnership process and bring all stakeholders into a durable and mutually beneficial arrangement for the successful delivery of infrastructure.***

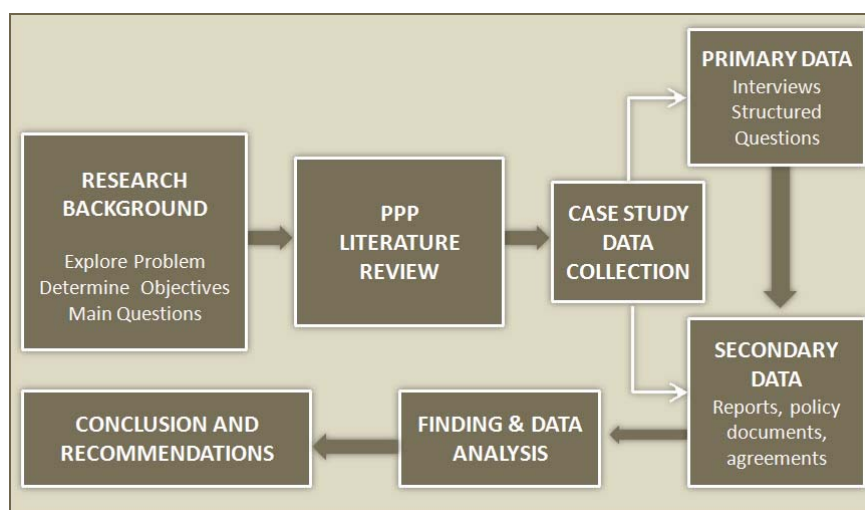
For a number of reasons, which will be explored further, public private partnerships are subject to a broader range of risks than traditional procurements, making the identification and management of risks the core of any PPP the design. The second objective is to : ***Ascertain why project risks tend to revert primarily to the Government of Jamaica (taxpayers) during the life cycle of public private partnership.***

## 1.8 research structure

The research design is a procedural plan, structure and strategy of investigation so conceived as to obtain answers to research questions or problems, Kumar (1999). According to Oppenheim(1992), the research problem is made researchable by setting up the study in a way that it will produce specific answers to specific questions.

The entire process involving several steps is outlined below in Figure # 5. It begins with the exploration of the problem to determine what the issue really was. The problem was stripped

for project implementation we down in order to identify the primary objectives for investigating the problem and the primary question that would give the parameters and direction for the study. From a review of existing body of literature on PPPs, the enabling environment for PPPs is defined and best practice approaches re identified. A case study analysis was then done using a local (Jamaican) and international (Dutch) PPP to assess the extent to which the theory supporting successful PPPs were adequately utilized. Areas of success in the Dutch PPP and areas of irregularities in the Jamaican PPP are identified and explored in order to formulate a hypothesis regarding impediments in the local application of this developmental model.




▲ Figure 5 Thesis Research Structure

### 5.3 delimitation of the study

Boundaries are necessary in a study to provide direction for the terms used, for the scope of the study, and for the potential audience Creswell (1994). According to Creswell, the researcher should *“use delimitations to address how the study will be narrowed in scope, and provide limitations to identify potential weakness of the study”*.

The study will therefore be confined to review of the general country environment that is required to support private investment as well as an extensive revision and synthesis of the process involved in formulating and executing a public private partnership and identifying international best practices. Then its analysis will be confined to one Jamaican and one Dutch case study and all the stakeholders engaged in the planning, implementation and monitoring of same.

Out of concern for the time allotted for this research paper, it seems pragmatic to ignore the obvious, that being if one is interested in truly receiving an answer to the questions being asked it would require a look into more than one project in that country to establish where the actual trends towards risk and bailouts lie. That however, will not be possible with the time frame allotted and for that reason the project will be delimited to one case study in Jamaica.



“ “ This City is what it is because  
our citizens are what they are. ” ”  
— Plato (429 - 347 BC)





## Chapter 2. RESEARCH METHODOLOGY

The concise Oxford Dictionary defines research as ‘*careful search or inquiry; endeavour to discover new or collate old facts etc. by scientific study or a subject; a course of critical investigation*’. This introduces the research area, outlines the nature of the research study and the methods of inquiry used to dissect the problem. It provides a justification for why each method was deemed appropriate, the strategy and instruments used to procure data, the subjects of the survey and process involved that will ensure the conclusions are valid and reliable.

### 2.1 description of research area

Jamaica is the third largest island in the Caribbean, she lies 145 km south of Cuba and is home to a population of approximately 2.682 million<sup>3</sup> people. Independent since 1962, with a constitutional parliamentary democracy, Jamaica is deemed to have one of the largest and most diversified economies in the Commonwealth Caribbean.



▲ **Figure 6** Location of Jamaica in the Caribbean

Notwithstanding, there seems to be common criticism that she has not lived up to her development possibilities in spite of the many advantages - proximity to a large North American market, an English speaking work force, good ‘initial endowments’ and widespread education. Previously ranked as one of the most advanced economies in the Caribbean region, Jamaica now has one of the region’s lowest levels of per capita income and growth, and is classified as a medium human development country. In 2001, she ranked 78th in the UNDP Human Development Index<sup>4</sup> and in 2008, 87th out of 179 countries, well behind many of her neighbouring islands. None of this has been made easier by the process of urbanisation. The Population Unit of the PIOJ informs that in 2002, 52% of the population lived in urban areas – an increase of 50.1% over the 1991 figure. Projections are that Jamaica’s population is expected to grow by 1.2 million by 2050 and most of this growth will be in urban areas.

Figure #7 below identifies Kingston, the capital of Jamaica and its key urban area which is home to some 655,000 persons. The subject of this study, the Soapberry Treatment Plant is located on the southern tip of the border between Kingston and its neighbouring parish, St. Catherine.

<sup>3</sup> *Economic and Social Survey Jamaica, 2007*

<sup>4</sup> *This index measures the average progress of a country in human development.*



▲ **Figure 7** Location Soapberry in Jamaica

## 2.2 research type and strategy

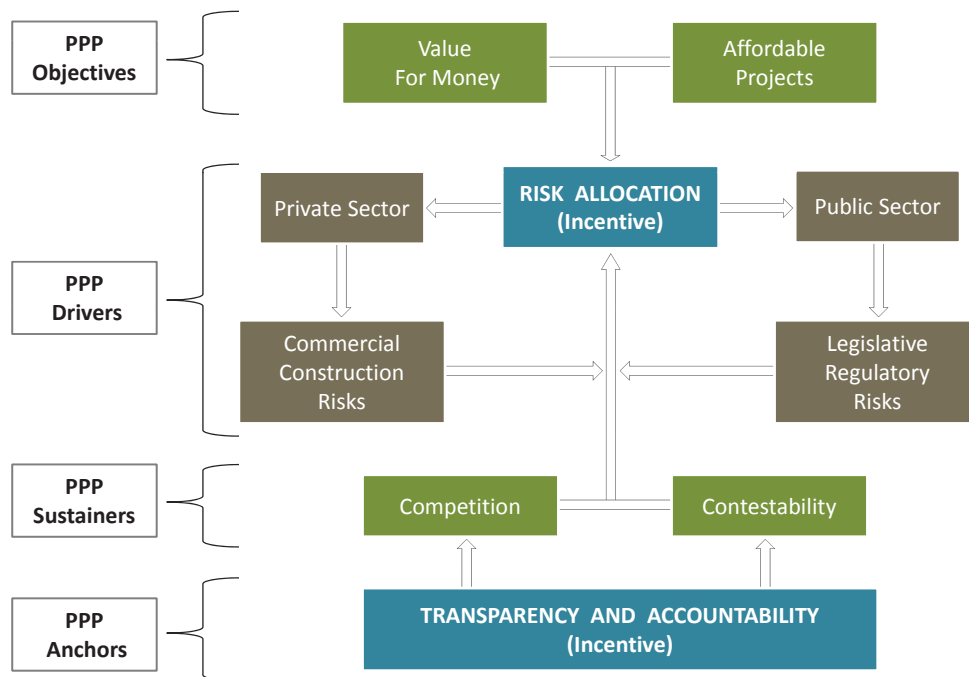
According to Naoum (2003) “qualitative research is subjective in nature and emphasises meanings and experiences and is often descriptive”. Peshkin (1998) in Leedy and Ormond (2009), states that qualitative research serves in description, interpretation, evaluation and verification of the research problem:

- *Description*: They can reveal the nature of certain situations, settings, processes, relationships, systems
- *Interpretation*: They enable the researcher to (a) gain insight about the nature of a particular phenomenon (b) develop new concepts or theoretical perspective about the phenomenon and or (c) discover the problems that exist about the phenomenon.
- *Verification*: They allow the researcher to test the validity of certain assumptions, claims, theories, or generalisations with the real-world contexts.
- *Evaluation*: They provide a means through which a researcher can judge the effectiveness of particular policies, practices, or innovations.

Consistent with the research parameters described above, this research paper has employed the use of a qualitative explanatory approach with elements of descriptive in order to identify, describe and evaluate the critical challenges associated with implementing the recent phenomena of the “public-private partnership” in Jamaica. That said, it was deemed useful to use case studies to facilitate arriving at the explanation the researcher was seeking. According to Yin case studies “... are the preferred strategy when ‘how’ or ‘why’ questions are being posted, when the investigator has little control over the events and when the focus is on a contemporary phenomenon within some real-life context....it tries to illuminate a decision or set of decisions: why they were taken, how they were implemented and with what result” Yin (2003a). Consistent with Yin, these are the very questions posted at the two case studies being used to derive an answer regarding where and why the seemingly illusive element of risk arises in the Jamaican context. Both formal and informal interview techniques were used to gather qualitative information and opinions from persons directly and indirectly involved in the projects using primarily open and to a lesser extent closed questions.

### 2.3 conceptual framework

According to Yin (2003a) “the goal is to develop preliminary concepts at the outset of a case study .....to place the case study in an appropriate research literature so that lessons from the case study will more likely advance knowledge and understanding of a given topic”. He goes on to add that it is these concepts that will assist in defining the unit of analysis, the sample population and data required. The concepts that have emerged throughout the review of PPP literature and are being examined throughout the research process are captured below in Figure # 8, representing a framework of concepts. It finds a starting point by identifying the two main objectives behind public private partnership projects as achieving ‘Value for Money’ spent and undertaking only projects that society and/or the State can afford. It then establishes proper allocation of risks to stakeholders as the core driver of PPP success. Competition and contestability are presented as the concepts that sustain PPP as without them present, risks are not effectively or meaningfully transferred and VFM is compromised. Finally, the concepts of transparency and accountability are offered as the anchors of the PPP process. These, like risk, create the incentive for the parties to perform and as we will see, can provide instead the incentive for corruption and poor VFM on the market.

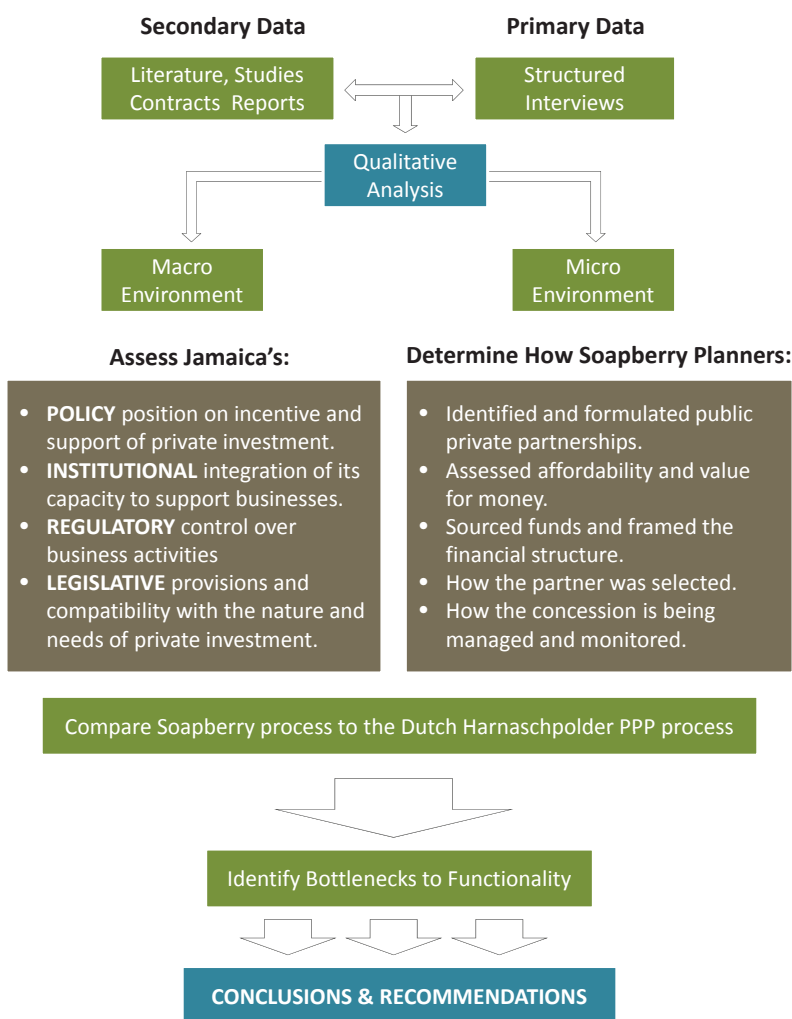


▲ **Figure 8** Conceptual Framework  
 Author: Source (2009)

### 2.4 analytical framework

Figure # 9 below presents the main analytical framework of the thesis which guides the approach being taken to systematically answer the main and sub-questions presented below. This framework facilitated the use of deductive reasoning by first drawing on the established concepts and theories to explain the factors that create an enabling environment for public private partnership and that drives, supports and anchors successful public private partnership projects. The experiences of both case studies were documented. These theories were then used to form the basis of

the examination to which the units of analysis were subjected in order to ascertain the shortcoming and the strengths in each case.



▲ **Figure 9** Analytical Framework  
Author: Source (2009)

A comparative analysis is then conducted using the successful Dutch waste water public private partnership as a benchmark, in order to identify the impediments and the causative factors in the Jamaican case study. The analysis ends with the presentation of the conclusion and the recommendations to guide both the correction of the challenges facing Soapberry and future PPP projects not necessarily related to the water supply and sanitation sector. The research does not offer any formal statistical testing to support the key recommendations but attempt to provide a careful analytical framework backed by systematically collected and researched information on the project approach and current status.

## 2.5 units of analysis

There are two projects that this research is proposing to study namely:-

- **Soapberry Wastewater Treatment Plant Project** – A public private partnership project - constructed for the treatment of sewage in the Kingston Metropolitan Region. The project was selected on the basis of being one of Jamaica’s most recent PPP projects and would therefore give the researcher insight into the most recent experiences in both the policies impacting on and practices engaged in the roll out of projects in the island. It was also considered ideal, as the project is delivering a public good that was always deemed the remit of the State and is one of the first private endeavors for waste water management since the promulgation of Jamaica’s National Water Sector Policy 1999.
- **Harnaspolder Sewage Treatment Plant** - A public private partnership project - constructed for the treatment of sewage in Den Hoorn (the Hague Region. This project has been promoted as a successful PPP and was chosen:
  1. Due to the commonalities it shared with the Soapberry project.
    - It shared a common experience in being the first public private partnership in wastewater management.
    - It shared a similar *raison d’être* – a response to need for higher treatment standards to prevent coastal water degradation.
    - It shared similar sectoral challenges – financial constraints that precluded public sector service delivery.
  2. For pragmatic reasons as the plant was located only half an hour away by train which facilitated ease of access to both plant and the parties involved.
  3. As there was perceived added value from assessing the approach of a developed country, high on the PPP maturity curve to a developing country that is low on the same curve.

## 2.6 sampling strategy

Sample respondents were selected using non-random, purposive sampling based on a criteria pre-defined by the researcher. This criterion spoke to identifying the key players who operate at both the macro (policy setting) and micro (project processing) level. The respondents were selected based on their role and active participation or expertise in the PPP infrastructure project. An advantage was taken of snowball sampling opportunities that did arise during interviews and research. The approximate number of persons interviewed were 14 and 3 in Jamaica and the Netherlands respectively.

Sample population will be taken from the two general areas of policy and practice, the details of which are enumerated in Table #3 below.

**Table 4.** Respondents

PROPOSED RESPONDENTS				
Unit of Analysis	Responsibility	Institution	Position	Survey Instrument
<b>JAMAICAN CASE STUDY</b>				
SOAPBERRY WASTE WATER TREATMENT PLANT	POLICY	Office the Prime Minister	Chief Technical Director Planning and Development	FFI, OEQ, CEQ
		Ministry of Finance	Deputy Financial Secretary	FFI OEQ
		Development Bank of Jamaica	Privatisation Manager	FFI, OEQ, CEQ
	Project Managers	Urban Development Corp.	-----	-----
	Management	National Water Commission (Procuring Entity)	V.P. Strategic Planning	FFI, OEQ, CEQ
	Management	Central Waste Water Co. Ltd. (Special Purpose Vehicle)	Former General Manager	FFI, OEQ, CEQ
			Current General Manage	FFI, OEQ, CEQ
			National Housing Trust	FFI, OEC, CEQ
			National Water Commission	FFI, OEQ, CEQ
			Urban Development Corp	-----
	Regulation	Office of Utility Regulation	Deputy Director General	FFI, OEQ
		Fair Trade Commission	Research Manager	TI, OEQ
		NEPA	Enforcement Branch Mngr.	
		Ministry of Health	Environmental Manager	TI, OEQ
	Operation and Maintenance	Waste Water Operation and Maintenance Limited	Director of Projects	FFI, OEQ
Private Sector	Management	Can Cara Environment Ltd	Managing Director	FFI, OEQ
		Dynamic Env Management Ltd	Director	FFI, OEQ
<b>DUTCH CASE STUDY</b>				
HARNASCH- POLDER WASTE WATER TREATMENT PLANT	POLICY	Ministry of Finance	PPP Specialist	FFI, OEQ
	Management	Delfland Water Board (Procuring Entity)	Innovation Specialist	FFI, OEQ
	Management	Delfluent BV (Special Purpose Vehicle)	Finance Director	FFI, OEQ
<b>Abbreviations: FFI - Face to Face Interviews, OEQ - Open Ended Questions, CEQ - Close Ended Questions</b>				

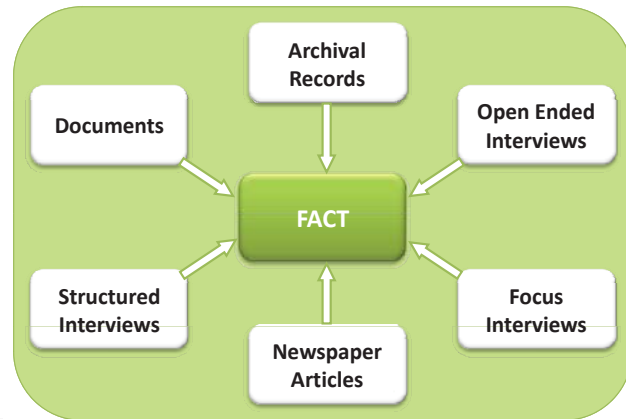
## 2.7 Data Collection Instruments

### Primary Data

As outlined in Table #3, preliminary data was collected before fieldwork commenced by means of a pilot questionnaire to the Office of the Prime Minister and informal, open-ended questions via telephone/internet. In Jamaica, the researcher administered the questionnaire via face to face, in-depth interviews with both public and private sector agents responsible for the policy and implementation phases of PPP projects. From the policy perspective the questions were designed to understand what provisions were made in our legislation, institutions and regulations to attract investors and facilitate successful project execution. From the project implementation perspective, the questions focused on gaining information on steps taken and the procedures

followed in formulating and implementing the projects. For questions, see Appendix A. All face to face interviews were recorded. Visits to the plant to observe it in operation was also included in the process. Primary data was collected over the period of July 1- August 14, 2009.

► Figure 10 Convergence of Evidence  
Source Yin (2003b)



## 2.8 Secondary Data

The main theories of PPPs, guidelines for success and case studies around the world, were collected before and after fieldwork in the form of research from other social scientists and PPP practitioners. Journalistic exposés in the Jamaica Gleaner and Jamaica Observer were useful in capturing public opinion on government activities and policy. Applications were made via the Access to Information Act to the Cabinet Office and the Jamaica Information Service for copies of Agreements, Policy papers, Parliamentary Reports etc. that document the formulation, execution, monitoring stages etc. Documents consulted included but was not limited to:-

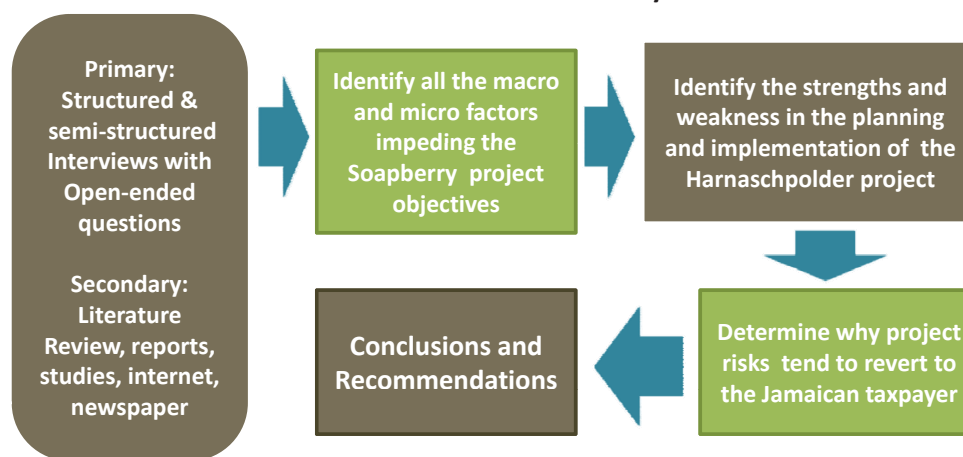
- Fair Competition Act, 1995
- GOJ Procurement Handbook, 2008
- Soapberry Contract Agreements
- National Water Sector Policy, 2002
- National Water Commission Act, 1980 and 2004
- Office of Utility Regulations Act, 1995 and 2000
- Jamaica Water Sector Policy – Strategy and Action Plan 1999
- Soapberry Wastewater Environmental Impact Assessment Report, 2004

## 2.9 Data Quality - Validity and Reliability

Validity refers to the extent to which the chosen research instrument accurately measures what it is intended to measure. This research is qualitative and depended on the use of both structured and unstructured questions, a pre-test questionnaire before fieldwork and re-tests via interviews after arrival in Jamaica. The construction of logical, adequate, relevant questions will also be critical. Audio recordings of interviews were requested and permitted; desk studies and official reports will be triangulated against information gleaned in interviews.

Reliability between two measures of the same thing” (Black, 1999). To enhance, reliability, the responses of all agents dealing with one project were analyzed for inconsistencies, as well as, interviewing officers at different levels within the structure. Asking the same question in different ways also served as a useful technique to verifying accuracy of the responses.

According to Silverman (2005) triangulation it refers to *“the attempt to get a ‘true fix’ on a situation by combining different ways of looking at it or different findings”*. Efforts were made to enhance the quality of the research using that method by asking the critical questions of both the private and public sector to determine the extent to which the narratives and descriptions of what took place actually corroborate.



▲ **Figure 11** Strategy for Qualitative Analysis of the Projects

## 2.10 limitations of the study


The primary challenge stemmed from the absence of empirical data available on projects undertaken using a public private partnership model in Jamaica. The terminology is in and of itself a new one for those in both the Jamaican private and public sector; but even more so, consensus on how to define this partnership remains unresolved. It was therefore very difficult to identify which projects were considered a ‘PPP’ and as such to obtain background information or analyze trends in a way that the research question would require.

The study/analysis of only one project in Jamaica to determine the impediments being faced in the employment of PPPs might produce findings not necessarily common to all or representative of the majority of PPPs undertaken and hence might be in danger of misrepresenting the true picture of such trends in the country. At the heart of all public private partnerships is a contract that defines the relationship between the parties, stipulates the obligations, the standards expected, the benchmarks to determine performance, the checks and balances, as well as the incentives and penalties. The absence of permission for direct access to the contents to all the contracts between stakeholders presented a definite limitation in the assessment of the partnership. In particular the ‘Construction Contract’ that serves as the anchor document with the linkages between the two phases – construction and O&M.

Greater input on the part of the Ministry of Finance would have provided additional information as it relates to the assessment of proposals, policies relating to the granting of guarantees or incentives. However, due to the fact that the month for research coincided with the country’s preparations to negotiate with the International Monetary Fund for a Stand By Agreement, the timing presented a challenge in accessing the officers of the Ministry authorized to speak to such matters.

Finally, the Soapberry Waste Water Treatment Plant was a useful study in that it is the latest project done by the GOJ using the PPP strategy. It is therefore arguably a reasonable option for assessing the GOJ’s use of this strategy and understanding our past difficulties in achieving success. However, it is this very infancy which did not allow for a more fulsome assessment of the operational value of going the route of a PPP or the robustness of the financial structure. In general, owing to the constraint of time, this study bears the characteristics of a preliminary study of quite a complex issue and as such this paper is being offered a modest contribution to the discussion and ought to be read in light of said limitations.





“ “ Public–private partnerships should not be seen as public partnerships and private projects. They should rather be viewed as private partnerships and public projects.

— Dr Montek Singh Ahluwalia, Deputy Chairman,  
Planning Commission, Government of India

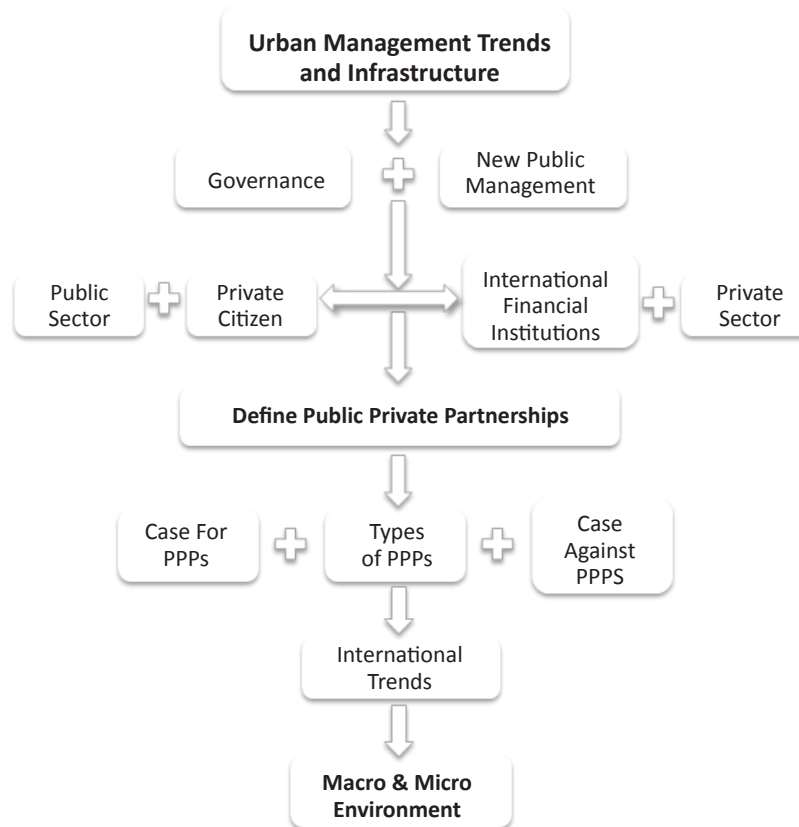




## Chapter 3. LITERATURE REVIEW

### 3.1 introduction

This chapter reviews the different concepts and theories that underpin the collaboration between the public and private sector for the provision of urban infrastructure. It provides the skeleton upon which the different approaches to these partnerships are framed. Figure # 12 diagrams the areas of study, which begins by first exploring what has prompted the need for not just different but differing entities, namely the private and public sector, to restructure their way of operating to facilitate doing business with each other, despite the patent differences in the *modus operandi* or their *raison d'être*. In this paper, the need is for infrastructure and the vehicle, urban management.



▲ **Figure 12** Literature Review Structure

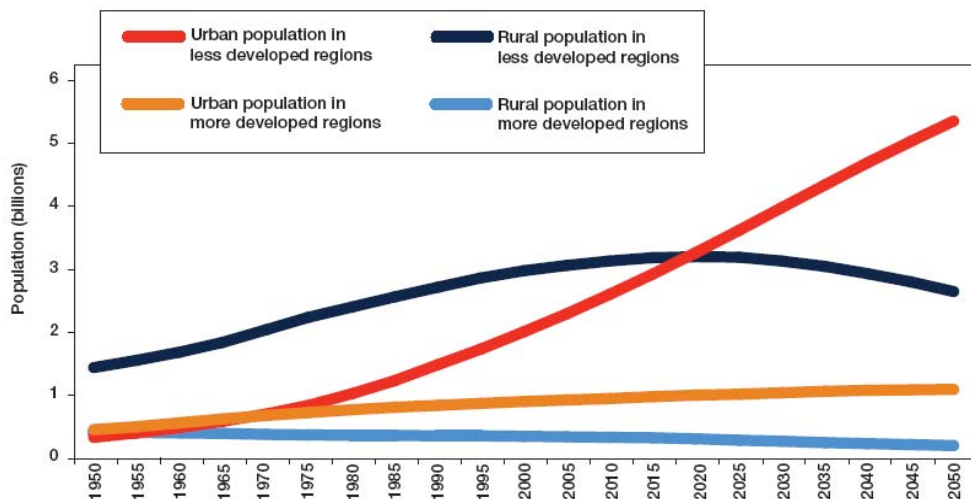
This takes us to looking at why cities need infrastructure, how its value drives the process of urban management and the primary stakeholders that plan, finance and support the process. We then move to an explanation for public private partnerships, how it is defined, differentiated from other models of infrastructure development and the schools of thought surrounding its advocacy and its rejection. A review is then done of the various innovative trends being used by different countries to overcome the deficiencies in the development process. The final section reveals the crux of the theory, which is defining the macro environment and the micro environment required to support the achieving the objectives of both the public and the private sector parties. See outline of thesis structure below.

### 3.2 urbanization - the contextual challenge

The city is a geographical concentration point of people and human activities. It is the space and context of this paper, its inhabitants, their needs and an analysis of one alternative to addressing those needs – collaboration between the State and the private business community for the provision of infrastructure.

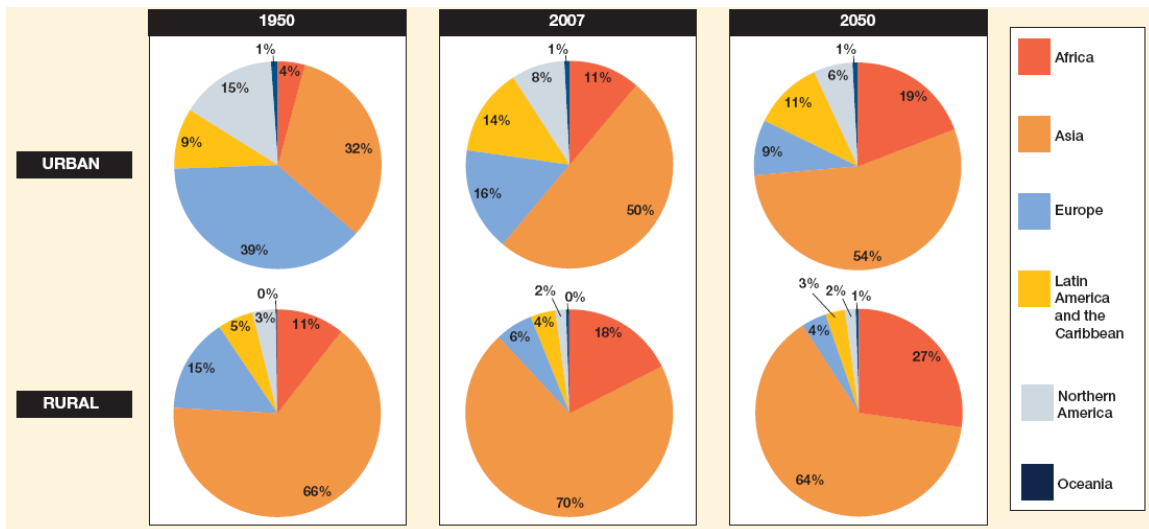
A country is said to become more urbanized as its cities grow in number, its urban populations increase in size, and the proportion of its population living in urban areas rises. With the advent of industrialization and the rising global population, urbanization has increased with cities growing in both number and size. Some 200 years ago, the only city numbering more than a million in population was London, today there are 400, that can claim such a feat Montgomery et al. (2003). More than 3.2 billion people now reside in cities resulting in an urban population that now exceeds those living in rural areas. It is estimated that by 2050, the world population is expected to be approximately 70%, with the majority of the increase taking place in developing countries. Among the less developed regions, Latin America and the Caribbean have an exceptionally high level of urbanization (78 per cent), higher than that of Europe. Africa and Asia, in contrast, remain mostly rural, with 38 per cent and 41 per cent, respectively, of their populations living in urban areas.

Figure # 13 and 14 below captures the extent of the concern by comparing both the rural and urban growth pattern for a period of a century, 1950 to 2050.



**Figure 13** Urban & Rural Population Growth for More and Less Developed Regions, 1950-2050  
Source : Population Division of the Department of Social & Economic Affairs (2008)

The question therefore, has been and remains one of resources, the carrying capacity of this planet and its ability to support the land, water, biological and energy needs of the now 6,780,382,829 human life forms, demanding more each day. Such large concentrations present enormous challenges and seem to have overtaken us before we became politically, financially and socially able to meet them.



▲ **Figure 14** Distribution of the World’s Urban & Rural Population, Major Areas, 1950, 2007, 2050  
 Source : Population Division of the Department of Social & Economic Affairs (2008)

Kingston, as the capital of Jamaica is no exception. Changing demographics and the patterns of how Kingstonians work and play, the impact of globalization and new technologies are creating new and rising demands on public services and very importantly the changes in public attitudes and expectations of a more informed citizenry. Simply put, the demand is outstripping Kingston’s present capacity to provide the required services. Discussions are already on the table to project, anticipate and plan for the impact of the Caribbean Single Market Economy<sup>5</sup> which allows for free movement of goods, services and people across all the islands who are signatories to the Agreement. This potential migratory movement to “more attractive” islands and towns will have far reaching urban resource implications that must be contemplated now.

Based on the resources that they consume and the burden of waste it generates, the city is considered a major contributor to the urban crisis. There are some however, like Jamie Lerner (former Mayor of Curitiba, Brazil) who asserts that “*cities are also the solution*”. Lerner posits both that unsound urban management is not the unavoidable destiny of cities and that urbanization and ecology can co-exist. This he says will demand increasingly active participation from all stakeholders - the public and private sectors, ordinary citizens as well as international development agencies via **adequate urban management**. To what is he referring, when he speaks of urban management?

<sup>5</sup> CSME is the new economic system signed into being on January 1, 2006 by 15 members states of the Caribbean, that is designed to facilitate the pooling of the region’s financial, human and natural resources in order to build the economic capacity required to effectively respond to globalization and the emergence of mega trading blocs.

### 3.2.1 urban management

If cities are indeed the key and urban management a door that leads to successful cities then the question...what is the relevance of urban management?... takes centre stage. Ron McGill (1995) states “that urban management is concerned with both city building (with its insatiable need for infrastructure and services) and council building (with its seemingly endless need for increased capacity to perform).” vanDijk (2006) perceives it as “the effort to coordinate and integrate public as well as private actions to tackle the major problems the habitants of cities are facing to make a more competitive, equitable and sustainable city”.

The practice of urban management takes different approaches and according to van Dijk (2006) they can be distilled into two major ones; one that focuses on geography and regional planning to guide trunk investments and land use. The other, focuses on making the city more competitive through sound management and economic theory.

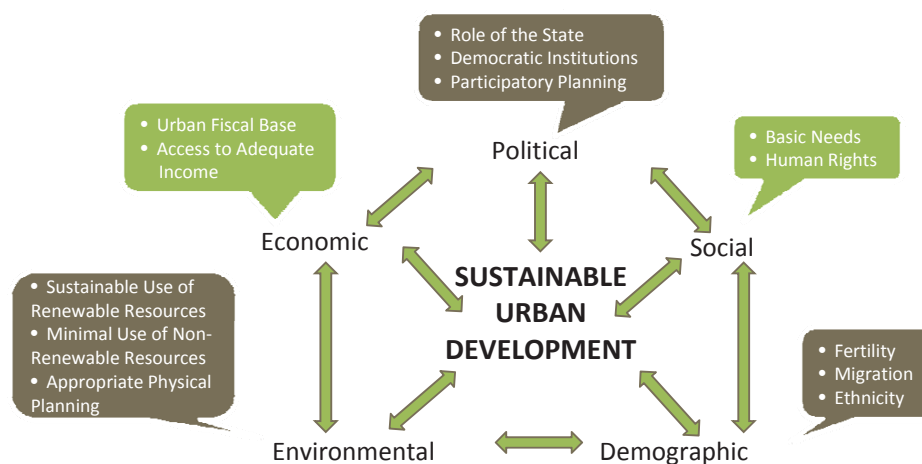


Figure 15 Sustainable Urban Management & Development

Pennink et al. (2001) has presented five “compelling reasons” for proper urban management and by extension would be the justification for any collaborative effort between city dwellers. The city:-

1. Is a space where the majority of a country’s inhabitants are living.
2. Is an engine for national economic development.
3. Is a centre for social progress, cultural development and social innovation.
4. Has a greater concentration of people and therefore provides for greater impact of development activities.
5. Makes an impact that goes well beyond its designated boundaries and as such urban development is good for rural development.

To achieve the goals of cities that are livable, well-managed, well-governed, and financially sustainable will then require the provision of adequate services via infrastructure provision. This begs the question, what is infrastructure and what is its value to society and its relevance to this paper?

### 3.2.2. value of infrastructure

Infrastructure are *“those services derived from the set of public works traditionally supported by the public sector to enhance private sector production and to allow for household consumption”* Fox (1994). Or more generally, *“all facilities which are necessary for the functioning of the economy and society”* Yescombe (2007). These are normally divided into economic and social infrastructure but for the purpose of this study, we will draw on the former which includes services such as roads, mass transportations, water systems, sewer systems, solid waste management, drainage and flood protection, electric installations and telecommunications.

1. Being a central aspect both of this paper and government operations, we ask the question what places infrastructure front and centre in any discussion on urban management and growth? According to the World Bank (1994):-
2. The adequacy of infrastructure helps determine one country’s success and another’s failure - in diversifying production, expanding trade, coping with population growth, reducing poverty or improving environmental conditions.
3. Good infrastructure raises productivity and lowers production costs but has to expand fast enough to accommodate growth. Infrastructure capacity grows step for step with economic output.
4. A 1% increase in the stock of infrastructure is associated with a 1% increase in GDP across all countries.”

Case in point, Jha (2005) in the World Bank Publication - Institutions, Performance, and the Financing of Infrastructure Services in the Caribbean, refers to the study commissioned by Jamaica’s National Water Commission and the Investment Facilitation Council that concluded that investments totaling some US\$500 million were being delayed due to a lack of water and that the capital cost for meeting the demand for water was only around US\$30 million.

Today, our societies would collapse without these supporting infrastructure, notwithstanding the problems that lie before our cities are mainly *“insufficient maintenance, misallocated investment, unresponsiveness to users and technical inefficiencies”* World Bank (1994). This will only be further exacerbated by the demand which is set to expand significantly in the decades ahead, driven by major factors of change such as *“global economic growth, technological progress, climate change, urbanisation and growing congestion”* OECD (2008a). Failure to take corrective action will impact directly on a country’s economic well-being as production costs rise with the *“first point of impact being the poor and the environment”* World Bank (1994).

But Infrastructure is not an end in itself. It is the means to growth and quality of life and as such *“should not be used as a prospecting tool”* OECD (2008a) in the hopes of generating returns but invested when there is a demand and justification. Neither is it a magic wand, in that it cannot operate in a vacuum. Without sufficient demand for outputs, (skilled labour, entrepreneurs and private capital) growth will not be achieved Fox (1994). In other words, infrastructure is most successful when it supports areas which have other aspects necessary for growth. The recommendations are for the general provision of these services to be based on *“commercial principles, efficiency and accountability that comes from stimulating competition and the use of technology”* World Bank (1994) and doing this with a commitment to social and environmental concerns.

Infrastructure investment however exhibits certain specific characteristics that have to be seriously considered in trying to meet the challenges mentioned above. Arts et al. (2008) highlighted some of these characteristics as:-

- *Sunk investment*: Investment in infrastructures is irreversible.
- *Long lead times*: There is a long time between start and use of the investment in infrastructure investments;
- *Lumpy*: Most expansion, renewal and construction of new infrastructures cannot happen gradually. The investment has to be carried out in big, discrete steps.
- *Inelastic demand*: Demand for drinking water, electricity and gas is fairly predictable, as it is often a function of the number of consumers and their income levels. Thus, demand is inelastic to a large degree. As a result, there are stable cash flows for the infrastructure company.

While Arts et al. (2008) notes that inelastic demand is the only characteristic of infrastructure investment that decreases the investment risk. All other characteristics increase the investment risk and casts doubt on the viability of these services being private sector financed, operated and/or owned.

### WHY HAS THE PICTURE CHANGED?

Government's provision of infrastructure has long been justified on the grounds that Yescombe (2007).:-

1. The private sector cannot be expected to take account of a country's economic and social costs (externalities).
2. Competition – a characteristic required by private sector may not be present or if it is, it would not be financially attractive by virtue of its high up-front capital outlay and long term return or be considered a 'merit good' and to be made available to all.

So what has created this momentum for change in the decades old way of delivering these services? Primarily, it is the increasing demand for services coupled with the fiscal crisis in the public sector. According to the OECD (2008a) the world economy is expected to *"grow on average at close to 3% per year to 2030, with developing countries' performance outstripping that of the developed countries by a wide margin (4% per year compared with 2.4%)"*. Most, if not all developing countries are not in a position to meet these complex infrastructure needs. Revenue from the traditional source – taxes, are already under pressure and this will most likely persist. Bult-Spiering and Dewulf (2006) note however that notwithstanding those issues, the *'picture might not have changed'* unless the opportunity for *"increased mobility [and availability] of capital and the dominance of neoliberal ideas and [growing] reliance on market mechanisms....."* had presented itself.

Other catalysts for this change stem from the *"inherent risks associated with public monopoly"* Netherlands Scientific Council for Government Policy (2008) where:-

- Public organisations lack the pressure from the capital market regarding the management that will minimise costs;
- There is less pressure on the management in general because of soft budget constraints (there is no risk of going bankrupt);
- There is the risk of opportunism from political pressure to adapt objectives and.

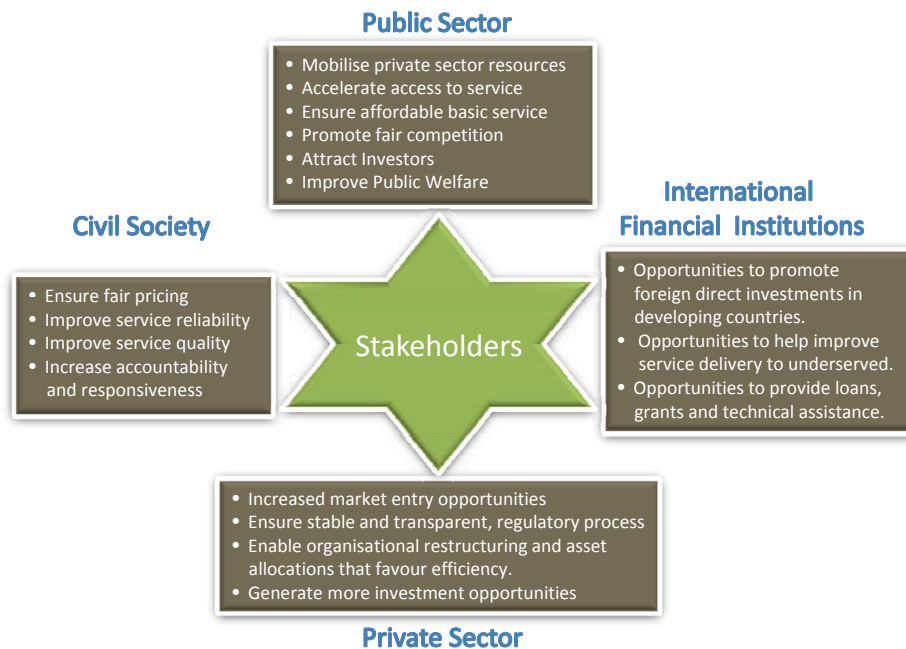


- Development of the private financing model, and the conceptualization of ‘partnering’ as a management process, Grimsey and Lewis (2004).

Based on the push factors highlighted above, the following questions arise. Where will additional funding be sourced? What new business models can be put in place to retrofit existing assets and provide for future growth and demands? Urban management, was previously defined as *“coordinating and integrating private and public action”*, so what part can and should the public versus the private sector play in filling this gap? What of civil society and the private citizen’s contribution? Does the influence and contribution of development finance institutions add value? What role does each play and what expectations do they bring to the table?

### 3.3 stakeholder roles

In taking the very necessary look at the primary stakeholders involved in the management of urban resources [and in public private partnerships as we shall see in a later section], it is not only important that the groups are themselves clear on their expectations but that each group must be conscious of the other's. We find that it is not necessary for these desires to be the same but it is critical that they do not conflict but are compatible with each other. Figure #16 below illustrates the expectations of each group.



▲ **Figure 16** Stakeholder Expectation in Urban Management Process  
Source :

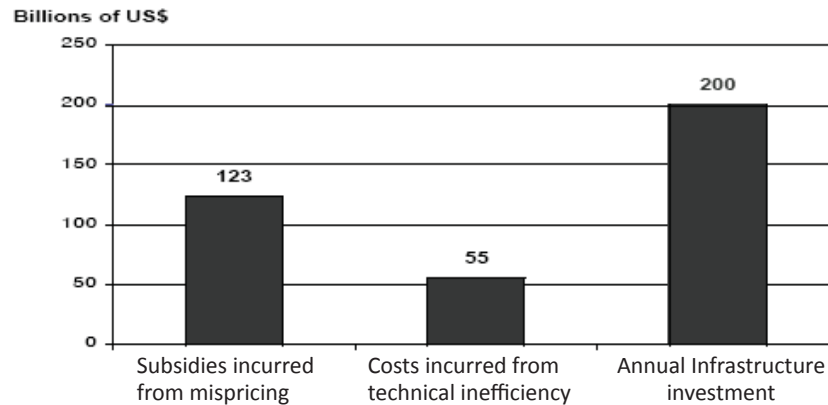
#### 3.3.1 role of government

Governments are in place to act on the behalf of the collective good of society and a significant part of the rationale for their operations is the failure of the market to provide for all of society's needs.

In the 1950s and 60s the post colonial vacuum was being filled by the idea of the state bureaucracy, the Weberian model was the lead actor for the transition to what was then considered 'modernization' (orig. Stone, 1965, in Batley, Larbi, 2004). The Government's *"ownership of most of the country's infrastructure was the desired norm in most of the developed world; not only as a means to promote growth but as a rejection of foreign influence in the post-colonial era"* Rondinelli and Iacono (1996) Infrastructure's *"enormous economic importance, a desire to protect the public interest in industries supplying essential services"*, and concerns about private monopoly power led governments to conclude that control over these services *"could not be entrusted to the motivations and penalties of free markets"* Kessides (2004).

This remained so until the end of the 1970s, when many became disenchanted with the role of the state, *"its link to powerful interests and self-serving tendencies at the expense of development"* World Bank (1994). These public sector monopolies were plagued by overstaffing, mismanagement,

inefficiency and failed to expand services to meet rapidly growing demand. Many were strapped for resources “as prices were held below costs and in many cases the beneficiaries of these subsidies were not even the poor” Harris (2003). Most nationalized firms “survived through tariff protection, preferences in public procurement, exclusive rights, preferential access to credit from state owned banks, government guarantees, public subsidies, tax exemptions”, Guislain (1997) etc. and in spite of all such resources, yet performances were disappointing at best. This is demonstrated in Figure # 17 below, which provides a convincing indicator of public sector performance in the 1990s.



▲ **Figure 17** Annual Costs of Mispricing and Inefficiencies under Public Sector Infrastructure in 1990s  
 Source : World Bank, 1994

Powerful liberal views entered the world stage during the 80s and continued into the 90s (Thatcherism and Reaganism<sup>6</sup>) which worked to reduce the expenditure and size of government, free markets from regulation and privatize state owned enterprises. By the 1990s, the thinking had again changed. It was now being posited that not less State was required but a different dimension.

Over a decade ago the World Bank (1997b) argued that “State dominated development has failed but so will Stateless development” and further reinforced that “only after a decade of experimentation with reducing government did economic reformers become explicit about the importance of strengthening government”. So Government was deemed a failure at providing efficiently and effectively for the needs of society but was not only expected to remain a major player but its strengthening was desirable for achieving the same objective. But in what capacity?

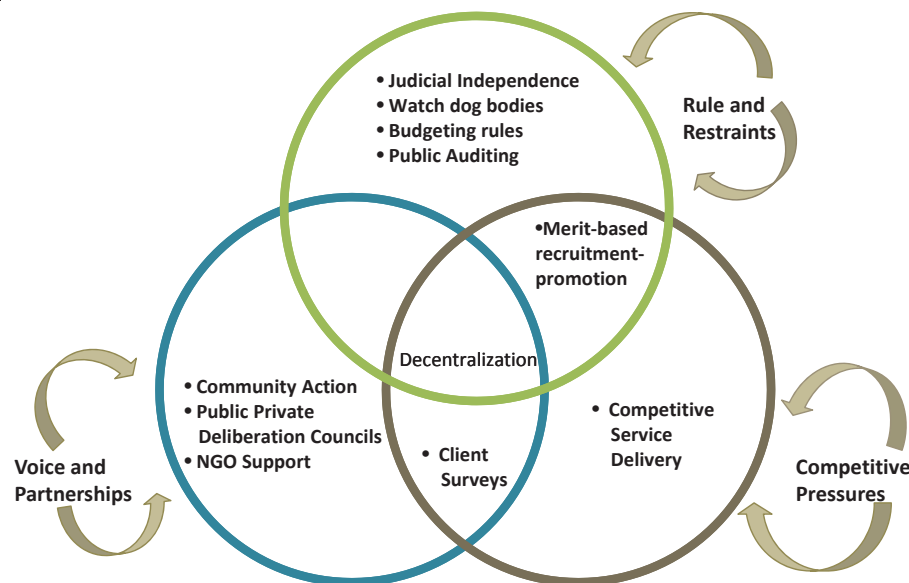
Latham (2006) tells us that Government intervention does not necessarily mean direct provision but can be achieved via (i) managing the market, (ii) intervening directly to ensure public outcomes or (iii) contracting non-state providers.

Today we see governments rediscovering their functional core - steering the process and managing service delivery through the option of decentralized management and market mechanisms. This is embodied in the theories – Governance and New Public Management (NPM) where governance is considered a political theory and NPM an organizational one Peters and Pierre (1998).

6 Policies of Margaret Thatcher (British Prime Minister 1979-1990) and Ronald Reagan (American President 1981-1989) which advocated reductions in tax, manipulation of the money supply to reduce inflation, reduction of trade union power, privatisation of public industry, reduction of Government’s role in the economy and encouragement of people to save, work and buy property.

As defined by Stoker (1998) “*governance refers to the development of governing styles in which boundaries between and within public and private sectors have become blurred*”, where the focus is on the process rather than on institutions and where the core principles of “*accountability, transparency, fairness, efficiency, participation, and decency*” UNESCAP (2007) are embraced and requires:-

- A fair and transparent rule-based administrative process by which projects are developed and procured by governments to develop partnerships with the private sector;
- Fair incentives to all stakeholders and fair return to all partners taking into account their level of involvement and assumption of risks;
- A widely representative participatory decision-making process that takes into account concern of all stakeholders including those who may be adversely affected, and an acceptable dispute resolution mechanism that assures continuation of services and prevents the failure of projects;
- An arrangement for project delivery that ensures efficient utilization of human, financial, natural and other resources without sacrificing the need of future generations; and
- An arrangement that improves human security and ensures public security and safety, and environmental safety:



▲ **Figure 18** Mechanisms to Enhance State Capability - Three Drivers of Good Governancej  
Source : World Bank (2002)

NPM on the other hand is defined in Batley and Larbi (2004) as “*a set of particular management approaches and techniques, borrowed mainly from the private for-profit sector and applied in the public sector*”. (Hood 1995, 1997 in Dent et al., 2004) sees it manifested as:-

1. Greater ‘disaggregation’ of public sector organisations into separately managed units
2. Enhanced competition and use of private sector managerial techniques
3. Emphasis on ‘discipline and parsimony in resource use
4. Greater ‘hands on management’

5. Adoption of measurable standards of performance, and
6. Use of 'pre-set output measures'.

While Yescombe (2007) adds that it encourages:-

7. Separating responsibility for the purchase of public services from that of provision.
8. Privatization of public services.

In summary, governments of both developed and developing countries have been weighed and found wanting in the delivery of basic services and have been seeking new ways to provide them with the direct inclusion of markets and civil society. First in corporatization, then in privatization and now this new governance model of participation and inclusion, as well as the New Public Management with its claims of greater efficiency are finding expressions in the public private partnership model – the subject of this paper which will be explored further. This does not imply an abdication of the State's role but offering Government the opportunity to re-strategize and refocus on core governmental responsibilities, while shifting the production of goods and services to those who have a comparative advantage in that area.

As we will see in further chapters, the theories of NPM become pillars for practitioners of public private partnerships as the public sector, working in tandem with the private sector becomes not just exposed to their management ethos but is galvanized into a new way of thinking and doing. Through the impact of civil society's clamour and insistence for greater say and involvement in the decisions that affect their lives, the theories behind governance and public private partnerships intertwine in response to the expectations and needs of this group of stakeholders.

This inclusive approach has neither been pain free nor flawless, especially when it ventures into the area of citizen engagement. The question then becomes, who is civil society and how do they add value to the process?

### **3.3.2 role of the citizen (third sector)**

The question of the role of the citizen in the development process is one that receives significantly less attention in the literature than other stakeholders. They were previously delegated the role of the 'silent partner' who pays their taxes in order to provide the means for the investment into goods and services that society requires. Today, that role has taken on greater depth. They are becoming a very important complement to the process and a critical element to its success as the 'how' of government today has embraced principles of good governance that is inclusive and makes room for the 'will of the people'.

Ikekeonwu et al. (2007), define a Civil Society Organization (CSO) as one made up of ordinary citizens who organize themselves outside of government and the public service with specific issues and concerns that normal governmental process cannot address by itself. The inclusion of civil society is one means of reducing tension and conflict over public policy decisions and there are various techniques to assist with soliciting public input. There are tangible benefits that emanate from effective public involvement process which are especially useful in decisions related to divestment of public assets to the private sector.

This public input is not limited merely to project selection and execution but is also important for the maintenance of facilities. According to the World Bank (1994) a study of 121 completed rural

water supply projects in Africa, Asia, and Latin America, financed by various agencies, showed that projects with high citizen participation in project selection and design were much more likely to have the water supply maintained in good condition than would be the case with more centralized decision-making.

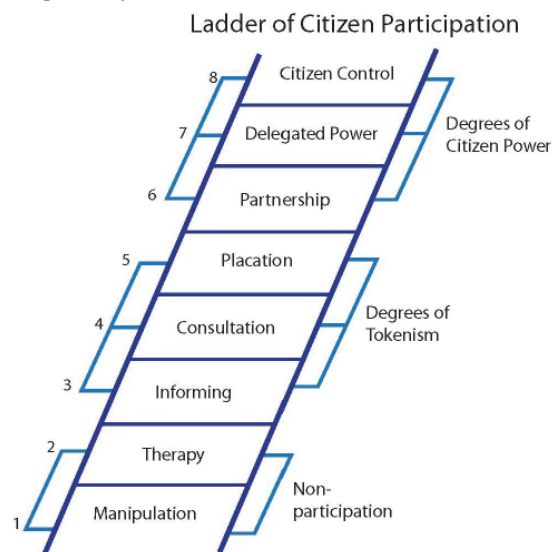
Participation however, is not a panacea or a quick fix. There is a certain level of risk associated with citizen participation programs but such programs can make the planning process and planners more effective by:

- Reducing isolation of the planner from the public;
- Generating a spirit of cooperation and trust;
- Providing opportunities to disseminate information;
- Identifying additional dimensions of inquiry and research;
- Assisting in identifying alternative solutions;
- Providing legitimacy to the planning effort and political credibility of the agency; and
- Increasing public support.

As Arnstein's Ladder of Participation in Figure #19 illustrates, there are different types/levels of participation to consider and plan for, which corresponds to the extent of the citizen's power in determining the conclusion. It is not costless nor without risk and can burden a project's timeline. Many times it requires the skills of professional intermediaries to interact with stakeholders and resolve disputes.

In its 2002 Human Development report, the United Nations called for *"a vibrant civil society, able to monitor government and private business - and provide alternative forms of political participation."* It is in the citizen's response to this call that we see this deepening of democracy and CSO's contribution to the development process and oversight of private sector decisions and activities in the marketplace. As we will appreciate later in the text, their contribution is invaluable to the process of good governance – transparency and accountability in the development of public private partnerships.

Having reviewed who civil society is, what their role consists of, what are the tangible benefits of their inclusion and the risks associated with their inclusion, we go centre stage to the question that is at the core of this thesis. What of the role and responsibility of the private sector partner? What value does the business community add to a city building and urban management process?



▲ **Figure 19** Stage of Citizen Involvement  
Source : World Bank (2002)

### 3.3.4 role of the private sector

Gidman. (1995) defines the private sector as *“institutions, firms and individuals who may be active in many different aspects of infrastructure management but whose main objective and organisation is to generate a profit on their investments”*.

If at present, many governments are not well placed to satisfy their citizens growing and increasingly complex need for infrastructure and as the infrastructure gap continues to grow, there will certainly be a great need for an influx of investment.

What makes the role of the private sector so critical to development is their characteristics that make them the engine of productivity growth which *“creates productive jobs and higher incomes and being complementary to Government, it can help provide basic services that empowers the citizen by improving infrastructure, health and education”* World Bank (2002) .

The effectiveness of the contribution of the private sector to service delivery will be dependent on a country’s political, social and economic starting conditions. According to the World Bank (2002) the key factors include the:-

- Level and location of capability in the concerned country and sector to deal with the functions of policy-making, contracting, regulation, funding and provision of goods or services;
- Credibility of the institutions comprising the governance system in committing to rules and policies; and
- Degree of access to private financing for projects or private firms in domestic or foreign financial markets.

Provided that these ‘starting conditions’ are present, there are varying mechanisms and organizational forms through which the private sector can engaged in country development, namely — public procurement, public private partnerships and full privatization. Engel *et al.* (2008) identifies the fundamental differences between these forms as deriving from asset ownership (or control), whether the firm builds and operates the project, and which is the entity in charge of planning.

The mechanism however, that is growing in use [and is the subject of this paper] is a variant of “privatisation” commonly referred to as Public Private Partnerships (PPPs)<sup>7</sup>. To a large degree, it has come about because *“of a fundamental difference between public enterprise, which aims to address political and social goals as opposed to bottom-line profits, efficiency and financial performance goals of the private sector”* Little (2008). The European Commission has identified four principal roles for the private sector in PPP schemes. These are to provide additional capital; alternative management and implementation skills; value added to the consumer and the public at large; and to provide better identification of needs and optimal use of resources.

But before addressing the subject matter, it would be remiss not to address the once compelling policy position on privatisation and what led to its decline as a viable alternative.

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<sup>7</sup> Alternate names – Private Participation in Infrastructure (PPI), Private-Sector Participation (PSP), Privately-Financed Projects (PFP), Private Finance Initiative (PFI) and P3s.

### why not privatize?

With the perception that the private sector adds that much value and achieves efficiencies in areas where the public service has failed, it begs the question, why not privatize the needed services? What we find instead is a degree of reluctance both within and without Government that has come to resist full privatization. Such opposition stems from various concerns and Guislain (1997) identifies the major ones as being:-

- the need for the preservation of national sovereignty
- the desire to retain national control over strategic interests and activities
- the belief that State ownership is necessary to safeguard the public's interest
- the fear that wealth might become concentrated in the hands of a few private parties

In 1990, investment in private infrastructure projects in developing countries was only around \$18 billion but seven years later, in 1997 it was nearly \$130 billion (World Bank, in Harris 2003). By the end of 2001, some 2,500 projects in developing countries had seen investments of \$755 billion with over 132 participating countries in one or more sectors. Based on the research findings presented by Harris (2003), this did not last. By the mid-1990s we see a trending down of investment flows with projects being re-negotiated and even some being renationalized or cancelled. As Kessides (2004) informs in *Reforming Infrastructure* below:-

The alleged failures of privatization have led to street riots, skeptical press coverage, and mounting criticism of international financial institutions. Concerns are increasingly being expressed about the distributional consequences of privatization and market liberalization—especially their effects on basic services for poor households and other disadvantaged groups.

Harris (2003) has boiled this “*subdued investor interest*” down to “*expectations of [both] investors and governments that were out of step with reality*”. This he elaborates as attributable to the Government's failure to successfully manage the “*politics of reform*” from those risks involved with price increases. Sensitivities over foreign investment, significant reductions in staffing levels and substantial investment obligations which put further pressure on prices, made the reforms harder to sustain.

It would be fair to say that much of infrastructure is already in private hands and that shows no signs of slowing down but public-private partnerships present a special arrangement between the public and private sector and has been defined and redefined by many experts, authors and international agencies. Before we take a more in depth look at this partnership model, we will examine the role of the last stakeholder, that of the Development Finance Institutions.

### 3.3.4 role of development finance institutions (DFI)

Every market economy will require a well-functioning financial sector and development finance institutions have a critical supporting role to play in creating that environment Buiter and Lankes (2001). Many countries and projects have been beneficiaries of the contribution of multilateral agencies like World Bank, Asian Development Bank, African Development Bank, Inter-American Development Bank, and the European Bank for Reconstruction and Development etc, in infrastructure development and their enhancement of economic growth and alleviating poverty is also significant. To international banks, they provide an umbrella of political comfort derived from their long-term relationships with governments and preferred creditor status. To local banks, they provide much needed medium-term capital and assist in their institutional development.



These institutions help to provide a sense of security to private investors as well assistance in analyzing feasibility studies and developing the structure for infrastructure projects. Two significant entities are Multilateral Investment Guarantee Agency (MIGA) and the International Finance Corporation (IFC), both members of the World Bank Group. The former promotes foreign direct investment in developing countries by insuring investors against political risk, mediates disputes between investors and member governments and provides advice on attracting investments. Guarantees from MIGA also help reduce risk-capital ratings of projects. The latter, (IFC) is the largest multilateral source of loans and equity financing for private sector projects in the developing world and provides advice and technical assistance to both the public and private sector.

Infrastructure is becoming more commercially oriented and as such has opened up access to more private financing. According to Nataraj (2007) in the 1990s, the World Bank reduced investment lending for infrastructure with the expectation that private sector investment in infrastructure would rise. However, the anticipated rise in private lending never came. Private financing for infrastructure plummeted from US\$128 billion in 1997 to US\$58 billion in 2002, quite contrary to the expected increase and bank investment lending for infrastructure dropped from US\$9.5 billion in 1993 to US\$5.5 billion in 2002 Nataraj (2007). Consequently the Bank has increased the flow of funds to infrastructure financing projects and is now fully re-engaged in infrastructure development to help fill this vacuum.

That trend is now on the mend as (Palter *et al*<sup>8</sup>, 2008 in HM Treasury, 2008) has indicated that substantial worldwide pool of capital has become available for investment in infrastructure through specialist managed infrastructure funds. They estimate that globally, dedicated infrastructure funds have some \$130 billion under management and that some 77 per cent of this was raised in 2006 and 2007 alone.

Other institutions such as the Asian Development Bank tend to focus on two sectors: infrastructure and finance. It offers a range of assistance to the private sector, largely by mobilizing international capital (equity investments and hard currency loans) for financially viable projects with significant economic and social merit that will lead to positive development impact. The organization's website advises that it has recently, modified its policies and procedures to make them more flexible to its PPP clientele. These included adoption of new financing instruments such as multi-client financing facility, sub-sovereign/non-sovereign lending, and local currency loans.

Farlam (2005) contributes to this review with the comment that private sector participation "*is often an aid conditionality of donor agencies for developing countries*". With the growing demand in developing countries they are expected to play an even greater role in not just bridging the infrastructure deficit and sustaining economic growth but in capacity building initiatives. The new focus on market-oriented economic development is here to stay, so too are the private capital flows. The task of the DFIs must be to facilitate these processes.

In concluding, there is a need to acknowledge that no 'win-win' situation is likely if all parties are not aware of the needs and expectations as well as the responsibility each bears. As such, Klijn and Teisman in Osbourne (2000) emphasises the need for a greater understanding of process management as opposed to project management when juggling different parties towards one goal. With potential tensions, competing expectations and self-interest that will likely arise

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<sup>8</sup> Robert N. Palter, Jay Walder and Stian Westlake, 2008, *How investors can get more out of infrastructure*, *The McKinsey Quarterly*, February 2008

between the four groups highlighted, the need for an *“ambitious governance arrangement” (op cit)* will become necessary. Sound process management will be vital to *“influence and facilitate the interaction processes”* and to strategically steer the process and avoid fragmentation of focus. The focus in this instance is the provision of urban infrastructure through sound urban management practices.

*As our governments continue to struggle to provide more with less, the search for new methods of delivery continues and with that new concepts and the ever growing list of acronyms emerge to communicate these ideas, some novel and some resurrected with a modern face. Today, we hear of more general concepts such as the “Alternative Service Delivery” (ASD) and the more specific “Public-Private Partnerships” which refer to unconventional arrangements that can supply good and services that would have been provided solely by the State. We have just looked at the different players involved in these partnerships but what is to be understood by the term public private partnerships? Under what circumstances are they used? What are the benefits to be derived from their use and who are those benefits intended for? Do they meet their objectives and are they worth the risk?*

### 3.4 public private partnerships

At its most fundamental, a partnership is an agreement between two or more parties to work together towards a common goal and as illustrated in Figure #20, public private partnerships in its broadest sense covers different types of collaboration within the interface of public and private sector, to deliver goods and services needed by society. According to Hodge and Greve (2007) “there is a need to reexamine the different meanings and definitions given to PPPs to find out whether the concept is worth keeping and using for empirical studies”. This comment was prompted by the broad range of definitions which one will unearth in any study on PPP. Some examples would include:-

- The combination of a public need with private capability and resources to create a market opportunity through which the public need is met and a profit is made, United Nations Economic and Social Council (2005) and,
- An appropriate institutional means of dealing with particular sources of market failure by creating a perception of equity and mutual accountability in transactions between public and private organizations through co-operative behaviour, Pongsiri (2002)

To those more detailed such as,

- An agreement between the government and one or more private partners where the private partners deliver the service in such a manner that the objectives of the government are aligned with the profit objectives of the private partners and where the effectiveness of the alignment depends on a sufficient transfer of risk to the private partners, OECD (2008b) and,
- Co-operation between public and private actors with a durable character in which actors develop mutual products and/or services based on ideas of mutual added value and in which risk, costs and benefits are shared, Klijn and Teisman (2003)

This paper has extracted the salient tenets of the ideas expressed here, highlighted the defining elements of the concept and for the purpose of this study narrows a PPP to:-

A response to **market failure** resulting in medium to long term co-operation between public and private actors who align different but **compatible objectives** for the provision of products and services, by building on their **varying expertise**, with appropriate **sharing** and allocation of **responsibilities, resources, risks and rewards**.

### 3.4.1 defining characteristics

Synergy, is often considered the heartbeat of partnerships and is described by Querrien and Elander (2002) as *“the added value obtained when two or more partners act together in order to achieve a common objective”*. But Sedjari (2004) reinforces for us the strength behind synergy as being more than just a *“simple addition but must represent a qualitative leap in the production of goods and services”*. This is one of the special characteristics desired from public private partnerships – its ability to achieve results that neither the public or private sector would be able to achieve on its own. There are other features of this model that distinguishes it and for the purpose of this document and as per the definition given above, a PPP will be confined to these vital elements where the:-

1. All partners contribute complementary resources McQuaid (1994).
2. Joint working arrangement is done either through a joint venture company or by contract Bult-Spiering and Dewulf (2006).
3. There is private but temporary ownership of assets and substantial intertemporal risk bearing by the public sector Engel et al. (2008).
4. The risks are not merely transferred to the private sector party but allocated between parties on the basis of which is best placed to manage and bear the risk. OECD (2008b)
5. It bundles investment, construction and service provision into a single long term contract, generally between 15-30 years Bennett et al. (1999, Engel et al. (2008).
6. Allocates the responsibility of leveraging financing to the private sector.
7. Payment to the private sector is structured in such a way as to ensure the private sector is incentivized to deliver the required services or obligations under the arrangement Akintola et al. (2003).

The sectors where these partnerships have emerged vary widely include telecommunications, power generation, power distribution, gas distribution, railroads, road infrastructure, ports, airport facilities, and water and sewage treatment plants.

### 3.4.2 types of PPPs

The literature on PPPs reveal that in actuality private sector involvement in infrastructure delivery is not new, as railways and roads in Europe and the United State using partnership with government hearken as far back as the seventeenth century. According to Asian Development Bank (2006) in sixteenth- and seventeenth-century France, roads and bridges were ‘concessioned’ for tolls in return for maintaining the routes. Earlier reference in the prelude, to Jamaica’s exploits in the creating tourism infrastructure almost two centuries ago using private and public sector resources, is evidence enough to support this position.

However, because of the pace of growth in national economies, as well as the growth in urban populations, the unprecedented demand for infrastructure services, combined with insufficient response from traditional funding sources, has encouraged several countries to revisit this approach to development. Hodge (2004) evinces that there are three characteristics making this ‘revisit’ different from previous models; *“the use of private finance arrangements, the use of highly complex contracts to provide the infrastructure or services and the altered governance and accountability assumptions”*.

Since the 1980s-90s we have created an array of partnership models in the ever-evolving relationship between the business community and the public sector. As demonstrated in Figure #20 below, PPP literature identifies a broad spectrum of partnership models, situated between traditional public procurement and private provision.



**Figure 20** Spectrum of Public-Private Partnerships Options  
 Source : Vives et al. (2006)

Arising from the assessment done by Bennett et al. (1999) there are different options for PPP and we can draw on the various options depending on a number of issues:

1. Degree of control desired by the government [or the private sector],
2. Ability of government and private sector to provide desired services,
3. Legal frameworks for private investment and regulatory oversight; and
4. Availability of financial resources from the public and private sectors.

Having reviewed the myriad of acronyms and definitions associated with various PPP models and in a bid to avoid the tendency towards what may be perceived as the semantics behind the debate, this paper found it useful to utilize the two categories identified by both PPIAF et al. (2009b) and Yescombe (2007) namely, “Usage Based” and “Availability Based” public private partnerships.

They assert that classifying PPPs on the basis of its legal nature for example, at what point legal ownership of the infrastructure is transferred, has no commercial or financial bearing on the project. As such, he bases the distinctions in typologies on “the nature of the service and risk transfer inherent in the PPP Contract”. Both the IBRD/World Bank (2009) and Yescombe, 2007 find the following categories useful for categorizing the various shades and degrees of PPPs.

**Usage Based Model (Concessions)**

With this approach the Government grants the private partner the right to design, build, finance and operate an infrastructure asset owned by the State. The contract life is normally between 20-30 years, after which the asset is transferred to the State. This typology, utilizes user-paid tolls, fares or usage fees for facilities such as roads, bridges, tunnels, port, airports etc., as well as other transportation facilities where usage risk is transferred to the private sector (the Government may share the risk by underwriting a minimum level of usage). This is considered to be one of the more popular types of PPPs.

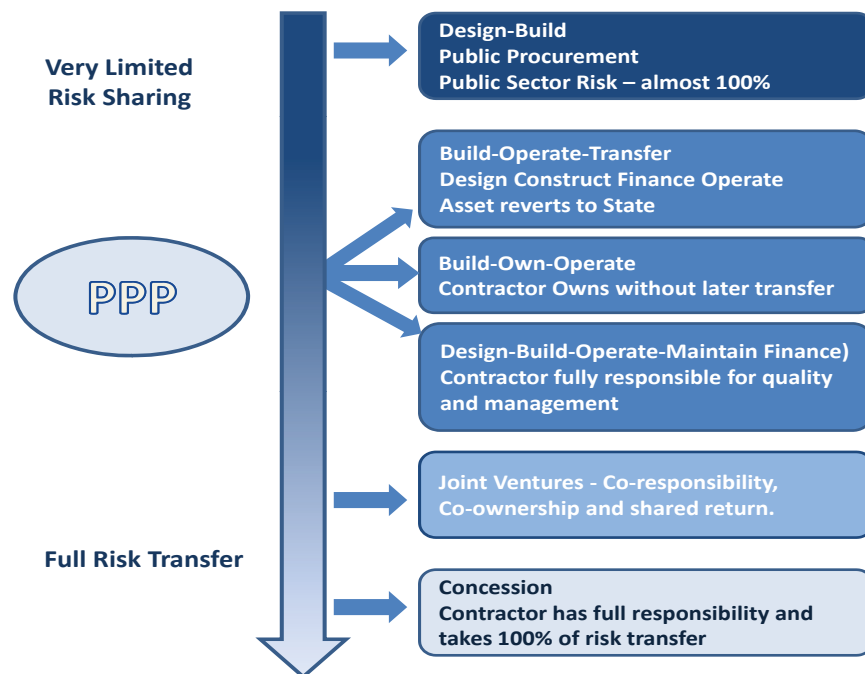
### Availability Based Model (Private Finance Initiative Model)

This also involves the private sector designing, financing, constructing, operating and maintaining the infrastructure. In this case however, the distinction is made where the public authority as opposed to the user makes payments to the private party when, and to the extent that a public service (not an asset) is made available<sup>9</sup>. The very clear implication of this revolves around the level of risk as the demand/usage risk remains with the public authority.

This is divided into three main sub-categories namely,

- Accommodation projects – such as hospitals, schools and prisons where payment is generally made for making a building available for use.
- Equipment, systems or network – less common but is applied in road projects where payments are based not on volume of traffic but ease of use of road, congestion, lanes open etc or on railways, street lighting or information technology.
- Process Plant – is the most common form of PPP, the difference here being the measurability. The applications are mainly in the areas of water and waste-water treatment plants and solid waste management. Payment is made on the availability of the plant rather than its output volume.

If taking strictly from the literature on PPPs, there many permutations of public private ‘partnerships’. They are derived mainly from the series of activities or stages involved in a PPP, namely; designing, financing, building, operating, maintaining, owning and the ultimate transferring of ownership. The writer however, does not consider all to be consistent with the concept of partnership outlined before but more reminiscent of public-private participation. Figure #21 below identifies the principal variants of partnership based on risk level.



▲ **Figure 21** Project Type by Degree of Risk  
Source OECD (2008)

<sup>9</sup> A hybrid of the concession (user paid) and availability-based (public sector paid) PPP is the use of “shadow tolls” in PPP road projects: here payment is made by the public sector, based on usage by drivers.

This wide spectrum of models vary based on ownership of capital assets, responsibility of investment, assumption of risks and the duration of contract UNESCAP (2007). It is very clear from the review of the literature that there is no perfect model, one must therefore take into account the country's political, legal and socio-cultural circumstances prior to determining the best model for any project.

In light of the risks that this “new” developmental model poses and with the challenges that has confronted developed countries in its application, the begging question is - why should developing and emerging economies embraced this approach? According to Kessides (2004) *“the simple answer is that the new model, implemented correctly, offers benefits too big to ignore—for governments, operators, and consumers”*.

For many however, the answer is neither simple nor straightforward. The relationship between the public and private player is not always based on synergy and consensus, as the objectives being pursued are almost always different and at times in clear opposition. What ought to commence and conclude in cooperation ends in conflict, hence the ongoing debate, review and evaluations of the arguments for and against PPPs. Further in this chapter we will take a look at these pros and cons.

### 3.4.3 what a ppp is not

Though they are used interchangeably in many circles, it is very important for the purpose of this paper to make a distinction between what is considered privatization, public sector participation and public-private partnership; these are distinctions which become clearer according to the nature and level of involvement of the private sector.

According to Australia Dept of Treasury and Finance (2002) PPPs differ from privatisation [and public sector participation] in that:

- Publicly owned assets are not sold off to the private sector
- Core services continue to be provided by the public sector
- The Government on behalf of society sets the standards of service delivery
- Private sector is paid according to its performance in reaching service standards

On the other hand, public sector participation (PSP) contracts *“transfer obligations to the private sector rather than emphasizing the opportunity for partnership”* Asian Development Bank) and include arrangements such as service contract, supply contracts, management contracts, leases etc. Public procurement refers to the *“purchase, lease, rental or hire of a good or service by a state, regional or local authority”* UN/ECE (2007). Procurement is chosen because of the simplicity of goods or services desired, the possibility to choose from numerous providers; whereas PPPs *“are more complex, frequently larger in financing requirements, and are long-term as opposed to one-off relationships”* United Nations Economic Commission for Europe (2007).

By way of comparison Table #4 below sets out the main differences between conventional public procurement, PPP procurement and full privatisation.

Table 4

	Conventional Public Procurement	PPP/Concession Contracts	Full Privatisation
Definitions	Supply, works, or service as defined by public authority	Private concessionaire creates facility and service on the basis of a negotiated agreement between public and private sectors	Public service or facility is transferred to the private sector usually with ownership for it to be managed in accordance with market forces.
Main Characteristics	<ul style="list-style-type: none"> <li>Single objective</li> <li>Short Term</li> <li>No link to operation</li> <li>No public project delegation</li> <li>Public authority direct operation</li> <li>No prior financing, co-financing, or project financing</li> <li>No entrepreneurial investment</li> <li>No project design freedom</li> <li>Contract does not deal with service</li> <li>Entrepreneur is not project manager</li> <li>No management freedom</li> <li>No long-term occupancy of property</li> </ul>	<ul style="list-style-type: none"> <li>Multiple objectives</li> <li>Long term</li> <li>Linked to service management</li> <li>Operation directed by the concessionaire</li> <li>Financing, co-financing by concessionaire</li> <li>Project/service, design freedom</li> <li>Contract deals with service needed by public authority (main contract)</li> <li>Concessionaire is project manager</li> <li>Concessionaire is free to manage contract</li> <li>Generally long-term occupancy</li> </ul>	<ul style="list-style-type: none"> <li>Single Objective</li> <li>Long Term</li> <li>Privatisation authority prepares divestment plan.</li> <li>Financed by private sector.</li> <li>Project/service design freedom</li> <li>Ownership transferred to private sector.</li> <li>Almost all risks are borne by the private sector.</li> <li>Usually a complex transaction</li> </ul>
Source: Adapted from UN/ECE BOT Expert Advisory Group (2000)			



*On almost all facets of the arguments, the debate remains inconclusive. So though this paper does not take a definitive position at this point on whether these partnerships have justified their existence, it finds benefit in presenting the main thrusts of both proponents and opponents, with a view to sensitizing the reader to the variance in the views and the potential concerns in the application of this model. This section will also be useful in guiding the analysis of the concerns raised for the employment of PPPs in the Jamaican context.*

### **3.5 CASE FOR PPPs**

According to Savas (1999) – there are five major forces influencing privatization, the pragmatic, economic, philosophical, commercial and populist. I would proffer that these are the same influences shoring up the argument for public private partnerships. Sedjari (2004) on the other hand identifies the major driving factors as the:-

- Demands from spatial and infrastructural modernization
- Increasing inadequacy of state and local authority budgets
- Development of major and complex planning projects by urban authorities
- Lack of skills and know-how on the part of local government
- Obligation on the part of towns and villages to carry out the major, and
- Development projects needed to meet the needs of the economy.

Much of the literature about public private partnerships is presented through the eyes of those who are largely advocates or opponents of this particular development model. With a view to determining its value for the Jamaican context, the study seeks to flesh out the arguments presented by both positions.

Let us first examine the major rationales presented by the advocates of public private partnerships.

#### **OFF BOOK FINANCING**

Many governments PPPs allow a build now and pay later facility which is very attractive for heavily indebted Governments. Murphy (2008) indicates that, having adopted the “*accrual accounting method*” that takes “*asset related expenditures as maintenance, replacement and other life-cycle costs*” into the annual budget, many municipalities and governments (such as the Province of Ontario, Canada) have conceded that the attraction of deferred payments via PPP is no longer a driver for using this model. For many countries however, PPPs allow governments to invest in socially desirable projects during periods of severe credit constraints “*when the choice is not between PPP and conventional provision, but between a PPP and not providing the service at all*” Engel et al. (2008).

That there can be some legitimate benefit to spreading costs for reasons of “*intergenerational efficiency*” Vining and Boardman (2006) is a reasonable argument for the use of a PPP but the literature presented suggests that the reasons are by and large to maximize political leverage from infrastructure projects, while disguising real costs and deferring the burden to future administrations. In traditional procurement, the Government pays the contractor during construction but the typical PPP payments are not made until services are being provided or construction is substantially completed Murphy (2008). This allows for an ease on the Government’s cash flow.

(Quiggin, 2005 in Vining and Boardman, 2006) reminds however, that the *“underlying economic reality of the investment is not altered even if it’s not on the books”*. Regardless of financing model, it’s either the government (for example through cash transfers) or the end user who pays so in the final analysis, there are ‘no free lunches’.

### **COST REDUCTIONS**

This is perhaps the most heated of all the debates, as both the groups supporting the use of PPPs and those who remain unconvinced of its merit, subscribe to the argument of cost. Those in favour of PPPs argue that on the basis of decades of experience with public sector delivery of infrastructure, there is very little benefit of efficiency or effectiveness as public servants do not see themselves as deriving benefits from their efforts. Added to that, Government usually operates as a monopoly supplier and in the absence of competition and on a cost plus basis, lacks the incentive that drives the private sector and is therefore typically prone to waste. Under traditional public procurement, a private developer has an incentive to do the minimum necessary to meet the contract terms. On the other hand, Daniels and Trebilcock (1996) points out that the majority of the costs of many large-scale construction projects are estimated to be determined by the design, so with a design, construct and maintain arrangement, the developer has a greater incentive to build the road to a greater quality *“as the costs of maintenance abides with him for the contract period”* Webb and Pulle (2002). The real issue as pointed out by Murphy (2008) is not the cost comparison between the parties but the *“net benefit that takes into account all the factors”* that really matters.

Another argument speaks to the private sector’s experience in construction and operations, greater specialization to support the undertaking and cost-reduction incentives<sup>10</sup>. This strength becomes most evident in their willingness to alter project specifications or incorporate new technologies to further minimize cost Vining and Boardman (2006). In the PPP model, cost overruns are absorbed by the private sector and delayed completion dates can result in penalties. This too drives efficiency and keeps project closer to schedule and budget than under Government procurement. It is posited that private sector incentives are more in keeping with the goals of public private partnerships.

Murphy (2008) presents the argument of the *“false comparison”* between the two costs as the assessors often fail to consider which party is actually bearing the risks. For traditional procurement, the point is made that the borrowing rate is low because the project is considered risk free. It is not. According to Webb and Pulle (2002) *“What determines the real cost of finance for a project is the risk involved. The private sector explicitly prices these risks into the cost of finance”*. However, when the public sector finances a project, taxpayers bear the risks and implicitly subsidize the cost of the project because the risks are not factored into the government borrowing rate. *“The risk is underwritten by the taxpayer”*. Murphy (2008) makes a significant point here, as under PPP the Government is paying an insurance premium to be protected against higher costs, rather than self-insuring at a zero premium cost but at a potentially high failure cost. Again it’s the *“net benefit”* that counts and it is perceived by many that when this exercise is properly conducted PPPs work in favour of cost reductions.

The caution is given however, that the *“first-order outcome of private sector costs superiority is higher private sector returns rather than lower public sector costs”* Vining and Boardman (2006).

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<sup>10</sup> For example complementarity – tying of one task to another to increase efficiencies.

What this tells us is that the pursuit of the former may facilitate the latter but should there be any threat to the former, the latter is unceremoniously at times compromised. In other words, where the public sector will opt to proceed or continue with a project on the basis of its social value, the private sector is not so inclined.

Finally, Yescombe (2007) adds the cost advantage to the faster pace at which private sector works, in that the project avoids cost/inflation that tends to result from longer construction periods typical of the public sector as well as the quicker decision making process and management skills present. In many cases, the private contractor also has a strong incentive to complete the project as quickly as possible because it needs the stream of revenues to repay the capital costs Nataraj (2007).

## RISK SHARING

This argument is considered to be one of the most significant by PPP advocates. Here we identify five positions that support the idea that risks are better managed under a PPP model.

1. It is said that the shifting of project construction, maintenance and commercial risks to the private company can be far less costly for the public purse. However, care must be taken by the Government to not unload all risks better handled (at lower cost) by the State as the private party does not bear risk for free and might simply not be the better party to counter the problem that arise in some areas. Grimsey and Lewis (2004)
2. Another position is that the greater ability lies with the private sector partner to more effectively price risk and thereby lower it because of their expertise and sophisticated financial instruments at their disposal, UNESCAP (2007).
3. One common argument attached to risk transfer is the private sector's ability to spread their risks across a number of projects (though so can the Government) but as stated in Vining and Boardman (2006) it does not reduce risk as much as it spreads it more broadly for a lesser impact.
4. Yescombe (2007) highlights a advantage whereby PPP's *"encourage the public sector to think about risk transfer in a way which has not been usual in conventional public-sector procurement"*. This can have a direct positive impact on other conventional procurement activities and improve the Government's capacity to adequately execute those exercises.
5. Schwartz et al. (2008) positions that private sector management allows the State to package risks in a more efficient manner (referred to as the single point risk allocation). This reduces the interface between project functions that can result in errors, delays and the "claims culture". The likelihood of project overruns and delays are greatly reduced. The key to reaping the rewards of any advantage that risk sharing presents is in ensuring that allocated risks and performance incentives are properly built into the Agreement itself.

## OTHER ARGUMENTS

Greater focus on due diligence – the inclusion of debt funding has significantly enhanced the review of delivery solutions and contract structures as debt providers are therefore likely to take a firm view in dealing with problems revealed by due diligence reports HM Treasury (2008a, Yescombe (2007). Debt providers have a long-term interest in the project as their loan is repaid over time, often close to the full length of the project. They therefore also provide a benefit to the authorities through ongoing review and monitoring of the operations of contractors HM Treasury (2008b). In effect, *"having the privately provided finance at risk acts as a catalyst to inject risk management*

techniques into the project in a way that is not possible under government financing” Grimsey and Lewis (2004).

- Customer Improvements are evidenced in projects that rely on usage and for which the demand risk is high and private capital is at risk, as the incentive for the private sector partner to perform is equally high Nataraj (2007). PPP allows investment in public infrastructure to be accelerated, therefore a project which might have been procured in smaller parts can be procured as a whole Yescombe (2007). It is perceived that PPPs are more insulated from political pressure. The ensuing argument is that this contractual form will make charging fees closer to marginal costs possible, as the public responds more favorably to user fees more reflective of cost from a private sector party rather than government Engel et al. (2008).
- Public Sector Reform – PPPs require public servants to think and behave in ways that require new skills and can therefore serve as a catalyst for reform as Government’s procurement and management skills are improved PPIAF et al. (2009b).
- White elephants<sup>11</sup> can be filtered by selecting an organizational form where the firm that builds and maintains the infrastructure is financed mainly via user fees. In this case private firms will participate in the project only if it is privately profitable to do so. In this context, infrastructure privatization helps countries with weak systems for social project evaluation Engel et al. (2008).
- Better life cycle planning - This is achieved by transparently recognising the costs and risks associated with the whole life of the required service or capability Australian Government Dept of Finance & Administration (2006). With payments linked to performance over the project life, the private sector must consider costs over the life of the asset, or at least the contract length, rather than just during the design and construction phase HM Treasury (2008b).
- Refocus Government - PPPs enable the Government to focus on its core business of policy, outcomes and regulation in the interest of the public Akintola et al. (2003). PPP arrangements are also allow for a reduction in public subsidies and redirection from the groups now served to the poor and those not currently served World Bank (1997a).
- Revenue Generation & Employment – PPPs also provide the opportunity for governments to raise revenues through license and/or concession fees UNESCAP (2007) and permits employment creation in depressed labour markets without committing additional public resources Daniels and Trebilcock (1996) (albeit possibly another fiscal illusion as the government is forgoing subsequent revenues from the facility).
- Boost Policy Clarity and Sustainability – Lastly, entering an arrangement with a private entity makes it harder to blur the issues such as how a tariff is set or how cost savings will be achieved. When these approaches are locked into an agreement it helps Government to not backpedal on reform decisions taken.

In defense of the “time-honoured traditional form of government action” Salamon and Lund (1989), some assert that Government is forfeiting its role and responsibilities by virtue of these undertakings with the private sector. PPPs however, have not been spared by critics, as an equally impressive amount of literature has disputed its benefits in meeting these societal goods and services. Some of the myriad reasons for these views are cited below.

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<sup>11</sup> *White elephants, defined as projects with negative social value i.e., whose social costs exceed their social benefits.*

### 3.6 CASE AGAINST PPPs

**OFF BALANCE SHEET FINANCING** Some commentators here contend that value to be received here is merely a function of accounting standards and as such lacks tangible meaning. Others like (Grahame Allen in Webb and Pulle, 2002) opine that “*while PPP contracts shift investments off the government’s balance sheet, the commitments to pay for future service-flows<sup>12</sup> have largely the same macroeconomic effects as public debt*”. Hodge and Greve (2008) contends that this ‘advantage’ is better described as a “*mechanism through which governments can turn a large, one-off capital expenditure into a series of smaller, annualized expenditures has simply been provided*”<sup>13</sup>. The supporting claim is that private sector design, construction or operation of infrastructure is not new or unique to PPPs. Even more so the financing of projects by the private sector is not new as all public debt financing involves the sale of debt instruments, usually government bonds, to private holders of capital which is not new money. This reduces PPP justification to merely financing to avoid political and budgetary obstacles.

**HIGHER COSTS AND LESS VALUE** The argument being advanced to support the case that PPPs are actually more costly surrounds the higher cost of private borrowing as profit has to be built into the budget and procurement/transaction costs are higher<sup>14</sup>. The assertion is also made that in the several instances when the partner is remunerated on a “cost-plus” basis they will have an incentive to increase rather than lower costs (McAfee and McMillan, 1988 in Vining and Boardman, 2006).

Another cost factor is what Murphy (2008) refers to as “*optimism bias*”<sup>15</sup> which is explained as the “*public sector tendency to budget for the best possible outcome rather than the most likely*”. This ends up with the tendency for project costs and duration to be under-estimated and/or benefits to be over-estimated. This sentiment is echoed in Flyvbjerg *et al.* (2002) which concludes their study in transportation infrastructure projects with the position that “*the cost estimates used in public debates, media coverage, and decision making for transportation infrastructure development are highly, systematically, and significantly deceptive. So are the cost-benefit analyses into which cost estimates are routinely fed to calculate the viability and ranking of projects*”. The misrepresentation of costs is likely to lead to the misallocation of scarce resources, which, in turn, will produce losses among those financing and using infrastructure, be they taxpayers or private investors. PPP advocates however, fire back with the assertion that as PPPs provide even more rigour and due diligence by many players beyond the public sector, its less likely to happen using that model.

Engel *et al.* (2008) examines the periodic re-contracting under PPPs which presents additional costs not faced by public sector provision and advances this as another justification for going

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12 Under the Concession Model, the cost is covered by the users instead of through taxes received and under the Private Finance Initiative (PFI), it’s charged to the public sector budget over the life of the PPP contract.

13 The exception would be when the infrastructure is paid for directly by the users; e.g. toll roads payments.

14 The cost of capital for a PPP is typically around 2-3% p.a. higher than that of public sector funding (Yescombe, 2007) and tendering costs under concession contracts were just under 3% of expected total costs, while for traditional procurement total tendering costs were under 1% (Bult-Spiering and Dewulf, 2006). But there are other transaction costs on the public sector side that are rarely costed for the comparison.

15 Although the Allen Consulting Group 2007 study of Australian PPPs found traditional procurement projects more culpable of this type of bias.

the route of contracting out rather than a partnership. According to Guasch (2004), in Latin America, renegotiations affected 75% of water contracts (against 10% in electricity), after 1.7 years (compared to 2.3 years in electricity). They were initiated in 66% of cases by the operator, and led to delays (70%) and reduction (62%) of investments, tariff increases (62%) and increase in number of cost components allowing pass-through (59%).

Vining and Boardman (2006) adds that PPPs delivering projects to government at lower prices will depend on *“private sector partners having the appropriate incentives to equate profit maximization with project cost minimization”* because without incentives costs are likely to increase. Lastly, they warn of the tendency for firms to *“register stand alone corporations”* for the purpose of limiting their equity participation, thus making it easier to walk away, leaving significant losses for the State.

**RISK TRANSFER FAILURE** Yescombe (2007) poses the question *“how real is any risk transfer”*? This is a vexed question, as when debate surrounds the question of basic public goods for which society is dependent for survival and productivity, the core question is almost rhetorical. The contracting authority has far more to lose should a project be allowed to fail and as such the Authority may have to take responsibility for the risk it had initially transferred. In answering that same question, Murray (2006) positions that even if a real risk transfer occurs the public still pays as the private partner prices compensation for assuming risk and this is reflected in the cost to government.

Hamel (2007) sums up the argument on the effectiveness of risk transfer with the position that private partners commonly form a consortium for PPP contracts and as such their liabilities *“remain limited to their investment in the consortium”*. He positions further that their long term funding is secured in many instances by use of third-party debt financing and *“regular and predictable receipts”* (from direct user fees or Government). This limits equity invested to the few assets that the Consortium has and not its parent company. Hamel maintains that in this case the option of walking away if cash flow is bad is highly possible, especially if the capital invested has already been recovered. It is here that the circumstances of *“too big to fail”* becomes a trap for the Government and in the case of most urban infrastructure, the State is compelled to bail out the private sector.

**LOWER QUALITY, DESIGN AND SERVICE** Various authors imply that the profit motive will drive the private sector to a lower quality of goods and services in order to maximize their bottom line UNESCAP (2007, Etienne-de-Bettignies and Ross (2004). If typical market conditions exist then this should not occur as the incentives as in the market place will keep them in check. However, should it be a monopoly scenario then carefully crafted service and quality standards with the associated penalties must be included in the contract. ‘Typical market conditions’ however rarely exist post-contract with a PPP as their long term service contracts reduce competition. Hamel (2007, Etienne-de-Bettignies and Ross (2004) argue that general service can also decline as maintenance projects are then under prioritized in order to facilitate new infrastructure<sup>16</sup> which carries far more political mileage than maintenance projects. Murray (2006) contends that whatever benefits PPPs bring by virtue of its shorter implementation time and avoidance of time overrun is effectively undermined by the lengthy planning and procurement period which mostly takes years longer than the period under conventional procurement.

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<sup>16</sup> PPP projects are rarely if ever maintenance contracts own but usually new infrastructural undertakings.

**CONFLICT OF INTEREST** Bouvaird 2004 in Johnston and Gudergan, (2007) *“contends that one of the key issues in PPPs is the extent to which they can overcome inherent conflicts of interest between their partners”*. This is borne out in one study done by Reijniers (1994) in which the author underlines that the private sector is oriented towards achieving returns on investment, taking risks, anticipating market developments while the public sector interests are minimizing risks, legislation, regulation, political opinion/influence and realization of a social goal. These fundamental differences can threaten the success of such partnerships as they can lead to conflicts which lead in turn to the undermining of performance. As stated by Rosenau (1999) stockholder’s interests must come first when the private partner is a for profit organization, resulting in divided loyalties and conflict with public sector’s obligations to society.

**LESS ACCOUNTABILITY, MORE SECRECY** This charge is levied against PPPs as Hamel (2007, Murray (2006) positions that long-term PPP agreements, which often keep proprietary information out of the public domain and put the day-to-day management of public services in private hands for periods of 20 to 30 years, can reduce flexibility, transparency, and accountability for local governments. Others Querrien and Elander (2002) refer to the concern of creating *“gated communities”* as these models can run the risk of limiting ‘participation’ in the policy process to elites with strong positions in society and direct vested interests in the subject issue. These ‘communities’ then decide which actors are to be included, their roles, the rules of the game and which issues will be excluded or included. This basically results in a switch between public accountability and private governance.

**UNBALANCED PROFIT SHARING** After the completion of the construction phase of a PPP project, the partner is usually able to negotiate for a better rate of interest on the project’s interim construction loan, largely because the riskiest phase (construction) is past. This has become a controversial issue, as refinancing can result in windfall profits and the question of who benefits arises. Murray (2006) who reviews British Columbia experience with PPPs quotes Unison (2001) *“that changes to the terms of the loan can increase the contractor’s profit by as much as 80%”*. These are basic examples of what is deemed *“private profit at the public’s expense”*. Studies done on PPPs in Latin America have also turned the spotlight on the number of contracts that have to be re-negotiated to facilitate retention of the private partner.

**THREAT TO WORKERS RIGHTS** This concern is usually given voice by unions who claim that PPPs are subject to higher demands, lower wages and higher staff turnovers Yescombe (2007). This however, is warded off by advocates who maintain that contractual provisions can be made to ensure the rehire of staff under the PPP structure.

**PRINCIPAL-AGENT CONFLICT & INFORMATION ASSYMETRY**<sup>17</sup> Christensen and Laegreid (2007) in their discussion on transcending new public management, speaks of *“PPPs challenging the principal-agent relationship normally associated with public-sector contracting”* and instead creating *“principal-principal relations and win-win situations”*. They concede however, that this exists perhaps more in the realm of theory as empirical research has revealed a lack of incentives for governments and the private sector to enter into truly co-operative agreements and resist opportunistic behaviour. Instead PPPs are less *“rosy institutional arrangements”* but more like *“a murky deal where innovation is stifled because of strategies based on actors’ self-interest”*.

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<sup>17</sup> In contract theory, information asymmetry deals with the study of decisions in transactions where one party has more or better information than the other (in this case the private operator). This creates an imbalance of power in transactions which can sometimes cause the transactions to go awry.

**REVERSE CONTRACTING** Opponents point to the number of government agencies that have brought back in-house previously contracted services (Hefetz and Warner, 2004; Dilger et al., 1997). This they purport to be a reflection of problems with the contracting process itself, limited efficiency gains, erosion in service quality, principal-agent problems, the high cost of monitoring, or concern over the loss of broader community values etc.

**LOSS OF CAPACITY & CONTROL** There is an expressed concern that rather than a transfer of private sector knowledge, the public sector will be left with a loss of worker capacity Kettl (1988, Hamel (2007) referred to in some literature as the ‘hollowing out of government’<sup>18</sup>. After having turned over maintenance and operations for several years, even decades, the state of readiness of the public sector to take over after the infrastructure has been transferred has been questioned.

**LOSS OF PUBLIC POLICY FLEXIBILITY** These have come in the form of reduced expenditure choices as a result of long term financial commitments and reduced service and policy choice options owing to the contract. This has been countered by the argument that had Government been the provider there should be little justification for them to want to defer service or maintenance to have funds made available. There are concessions that a PPP carries some amount of inflexibility, which the Government can negotiate but with a higher price tag for the risk that it may incur.

**LACK OF COMPETITION** This problem identified in the literature speaks to too few bidders and the creation of cartel agreements. It is generally accepted that the number of firms with the financial and technical capacity to respond to the sizable BOOT and DBFO are few and far between and in many instances the procurement exercise involves one responsive bidder. This tends to replace a public monopoly with a private one Hamel (2007) and Murphy (2008). Additionally, there is the concern that many PPP agreements require that the Government guarantees the absence of competition in order to facilitate the projected return on investment of the private partner.

Table #5 below sums up some of the more frequently encountered difficulties to be avoided or managed, as well as the rewards to be sought after in justification of the use of public private partnerships. Figure # 22 below provides a summation of the arguments presented above.

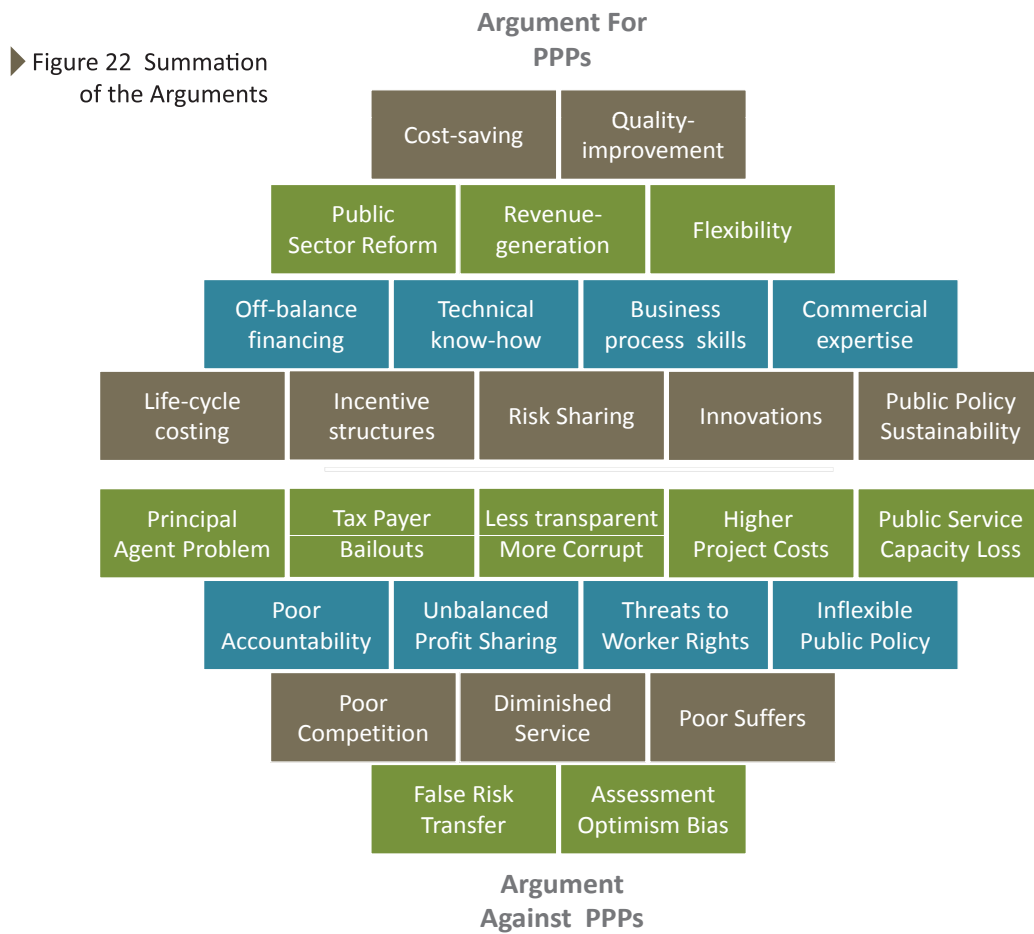
**Table 5** Risk and Reward Balance Sheet

RISKS		REWARDS	
Public	Private	Public	Private
Conflict of interest, perceived or real	Excessive costs of development, unprofitable	Greater community wealth, tax base, public infrastructure	Resources to sustain organization
Use/misuse of public funds, resources perceived or real	Time consuming process required: time is money	Increased taxes, other revenue	Profitability
Controversial impacts on those directly affected:	Failure to create long term value	Promote and advance city image	Value, wealth creation
Land use conflicts with adjacent property owners	Accusation of being enriched at public's expense	Job Creation	Enhanced reputation, experience to get next project

<sup>18</sup> Other scholars have contributed terms for thinking about the government's increasing reliance on private contractors for service provision and have termed this phenomenon "government-by-proxy" (Kettl, 1988), "shadow state" (Wolch, 1990) and "third-party government" (Salamon, 1989).



RISKS		REWARDS	
Public	Private	Public	Private
Relocation costs and procedures	Change in key public, political or staff leadership that derails partnership	Community betterment, enhanced quality of life	Market niche
Disagreements on fair market value	Market shortfall failure	Re-election (elected officials)	Community betterment, enhanced quality of life
Developer fails to perform or goes out of business	Loss invested equity	Job retention, advancement (staff)	
Public Opposition NIMBYism	Untimely public airing of critical project details, e.g. financing		



## CONCLUSION

What is sure is that no one can predict all the uncertainties that may arise during the course of a PPP, (though this is true for any contract, PPPs seem to present additional risks) but the ‘ayes’ and the ‘nays’ both agree that more than anything else the effective transfer or risk is the key determinant of project success. What is very clear and cannot be shied away from in the debate is the question, how meritorious is the proposed alternative – contracting out?

Grimsey and Lewis (2004) identify risks that governments currently face with that alternative and they include:-

1. Over optimistic forecasts of the viability of the projects , coming from an over commitment of political prestige to projects
2. Costly changes to project specifications at a late stage in the project cycle,
3. ‘Capture’ of the project by special interest groups, and
4. Failure to articulate policy objectives and carry out adequate risk analysis.

The question which remains therefore is, to what extent can these “additional risks” be mitigated in order to capitalize on the benefits of private sector engagement? The greatest challenge I believe surrounds the question - if the private sector, in pursuing their objective function of maximizing profit and minimizing losses, chooses that to terminate and walk away or declare bankruptcy is in theirs and their shareholder’s interest, what then are the options that are open to the State? Often times the State will not have the luxury of abandoning what usually is a critical service.

Hamel (2007) suggests four possible State interventions for this ‘moral hazard’:-

1. Granting a subsidy to shore up the cash flow crunch
2. Injecting fresh capital from the consolidated budget
3. Guaranteeing the enterprise to facilitate re-financing
4. Extending the Concession period to improve the recovery of the investment.

He concludes however, that “*in the case of a vital service, [PPP] risk sharing seems to be a fool’s bargain*”. If these risks he states, were objectively placed on the Government’s books (which is ultimately where the risk is) instead of the private partner’s, financial accounts would better reflect these PPP related risks and the national debt might jump but Government would be in a better position to make informed choices on public private partnerships in the best interest of the public.

It is the opinion of the writer however, that from the literature reviewed, there appears to be as many cases of PPPs that reflect the arguments in favor of their use as much as there are those that substantiate the arguments against them. In absolute terms, the PPP cost advantage was found to be economically and statistically significant. Based on the Allen Group 2007 evaluation of Australian PPP projects and traditional procurement projects, it was reported that “*On a contracted \$4.9 billion of PPP projects the net cost over-run was only \$58 million – not statistically different from zero. For \$4.5 billion of traditional procurement projects, the net cost over-run amounted to \$673 million*”. What it then appears to be is a case of the experience of the advisors and personnel formulating and implementing the various cases or the adequacy of check and balance mechanisms in place that would cauterize corrupt practices; rather than an inherent problem with the model of development itself. Some of the criticisms seem grounded and therefore merits careful consideration. Others, however, seem to be driven by a misunderstanding of PPPs or perhaps incomplete and/or inaccurate information<sup>19</sup>

19 Much of the literature quotes the “Infamous Farum PPP” which for example, was dubbed by PPP

Of relevance, is the observation made by some researchers that in some instances public private partnerships perform no better than State Owned Enterprises (SOEs). One study done by the University of Greenwich identified five different types of “economic problems and distortions characteristic of monopolies” which both models have manifested; namely-

- Management inefficiencies
- Restricted competition and corruption
- Excess pricing and restricted access
- Excess profits and reduced quality
- Problems in delivering development objectives

There are those analysts for example in Hodge and Greve (2008) who claim that many of the assumed benefits of PPP projects are hypothetically available through public sector procurement. I find that to be a weak argument as it would also be fair to say that “*hypothetically*” it is equally possible for PPPs to achieve what public procurement has and more. In my estimation, the debate must be moved from the domain of hypothesis to the actual track record of the State where what the State can do versus what the State has does, is worlds apart and changes the picture entirely.

It is unarguable that PPPs represent uncharted and dangerous waters for the uninitiated public or private partner. Collin (1998) expresses it best when he describes PPPs are resting in a “*twilight zone*” because they are positioned in between the public and the private spheres in a ‘no-man’s-land’ or a ‘both-men’s-land’, each one dominated by a different reasoning. What this paper demands then is a thorough assessment of the arguments, in the context of two case studies, in order to determine if the ‘cons’ can be reversed, avoided or corrected in future projects; as well as how to reinforce the benefits from the project ‘pros’. In doing so we will have to first explore in Chapter Three the macro and micro preconditions that are necessary for reinforcing the strengths of public private partnerships and minimize the loopholes and weaknesses. Then in Chapter Five we will have to ask the question, how does Jamaica stack up against these findings. Even if PPPs are a viable option for service delivery, is Jamaica ready for such a model and if not what steps will need to be taken to prepare us for such a move?

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*analyst Carsten Greve as the “most scandalous PPP in Danish history”. This author does not consider the project a public private partnership but a corrupt sale and lease back arrangement.*

### 3.7 THEORIES UNDERLYING - Public private partnership

*Before delving into the next section which will attempt to unravel the mechanics behind the practice of public private partnerships, there is a need to highlight a few pertinent theories borrowed from Contract and Transaction Theorists that are relevant because of their impact on the process of engaging such commercial partnerships. These theories ask one to think about the intricacies of human behaviour, the relationships between the parties, what induces them to perform and how their actions and decisions impact on the cost and success of public private partnerships.*

#### 3.7.1 agency theory<sup>20</sup> and new public management:

The Agency Theory premises a contractual relationship between a principal who engages an agent to perform services on the other's behalf. This theory speaks to the inherent problems that arise due to conflict of interest between both parties due to an asymmetry of information<sup>21</sup> which grows out of the agent's length and depth of involvement in a project, on the principal's behalf. According to Fong and Tosi (2007) *"It focuses on control issues resulting from conflicts of interest between principals and agents and conceptualizes controls in the form of optimal contracts designed to correct for these conflicts"*.

According to Niskanen, 1971 in Ward (2007), the problem is that *"often there will be a divergence between the actual decisions made by agents and the decisions that would maximize the principal's benefits"*. This shows up in the public sector and lies at the heart of the problem in achieving efficiency and increasing productivity as bureaucrats (the agent) take advantage of a Minister's ignorance or public servants act counter to Central Government's strategic plans and targets. This divergence arises because when making a decision, agents are also seeking to maximize their self-interest. This then stands to reason, that whenever the agent's actions are for the sole benefit of the principal (and thus contribute nothing for promoting the agent's interest), he/she will engage in a lower level of effort.

NPM (defined in Section 3.6) becomes relevant to this theory as a proposed remedy for the unbalance between the two parties. NPM advocates argue that one of the debilitating factors that cripple public service is this opportunity for a public bureaucrat (an agent of the state acting as a principal) to use their expertise and monopoly on information to manipulate the decision making process. Ward (2007) writes that only in engaging and emphasising another type and level of principal-agent accountability, can we realize a Government that is responsive to the needs of its citizens. As an NPM advocate, he advances the proposition that engaging the private sector allows for separation between the buyer and the seller of Government services. This introduces self interest which works because both parties have an interest (one political, the other economical) to mutually reap the benefits of the exchange, thus creating an environment where competitive market principles are able to operate in a previously non-competitive market, allowing profit incentives to emerge and create new forms of economic efficiency.

#### 3.7.2 transaction cost theory

This has been developed to facilitate an analysis of the *"comparative costs of planning, adapting, and monitoring task completion under alternative governance structures"* Williamson 1985 in

<sup>20</sup> Also referred to as the Principal-Agent Theory

<sup>21</sup> An imbalance of power in a transaction caused when one party has access to information that the other does not.

Aubert and Weber (2001). Transactions costs arise for ex-ante reasons (drafting, negotiating, and safeguarding agreements between the parties to a transaction) and ex-post reasons (haggling, establishment, operational, and bonding costs). Governments must weigh the production and transaction costs associated with executing a transaction within the public sector (insourcing) versus the production and transaction costs associated with executing the transaction in the market (outsourcing). According to Aubert and Weber (2001), if they choose to outsource by using the market, they must then determine the appropriate type of contract to use as this will, to a large extent affect cost.

Jobin (2008) argues that two human and three environmental factors lead to rising transactions costs. The two human factors are:

1. **Bounded rationality**<sup>22</sup>: Humans are unlikely to have the abilities or resources to consider every state-contingent outcome associated with a transaction that might arise.
2. **Opportunism**: Humans will act to further their own self-interests. This breaks down trust and increases transaction costs.

The three environmental factors are:

1. **Uncertainty**: This exacerbates the problems that arise because of bounded rationality and opportunism.
2. **Small numbers trading**: If only a small number of players exist in a market-place, a party to a transaction may have difficulty disciplining the other parties to the transaction via the possibility of withdrawal and use of alternative players in the marketplace.
3. **Asset specificity**: The value of an asset may be attached to a particular transaction where the party who has invested in the asset will incur a loss if the party who has not invested withdraws from the transaction. The possibility (threat) of this party acting opportunistically leads to the so-called “hold-up” problem.

The relevance to public private partnerships is that based on this theory there are three aspects of a transaction that will affect its governance structure<sup>23</sup>. Those are asset specificity and uncertainty which increases risk of opportunism as they themselves increase Jobin (2008). This risk of opportunism increases because of the incompleteness of a PPP contract, which recognizes that there are uncertainties that cannot be anticipated decades in advance. When this is combined with an investment that is “*specific*” i.e. cannot be easily re-invested elsewhere, then investors either spend heavily (legal fees for writing lengthy contracts or in re-negotiation costs and in monitoring costs) increasing transaction costs or under-invest to reduce potential loss, which in turn reduces performance. These additional expenses ought to have been channeled towards productions costs hence productivity declines and the partnership fails to meet its highest objectives.

### 3.7.2 stakeholder theory

This is a theory grounded in organizational management and business ethics that address the morals and values in achieving an organisation’s objectives. Using the classical definition bequeathed by Freeman, 1984 in Laplume et al. (2008) “*a stakeholder is any group or individual who can affect or is affected by the achievement of organizational objectives*”. This will include financial claimholders, employees, customers, communities, government officials etc.

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22 See glossary for definition.

23 See glossary for definition.

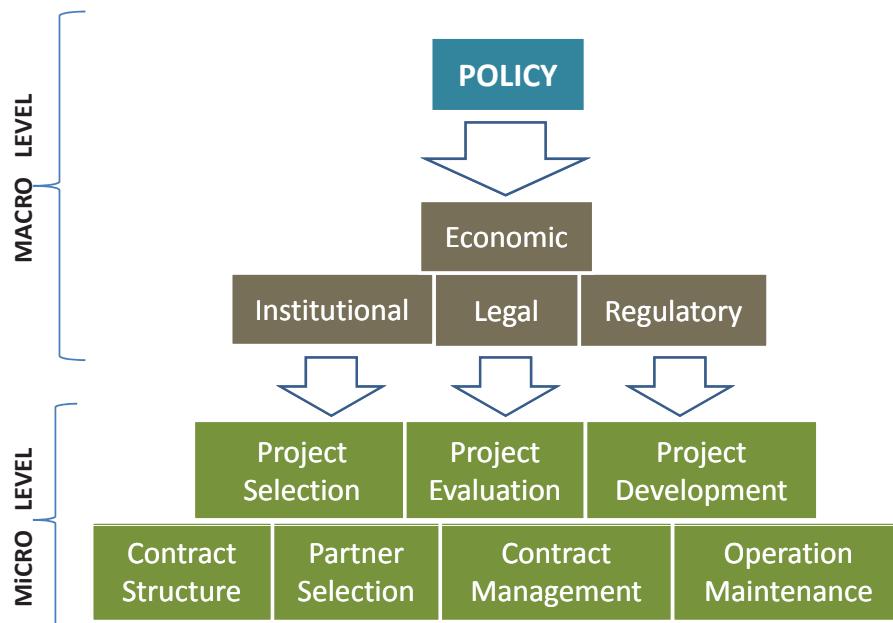
Greenwood and Cieri (2005) reason that this theory is based on two principles that seek to balance the rights of the claimants on the corporation with the consequences on the corporate form. The first principle states that *“the corporation and its managers are responsible for the effects of their actions on others”*. The second principle states that *“the corporation and its managers may not violate the legitimate rights of others to determine their own future”*. This is a theory that has received much criticism from the neo-classical economists who argue that these principles undermine the property rights of the company owners, compromise the mechanism of the free market, destabilize Government operations and subvert *“the very nature of capitalism”*.

The thrashing out of that debate however, lies outside the parameters of this paper. What is of relevance, is the need to point out that the guiding principles are those that would serve the interests of a public private partnership very well. Oft spoken of in the literature, is the concern regarding the appearance of the private sector’s fixation on the bottom line which has no second goal in determining what drives the decisions it makes. At first blush these principles seem cemented in theory with little real application value as maximizing the bottom line seems to be contending the fundamentals of partnership. Jensen (2001) however argues that corporate managers cannot succeed by just holding up value maximisation as the goal and ignoring their stakeholders. He posits that *“in order to maximise value, corporate managers must not only satisfy, but enlist the support of all corporate stakeholders – customers, managers, employees, suppliers, local communities*. He concludes by proffering new terminologies *“enlightened value maximisation”* which he deems as being equal to *“enlightened stakeholder theory”* and his conclusion that the objectives of all can be best met in a sustainable manner by making consideration for all.

In concluding, it seems fair to state that all three theories, including New Public Management appears to be grounded in the question of good governance. Section 3.6 previously addressed the question of what defines good governance and summarizes it in terms of its principles - *“accountability, transparency, fairness, efficiency, participation, and decency”*. These theories go a step further in promulgating where a major pitfall to good governance and partnership lies -self-interest. Though it appears to go unmentioned it also points to the issue of trust. Trust they say is the glue of any partnership and in the absence of trust, excessive contracts, documentation and monitoring gobbles up time and money. Trust is defined by Gambetta (2000) as *“our expectation that another person (or institution) will perform actions that are beneficial or at least not detrimental to us, regardless of our capacity to monitor those actions”*. The more trust there is the better and one of the aids to strengthening trust is reputation. Fombrun and Foss (2005) define reputation as *“a collective representation of a partner’s past actions that describes and assesses the partner’s ability to deliver outputs and outcomes.”* They speak further of the emerging discipline of *“reputation management”* whose central tenet is that strong reputations result from initiatives and messages that are in tune with the distinctive values and personality of a company, and which are meaningful to all company constituents and stakeholder groups. There is no doubt that is the absence of a good reputation leads to the reduction in trust which in turn affects how stakeholders behave and the decisions they make, which leads to increases in costs and handicaps performance. Trust and reputation are therefore economic assets and if Arrow, 1974 in Jobin (2008) is right in that *“Virtually every commercial transaction has within itself an element of trust...”* then surely one of the assets that matters the most in the risky business of a public private partnership, is that of reputation and trust - in both sectors.

## ENABLING ENVIRONMENT

According to the World Bank (1997a) all forms of private sector participation can be designed so as to improve technical and managerial capacity. But the other desired objectives can only be achieved if the appropriate arrangement for private sector participation is chosen and if the government creates the necessary enabling environment. This section of the review therefore aims to set out both the macro and micro environment within which PPPs need to operate and that which determines a country’s readiness for a public private partnership facility. Figure #22 below sets out the specific areas of interest.



▲ Figure 23 Macro and Micro Areas of Study  
Source Author 2009

### 3.8 MACRO ENVIRONMENT

Public private partnerships do not occur in a vacuum. They first unfold in a broader context, encompassing the institutional, legal, financial, regulatory and policy setting of a country and then at the project level where the case specific details are ironed out. It is necessary to reduce the level of uncertainty surrounding public-private partnership, to increase the confidence of investors and to present the State as a “credible partner” OECD (2008b). The programme will therefore require clear and unambiguous support from politicians within its Ministries and senior officials heading the various agencies. Such being the case, a successful PPP ought to be designed with very careful attention being paid to both the macro and micro environment in which the partnership is being implemented and in many instances will require ongoing reform which only the Government can initiate. To foster a PPP investment friendly environment, what are those primary framework areas that are deemed necessary?

#### 3.8.1 policy framework

“Public policy requires consistency and predictability” Basanes et al. (1999). Particularly because PPPs tend to span decades, any and all investors would need to have confidence in the country’s

political commitment to the process and this can be conveyed through the formulation of a policy framework UN/ECE BOT Expert Advisory Group (2000). This is considered an important step towards building an enabling environment for PPPs. Existence of a clear framework can remove ambiguities and uncertainties about government's intention to PPP development. The roles of the public and private sector should be clearly defined in the framework with private sector friendly policies formulated and their implementation needs coordinated in a manner *"consistent with other policies within the Administration's overall policy framework"* UN/ECE BOT Expert Advisory Group (2000).

UNESCAP (2007) speaks about areas within policy where Governments can significantly improve the environment to support PPPs. These are inter alia, addressing social and political concerns, providing financial support/incentives, promotion of good governance and building the capacity of the public sector. Promotion of pro-poor PPP projects has challenges but through incentives and technical assistance can be a part of the government's policy framework to address some of the social and political concerns. If a PPP project is not financially viable but found to have high economic internal value, various options can be considered for improving the project's financial rate of return. Government policy can in such cases allow for intervention of various types and provision of incentives or subsidies. The main types of supports and incentives considered by the government UNESCAP (2007) include:

- Land acquisition
- Loan guarantees
- Revenue guarantees
- Tax incentives
- Force majeure coverage
- Foreign exchange risk coverage
- Capital grant and other forms of financial support (interest free loans, subordinated loans, equity participation, subsidies etc)
- Protection against reduction of tariffs or shortening of concession period

Setting of appropriate policy via the promotion of good governance is also a major responsibility of government and must be done while incorporating the principles of "accountability, transparency, fairness, efficiency, and participation". Gidman et al. (1995) identifies some of the key policy implementation issues that will need to be formalized in order to streamline the PPP project process. Some of these include:-

1. Managing Competition – Changing legislation to lower barrier entry to provider markets or the setting of rules to govern post-tender bargaining.
2. Foreign Participation – Protecting sensitive local industries or sectors.
3. Managing Malfeasance – Establishing mechanisms to allow for greater transparency.
4. Debt Frameworks – Changing legislation governing debt.

It takes years to establish a mature programme and one certainly longer than a political cycle; the policy must have very committed high level political support and must be broadly acceptable to the majority of political opinion.



### 3.8.2 institutional framework

Not to take away from the importance of the others but investors are going to want assurances that the operating framework within government *“is capable of managing the PPP process and that policy makers and the parties implementing projects have a realistic understanding of the complexity of PPP projects”* PPIAF et al. (2009b). Because the role of the public sector changes in a PPP from direct service to management and monitoring, significant changes in institutional mechanisms must be anticipated.

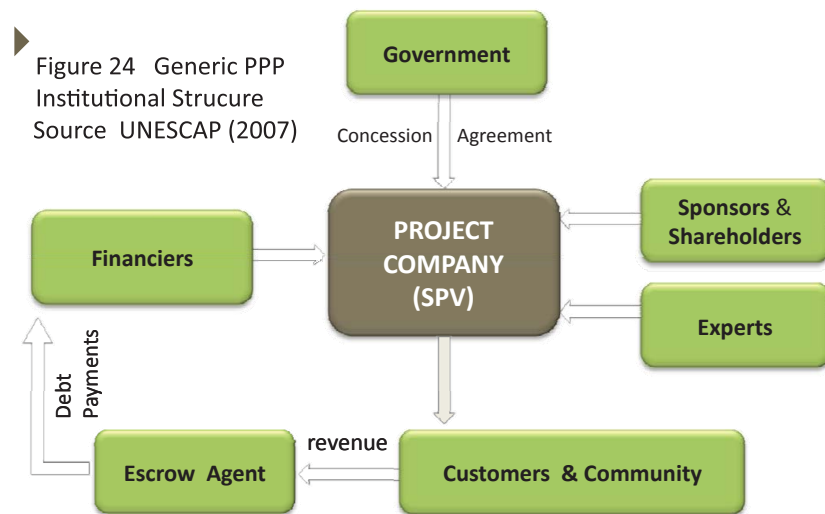
The institutional setting as defined by Guislain (1997) is *“determined by a country’s administrative, legal and commercial traditions and practices; competence of its public administration, degree of corruption in the system.”* Vives et al. (2006) defines institutional capacity as *“sound institutional framework that includes clear division of responsibilities and lines of accountability among sector and central institutions that oversee the operations of companies, including the way in which policies are implemented and on how that organization functions”*.

#### institutional models

The European Commission (2003) identifies two principal institutional models of intervention. The decentralised approach, as adopted by France, places responsibility at the regional level and within the concerned line Ministries. Other countries, such as the UK and Ireland, have selected a more centralised approach by creating for example a dedicated national PPP unit. According to UN/ECE (2007) this provides an important consistency across the different sectors and projects as well as reducing the bid time and costs associated with the project. For further strengthening of a country’s institutional setting UN/ECE BOT Expert Advisory Group (2000) recommends the creation of a one stop approval shop that has final jurisdiction in all matters related to the project.

The experiences in various countries suggest that either of the two approaches will allow the public sector to change from being a direct service provider to an independent regulator, manager and monitor. Very clear definitions, responsibilities and timeframes for various tasks and a transparent rule-based administrative process by which PPP projects are developed, approved and procured by governments will be necessary. This aims at streamlining procedures, reducing uncertainty and the transaction costs during project development UNESCAP (2007). The European Commission (2003) warns against the temptation to create new institutions or institutional mechanisms to deal with all the

issues and experience as it has shown that institutional overdesign can kill or significantly slow down the process. An example of the institutional design is captured in Figure # 23 below.



- A typical PPP structure can be quite complex owing to the number of contracts and parties involved but the main participants that are directly involved in a PPP are:
- the public sector procurer (the government, local governments and agencies, state-owned entities);
- the sponsors who as equity investors normally create a special purpose vehicle (SPV or project company) through which they contract with the public procurer, and the principal subcontractors;
- financiers;
- subcontractors; and
- other involved parties such as advisers (legal, financial, technical), insurers, rating agencies, underwriters, etc.

The actual structure however, depends on the type of partnerships as may be seen in discussion presented later.

### **and where there is little institutional strength?**

The concern for institutional strength is not limited to merely those directly involved in the partnership but it speaks to the entire cadre of agencies and civil servants that facilitate setting up a business, the ease of complying with taxation laws, obtaining permits and licences, registering property, enforcing contracts etc. According to Engel et al. (2008) *“institutional separation between the agencies in charge of strategic planning and policy design, and those involved in execution of projects, and enforcement of contracts....results in an array of problems”*. He identifies the following as problems that can arise from this poor integration. He argues that it leads to the:-

- Emphasis of some responsibilities at the expense of others.
- Lack of supervision of maintenance of existing projects.
- Capture of the public agency either by construction lobby groups or politicians, and
- Weakening of public agencies against pressures from the construction industry, all of which ultimately leads to the *“construction of wrong projects at excessive costs”*.

This would therefore imply that a country would not only have to decide whether implementation will take place at a central or decentralized level or just focus on how to strengthen the agencies that are signatories to contract but the country must appreciate that nothing less than public sector reform will suffice. The weakest link, even on the periphery of the development can, without exaggeration, be the partnership's undoing.

### **building capacity**

The literature also suggests that the concept of partnership is not always well understood by the public servants, largely because of the lack of capacity which can be a major obstacle. Skills of a diverse nature<sup>24</sup>, from project identification and economic evaluation to financial and risk analysis to contract document preparation to procurement to contract negotiation are required in administering a PPP programme. It will be necessary to recruit qualified personnel but equally impractical to employ all you will need. It is therefore necessary to consider suitable capacity-building programmes to develop necessary skills of existing officials involved in all stages of the process. Even more so it will be important to ensure you retain the staff on completion of training.

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24 One of the key challenges is that instead of the traditional approaches, which focus on inputs, PPPs require skills that can identify the outputs of projects. UN/ECE (2007) *Guidebook on Promoting Good Governance in Public-Private Partnerships*, New York and Geneva, United Nations..

Public officials need to have knowledge and skills in many related areas including public policy and planning, economics and project economics, finance, relevant legal framework, and broad technical issues pertinent to PPP development in each sector. The main areas in which development of skills are required as identified by European Commission (2003) include:

- Project identification and structuring
- Economic and financial evaluation
- Risk assessment and management
- Marketing of PPP projects
- Financing and fiscal management
- Legal and contractual administration
- Project procurement
- Contract negotiation
- Contract management and PPP programme management
- Participatory approaches to planning including public relations
- Engineering aspect of project design, construction, supervision, operation and maintenance.

The government may also consider developing PPP training programmes for public officials on such topics in collaboration with national training and academic institutions and can offer training programmes through these institutions. To solve this problem, many governments have prepared manuals, guidelines and technical notes based on their legal frameworks and administrative procedures for PPPs. However, if countries do not have such experience UNESCAP (2007) recommends requesting assistance under a technical cooperation agreement with another country which does.

Let it not be implied or suggested that the only party that requires some re-tooling is the public sector. As so aptly put by Payne (1999) *“the traditional antipathy between public and private sectors will require a major shift on both sides – for public sector agencies to become more market sensitive and for the private sector to become more socially responsive”*. The private sector players are also being thrown into an

operating structure that is different from what they have been accustomed and do need to find their feet also. For example, the desire for accountability on the part of the public sector demands an approach to decision making that is quite foreign to that of the private sector party. The construction industry in and of itself is renowned for adversarial relationships that arise mainly from poor communication and conflicts that result in cost and time overruns, low morale and

#### ▼ Box 1 Successful Chilean PPP

**Chile** is a case in which significant benefits have been obtained with the transfer to the private sector. Contrary to what typically happened in other developing countries, the public utilities were transferred to private operators only after they had been turned into efficient providers and a competent regulatory agency had been put in place. Still, there was a huge financial benefit for the government with the transfer, which brought USD\$2.3 billion in cash receipts, plus a doubling of yearly revenues from income and value-added taxes paid by the regional water companies. The private sector invested a total of USD\$1.2 billion in wastewater treatment between 1999 and 2006, and Chile is now the only country in the world (including Europe and North America) where full treatment of urban sewage is being achieved without any government money, financed entirely by the private investors. Marin (2009)

eventually litigation. Partnering on the other hand involves conflict management, team building, collaboration, trust and commitment; most of which represents a major cultural change for the private sector parties. Lastly, Grimsey and Lewis (2004) provides the example of how several UK construction companies have become *“more like facilities management companies, reinventing themselves as project operators and service providers, which has turned out to insulate their bottom line from cyclical construction markets”*. PPPs therefore present a capacities building and cultural change opportunity for both parties and will require some time for adjustments to be made.

### 3.8.3 regulatory framework

Regulation as defined by IMTA-OECD (2008), is a *“form of government control on particular aspects of economic activity”* and by Pongsiri (2002) as a *“traditional role of government in which public officials set standards and rules to guide the operation of private business”*. This type of control relies upon various instruments and can be exercised through different regulatory alternatives, such as direct controls (standards and norms, permits...), economic instrument (prices, incentives, taxes) and encouragement of self-regulation (benchmarking and information sharing, public awareness).

As in the case of most infrastructure projects, the operator (be it private or public) is likely to possess market power which in the absence of adequate oversight can lead to excessive fees and reduced quality. The literature reviewed all concur that there is a need to regulate a service provider to ensure that services provided meets the desired standard, quality and cost and ensures sustainable development<sup>25</sup> in a sector. However, some case studies reviewed, demonstrate that this can be made difficult by regulatory and legislative frameworks that are incomplete, outdated and poorly integrated across sectors.

This system as defined by UNESCAP (2007), consists of a set of legal instruments and rules (laws, contract agreements, statutory rules framed by the government etc); procedures and processes (for obtaining required approvals, licences and permits etc.); and regulatory authorities (ministry, regulatory agency, judiciary, competition commission etc.) with the delegated power. Figure # 24 above shows the elements of regulatory governance within the regulatory process and how regulatory governance is related to the broader institutional structure and to the regulatory tools used.

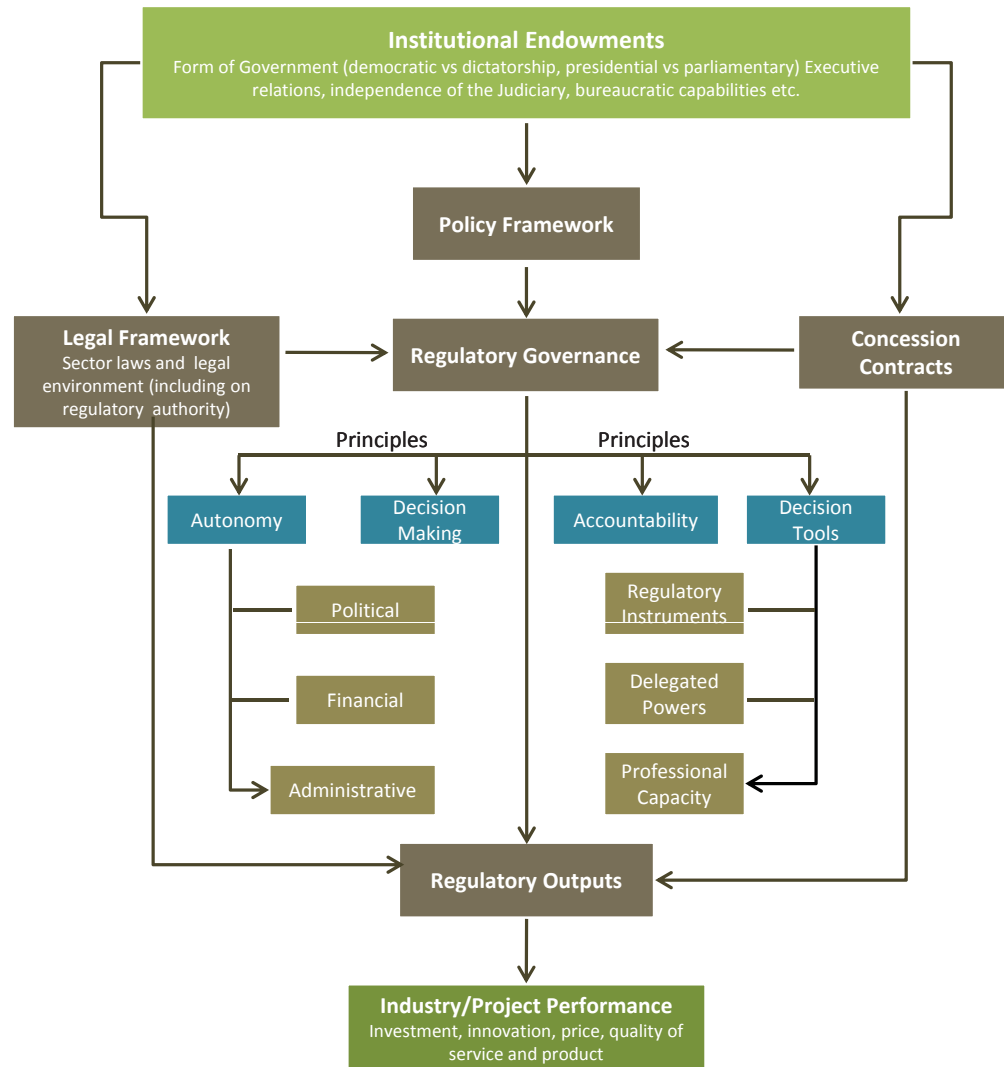
The diagram illustrates the necessary underpinnings for a robust regulatory framework and the author interprets it in the following way. It starts by pointing to one of the primary determinants of a highly functional regulatory system – the form of government through which it operates. This in turn will determine the policy environment which feeds into the legal framework that ultimately creates the desired regulatory outputs – affordable and high quality goods and services, increased investment and reasonable profits. At the heart of it all though is good regulatory governance which UNESCAP here ascribes to the regulator having:-

- Highly accountable stakeholders – which includes
- Political, financial and administrative autonomy in decision making
- Appropriate tools for sound decision, namely effective regulatory instruments (legally

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<sup>25</sup> It must therefore be economically and financially sustainable, environmentally sustainable and socially sustainable.

enforceable licences and permits), delegated powers not concentrated in the a few positions and a cadre of well trained professionals.



► **Figure 25** Regulatory Governance Framework for PPPs  
Source UNESCAP (2007)

Excluding self-regulation, IMTA-OECD (2008) identifies four main regulatory models: (1) Regulation by the State (2) Independent regulation (Anglo-American model) (3) Regulation by contract (French model) (4) Outsourced third party regulators. Some of the duties of a regulating authority as identified by the World Bank (1997a) include:-

1. Protection of the public's interest
2. Establishing tariffs determining allowable increases and periodic reviews.
3. Determining (or advising policymakers on) appropriate service standards.
4. Monitoring company performance and contractual compliance.
5. Receiving complaints and arbitrating disputes between the utility and its customers
6. Imposing sanctions for failure to meet agreed standards, and
7. Establishing accounting standards operator's cost and performance analysis

## Benefits

By delegating these powers to independent regulators, the government can assure private investors that it would not be able to arbitrarily change any rules or intervene in the market after investments are made, as tends to happen when investors compete with State enterprises. The stability of rules and credibility of the regulators are the main characteristics of an independent regulatory environment and these rules will guard against excessive tariffs, discontent between parties, inadequate service level and quality and inadequate level of sectoral investment. It is this regulatory environment that investors will be operating under and their forming a view of how these rules might evolve over the years that determine much of whether a partnership is likely as long term financial sustainability is more achievable if pricing is based on economic and longer-term social considerations, rather than political ones.

There are benefits to other stakeholders, as Yeung (2006) points out in his assessment of regulation in the Caribbean. He identifies the following:

- Greater transparency of decision-making. Regulatory bodies usually have to publish justifications of their decisions.
- Right to appeal. Ministerial pricing decisions, however unfair to a utility company or to consumers, are not normally open to appeal; those made by regulatory bodies normally are.
- Increased ability to penalise monopolistic companies.
- Non-involvement in the complaints process frees up government for other functions.

Finally, it is useful to note that the structure of many public private partnerships, actually work as regulatory instruments as they set many of the key regulatory parameters for the sector and may be revoked if the concessionaire fails to meet its obligations, Guislain (1997). However, as these contracts will govern a project for decades, the agreements tend to be “incomplete” and flexible. In instances such as this, regulatory discretion becomes very useful. Though desirable, this flexibility will require that the regulating authority is independent. How is that secured? World Bank (1997a) concedes that achieving independence for the authority is not easy but recommends the following steps be taken to increase the likelihood.

- i. Tenure must be fixed for a certain period to protect regulators from arbitrary removal.
- ii. The Authority must be funded directly from levies from utilities or customers not from ministerial budgets
- iii. Pay must be competitive with private sector salaries to minimize corruption and to attract competent staff.
- iv. Regulators must be barred from political activity and from any interests in the areas they regulate.

### 3.8.4 legal framework

Because PPPs are defined and governed by a complex interaction of legislation and project contractual documents, there is a great sense of unease on the part of private sector provider based on the perception that they are ‘contracting with the umpire’ who has the upper hand. It therefore behooves the Government to provide a legal environment that is stable, secure, consistent and balanced as well as contracts that are enforceable.

Based on the literature there are many countries where the legal provisions and procedures related to private sector participation are complex, numerous, scattered over many different instruments; often not clear on many issues, and have no fixed time frame for completion. Guislain (1997) suggests one that starts with the recommendation that the objectives of a public private partnership programme “*be compatible with the constitutional provisions that underpin the legal framework for business*”. Some of these might include - the private contract law, company law, tax law, labour law, competition law, consumer protection law, insolvency law, property law, foreign investment law, intellectual property law, environmental law, public procurement law, acquisition or appropriation and many other laws. To address these problems, many countries have enacted special legal instruments and/or have amended the existing ones.

UN/ECE (2007) has recommended five key principles and priorities to guide the framing of the legal environment:-

- Protection of rights of investors to dispose of their property and assets;
- Promoting a better quality of legislation under the banner of fewer, better and simpler rules;
- Making enforcement more business sensitive; especially where investors fear that the local courts will favour the local partner.
- Improving the effectiveness of the judiciary in the enforcement of contracts; and
- Developing the legal framework for PPPs on the basis of thorough consultation in those areas which most directly affect the start up of the project and its operation, including concession, tax, competition, procurement and company laws.

The legal instruments and/or government rules and guidelines will define the parameters of the PPP relationship and guide how the sectoral agencies and local governments may initiate, develop, submit for approval of the national/provincial government, procure, negotiate and make deal with the private sector, and finally implement a project.

For illustration sake lets us take a look at two examples raised by Basanes et al. (1999) in their review of five Latin American countries undertaking PPPs. The first speaks to a particular concern of private lenders/investors where they are entitled to operate a concession to avoid a default by the concessionaire. It is likely that they will appoint an operator rather than directly undertake such tasks. This raises the issue of whether any breach of the concession by the operator appointed by the lenders renders the lenders automatically liable, or whether the lenders’ responsibility is limited to diligently appointing an operator with experience in the particular industry. In the absence of this level of diligence in clarifying such issues, a country will find it harder to attract the capital needed for these infrastructure projects.

The second example speaks to termination clauses. Generally, nonperformance of the concession agreement by the concessionaire allows the government to terminate the concession. However, a similar right for the benefit of the concessionaire following a default of the government is not contemplated in all legislation. Where no right of termination is granted to the concessionaire following a default by the government, the concessionaire is not only confronted with a performance risk, but also with the further risk that it be required to continue performing its obligations despite the government’s default. This imbalance between the government and the concessionaire is inconsistent with the creation of a favorable environment for private investment in infrastructure services.

As a final comment, UN/ECE BOT Expert Advisory Group (2000) points out that PPP processes are often very complex and as such this raises the cost which can result in the exclusion of all but the wealthier firms. This indicates that simpler procedures will improve competition, which will also increase the range of partners governments can choose from. They also recommend that countries not be too much in a hurry to establish highly detailed PPP legislation in the early days of the programme as without experience it can be problematic should changes be necessary.

### **3.8.5 conclusion**

In the absence of a credible and functional policy, institutional, legal and regulatory framework, Governments are going to find it difficult to secure interest in infrastructure investment, from not only the international but also the domestic market. This can be attributed to too many unknowns and uncertainties that makes such investment present risks they are less likely to control.

One way of putting a more compelling argument before the private sector would be the use of an investment plan. Not only would this plan demonstrate the extent to which these various frameworks exist but it would more credibly drive home the level of government commitment. This programme is not a wish list of projects and is not specific to just the PPP model but ought to be a general investment plan for a time period of which the use of PPPs is merely one such option. This would give the prospective investors both a general picture of where the Government is heading, what other projects of interest are in the pipeline as investor would be interested in a programme than in a one-off project offering.

The fallout from poor investor environment will be the loss of investment opportunities, investment being limited to the few infrastructure projects where market return can be high and payback period is short, maintenance expenditures are kept to a minimum (which degrades quality) and/or the insistence on government guarantees. But what of the environment to be fostered at the project level? To what extent does project formulation, partner selection or contract structure and management, determine the likelihood of success? We take a closer look at these issues in the next section of the chapter.



*Integration between the macro and micro level operations for procuring and delivering PPP projects is what constitutes an effective overall PPP governance system. At the micro (project) level, which is examined in this next section, we will next explore the critical stages that must be carefully scrutinized and adhered to in order to have a successful public private partnership.*

### **3.9 MICRO ENVIRONMENT**

Any attempt to establish a PPP in an environment hostile to the private sector is a clear and present invitation for failure. The business community is especially sensitive to commercial risks and even more so with international infrastructure operators working in unfamiliar local environments. As such, this paper is taking a keen look at what is required not only at the macro level but also at the micro (project) level in order to establish a sound PPP design for the realization of all project objectives. From the literature reviewed, it is fair to state that there is no one model for undertaking a public private partnership, as such, whatever is deemed suitable has to be adapted and modeled on not just a project-specific basis but a country-specific basis.

- Culled from the literature are some of the key criteria that will have to be satisfied in order for Government to consider the route of a private sector participation in public services. These criteria are as follows:-
- Private sector involvement must deliver a net benefit to Government, having regard to the risks of the project, compared to traditional public sector delivery Treasury and Finance Dept (2007);
- The risks associated with the project are clearly identified and allocated to the parties best able to manage those risks OECD (2008b);
- Projects must be subjected to a competitive bidding process Zitron (2006) .
- Direct negotiations entered into only under a limited set of circumstances; and
- Probity is maintained during all phases of the process Johnston and Gudergan (2007).

The process through which a project is developed to deliver its objectives may be broken down into four general tasks.

1. Project definition and planning
2. Project development
3. Procurement
4. Contract Management

Located below in Table #6 is an overview of the different steps taken to facilitate a smooth, successful public private partnership.

**Table 6** PPP Project Phases and Activities

	Project Definition and Planning	Development & Procurement	Contract Management
Activities for PPP Infrastructure Delivery	<ul style="list-style-type: none"> <li>Needs identification</li> <li>Project Identification</li> <li>Pre-feasibility Study</li> <li>Procurement Planning</li> </ul>	<ul style="list-style-type: none"> <li>Feasibility Studies – determine VFM.</li> <li>Cabinet Approval</li> <li>Prepare Tenders</li> <li>Identify Financing Options</li> <li>Select Partner</li> <li>Financial closure</li> <li>Cabinet Approval</li> <li>Contract Award</li> </ul>	<ul style="list-style-type: none"> <li>Finalize detailed design.</li> <li>Construct facility</li> <li>Manage relationships</li> <li>Manage contract</li> <li>Monitor concession</li> <li>Evaluate within 12 months for goals met.</li> <li>Maintain facility</li> <li>Transfer asset</li> </ul>
Key Activities	<ul style="list-style-type: none"> <li>Assess existing infrastructure</li> <li>Assess infrastructure need and effective demand</li> <li>Evaluate alternative options</li> <li>Public Consultations</li> <li>Social Marketing</li> <li>Identify major stakeholders</li> </ul>	<ul style="list-style-type: none"> <li>Identify PPP model</li> <li>Perform Cost Benefit &amp; VFM Analysis</li> <li>Apply PSC</li> <li>Invite interested bidders &amp; short list.</li> <li>Develop draft contract</li> <li>Evaluate and Identify preferred bid</li> <li>Negotiate</li> </ul>	<ul style="list-style-type: none"> <li>Final design approval</li> <li>Monitor construction</li> <li>Monitor compliance in operations</li> <li>Monitor risks</li> <li>Resolve disputes</li> <li>Identify residual value and transfer to State.</li> </ul>

In planning for these three phases, there are a number of questions that Government has to pose and answer along each stage of the process. First is to determine what are the project requirements and scope, if the project should be executed via a PPP and if so which model would be best?

### 3.9.1 can the project be delivered as a PPP?

Considering all arguments outlined in the previous section for and against the use of public private partnerships, the question as to when it would be deemed suitable to enter into a PPP is a very relevant one. Projects that are unlikely to deliver the government's overall policy requirements or that have few prospects as a PPP can be eliminated at an early stage, before incurring significant costs and damaging the credibility of the project and the government.

A thoughtful review of the literature would suggest that after assessing a project and identifying the various risks that the undertaking would pose, the State would determine if the majority or major risks were ones the private sector can better manage and if so then the exploration to determine if the business community would be responsive would begin.

UNESCAP (2007, PPIAF et al. (2009b) positions that before any project identification is undertaken, the State must determine its own readiness for a PPP model and as such must assess the *“the capability and capacity of the public sector to implement PPPs”*. They must as well, determine if there is *“sufficient private sector interest, if the PPP is the best delivery model”* for that particular project and the objectives the government wants to achieve.

The private sector, in identifying potential infrastructure projects, will be driven by a different set of considerations from the public sector. A very significant divergence between the two parties in the assessment stage is highlighted by Daniels and Trebilcock (1996) as the public sector is likely to undertake a benefit-cost analysis that weighs all relevant social costs and benefits associated with the project and is subject to a myriad of political considerations. Private sector proposals, on the other hand will be influenced only by the expected private rate of return on the project.

One of the most fundamental determinants is the nature of the good/service itself, which asks decision makers to take a look at whether it would fit the bill of a public or private good, an competitive or monopolistic good or a merit or economic. The answer would direct the decision towards either traditional procurement or two general types of PPPs mentioned in Section 3.4.2 availability based PPP (private finance initiative) or usage based (concession).

There are goods/services that have long remained in the realm of traditional Government provision. These are referred to in economic literature as public, monopolistic and meritorious goods. According to neo-classical theorists, they have remained for a large part outside the domain of the market because of certain characteristics.

Public goods for example, are those that are considered non-excludable meaning that if the good is provided for one person, it is automatically available for everybody else, and non-rivalrous, meaning that the good is not less available for any one person because another person is consuming it. The assumption here is that if a good/service is subject to these 'free riders'<sup>26</sup> then it's difficult for the private sector to provide the efficiencies desired and hence difficult to attract them the delivery of this type of infrastructure. Examples of these would be defense, justice and public order.

Most infrastructure are by tradition considered to be a natural monopoly (though the option to unbundle<sup>27</sup> has been applied to many) which is defined as a situation where for technical or social reasons there cannot be more than one efficient provider of a good. Out of concern for market dominance and abuse of the absence of competition and choice the State has largely been relegated the responsibility for such. That too has been evolving as improved regulatory capacity and autonomy is granted to various agencies. Examples of these would include telecommunications, roads, sewage treatment etc.

The last category is that of merit goods which can be defined as is a commodity which is judged that an individual or society should have on the basis of some concept of need, rather than ability and willingness to pay. Based on the value society places on them, the collective opts to pay for them to be provided to those who cannot or in some case will not pay. Examples of these would be health and education.

This is relevant to the discussion of PPPs as the way in which these products are 'packaged' by the Government will determine the level of response from the private sector who operates primarily off profit. There are some goods and services that society would prefer the State remain as primary providers. For example in the case of merit goods, a PPP model would be chosen whereby the assets remain the property of the State; who merely purchases the service from the private sector. Or WSS sector where the country benefits from a more efficient and reliable service which

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<sup>26</sup> Please see glossary for definition.

<sup>27</sup> Splitting up of project components into distinctly different tasks for separate contracts

the Government pays the business community to provide. In the case of toll roads and ports other options are available as these goods are rivalrous and excludable and other models allowing concession arrangements with the private sector charging direct fees are permissible.

Very importantly, PPPs are regarded as unsuitable for those projects where there are rapid technological or other changes which make it difficult for both procuring authorities and bidders to confidently predict the service delivery requirements and to include sufficient contractual flexibility at a reasonable price HM Treasury (2008a)

### 3.9.2 should the project be delivered as a PPP?

Once the Government has been satisfied that the conditions are in place to enable delivery by PPP, it now has to turn its attention to the question, should it be?

A major determining factor is the high transaction and procurement costs associated with these projects. Many countries such as Australia and the United Kingdom only consider infrastructure projects of a certain minimum value as likely candidates.

In order to enhance project viability, the government may lend support through asset ownership, equity participation, risk sharing and provision of various incentives including loan guarantees for sub-sovereign and non-sovereign borrowings. These types of involvements require the government to bear explicit direct and contingent liabilities<sup>28</sup> and as such, the PPIAF et al. (2009b) cautions that these guarantees can actually serve to transfer risk back to the public sector and may weaken the incentive of the private sector and lenders. Analytical methods will therefore have to be developed to anticipate fiscal liabilities and these assessment options (European Commission, 2003) should include but not limited to:-

- **Financial Comparator** - involving a comparison of the cost of the preferred PPP tender with the cost of delivering the project through traditional public sector procurement. The Comparator is based on a hypothetical project contract in which the public sector undertakes all functions (design, build operate etc) based on actual costs incurred on similar projects. It should include all risks and the value of any assets to be made available to the project.
- **Best available alternative** - for projects where the cost of traditional public sector procurement is difficult to determine, the cost of the preferred PPP tender should be compared with the best available alternative costing;
- **Price benchmarks** - involving a comparison of the preferred PPP tender with reliable, comparable and independent price benchmarks or unit costs (for example, standard costs per volume); and
- **Comparable PPP projects** - involving a comparison of the preferred PPP tender with the cost of other comparable existing PPP projects.

These concepts underpin the creation and development of PPPs – value being received for money spent and projects that are affordable to both users and/or the State (in the long and short run) are what drives the need for a PPP; it is adequate risk allocation that drives the process and ‘incentivises’ both parties to perform their responsibilities; competition and contestability sustains

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<sup>28</sup> *Explicit direct liabilities are those recognized by a law or as mentioned in a contract agreement, they arise in any event and are certain. A contingent liability is one that only arises if a particular event occurs and is therefore difficult to predict. (UNESCAP, 2007)*

the viability of the project by removing complacency and transparency and accountability which anchors all the aspects of PPPs in a way that legitimizes its goals. These concepts are elaborated during the next section, justifying their relevance and how critical they are to realizing PPP project success. Providing that the project is deemed 'fit', how do we then determine if a project requires a PPP or traditional procurement? If PPP, the selection of a suitable arrangement can be a complex task and is based on sector, individual project characteristics and needs which Appendix B outlines as an example of strengths and weaknesses for a sanitation project.

In addition to the tools mentioned above, there are three critical benchmarks which must be satisfied before the PPP green light is given, namely: – project affordability, its ability to secure value for money and adequate allocation of risk. We will now explore each to understand their relevance to the PPP process.

### 3.9.3 who pays and how?

Assessing affordability can be a bit elusive for Governments who rarely budget for a longer horizon than the upcoming year. This practice however, makes this question pointedly necessary and vital to the discussion. According to PPIAF et al. (2009b) affordability examines the *“level and structure of the project’s overall revenue requirements in relation to the capacity of users or the public authority to pay for the infrastructure service”*. OECD (2008b) describes a project as affordable if *“government expenditure associated with a project, be it a PPP or other mode of delivery, can be accommodated within the intertemporal budget constraint of the government”*. But what does that mean?

It means that when the State borrows funds to pay for the infrastructure then public debt increases. However, as it now owns an economic asset, its net worth may have actually improved. For a positive net worth (the ideal), the *“present value of expected future surpluses must equal or exceed the value of existing public debt”* OECD (2008b). Should this not be the case, then the project is deemed unaffordable.

There are instances where PPPs do make a project affordable which would not have been possible under traditional procurement. Infrastructure projects tend to be bulky with large capital outlays. If done via a PPP, the private sector will be responsible for that upfront financing and the government will then (in the absence of user charges), pay the private partners a fee for services delivered over a period of time. This is therefore easier on the State’s cash flow.

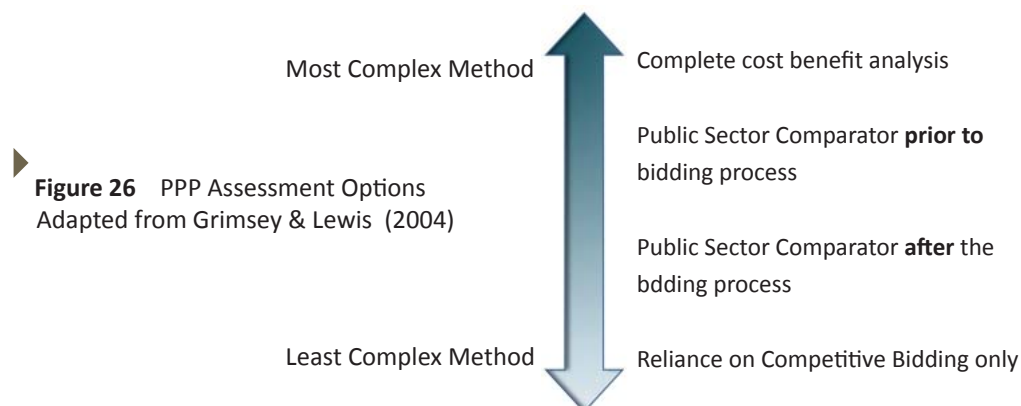
It must be borne in mind that there are only two sources to pay for services delivered by PPPs, namely the Government via taxes and the beneficiaries via direct user fees. As infrastructure becomes more commercially driven the debate between the move from taxpayer pays to user pays continues. In a public–private arrangement, revenues to the private firm can come from two sources, namely consumer payments, or public entity payments (or from some combination of both). According to Grimsey and Lewis (2004), the source is important because it determines the:-

1. Amount and timing of public expenditures.
2. Nature of the risks to which revenues are exposed, and
3. Incentives of a private firm to adjust the cost and quality to consumers’ willingness to pay for them,

What this underscores is that when public sector entity is the source of revenue then there is little commercial risk but a higher chance of contractual disputes which can result in failure to pay, Daniels and Trebilcock (1996). However, when the revenue consists of user fees, as in any market context, revenues are governed by commercial risk, which is largely retained by the private partner.

### 3.9.4 will society receive value for money?

According to Little (2008) this is a term used to “*assess whether or not an organization has obtained the maximum benefit from the goods and services it both acquires and provides, within the resources available to it*” and “*not simply the cheapest price*” UN/ECE BOT Expert Advisory Group (2000). The OECD (2008b) summarises the concept as “*an optimal combination of quality, features and price, calculated over the whole of the project’s life*”. In essence, it can be described in terms of economy (careful use of resources to save expense, time or effort), efficiency (delivering the same level of service for less cost, time or effort) and effectiveness (delivering a better service or getting a better return for the same amount of expense, time or effort). Lastly, HM Majesty (2008) considers value for money to be “*a relative concept [that] it is measured in terms of a comparison with other potential or actual outcomes*”. Assessing value for money therefore requires an ability to define, estimate or identify both a proposed approach and its related outcome and compare this to at least one alternative approach and its related outcome.



The factors that determine whether a project delivers value for money (VFM) will vary by type of project and by sector but will be common to a number of projects. The European Commission (2003) associates the following as necessary for achieving VFM:-

1. **Identification and reduction of whole life costs** - the integration of infrastructure design, build and operation, facilitating private sector innovation in design, an avoidance of over-specification and improved maintenance scheduling;
2. **Faster implementation** - the transfer of design and construction risks, together with the principle of no payment until commencement of service delivery, will provide significant incentives for the private sector to deliver infrastructure projects within short construction timeframes;
3. **Improved quality of service** - resulting from better integration of services with supporting assets, improved economies of scale, the introduction of new technology and innovation in design, and the performance incentives and penalties included in the Public Private Partnership contract, and

4. **Better allocation of risk** - cost effective transfer of risk to the private sector, enabling efficiency benefits to be generated across the term of the contract.

Though not included in the Commission's list above, Etienne-de-Bettignies and Ross (2004) and Grimsey and Lewis (2004) emphasise the need for competition to shore up the likelihood of achieving VFM. They state that "a substantial fraction of the benefits from private provision comes from marshalling the pro-efficiency forces of competition". This is basically advising that if there are not enough responsive tenders (competitors) to make the process competitive, the chances of society receiving the benefits will be lower and the likelihood of receiving value by means of the four goals numbered above will be diminished.

OECD (2008b) argues that sufficient transfer of risk to the private partner is necessary to ensure efficiency and value for money. It further posits that for the transfer of risk to be the most effective, it has to be transferred to the party most able to carry it and defines that as "*the party able to carry it at least cost, be it the government or the private sector partner*". UNESCAP (2007) concurs that the "specific characteristics of the project and the strengths of each party acts as a guide to determining risk allocation". But what is meant by risk and how does it facilitate the goal of value for money?

### 3.9.5 which risks and managed how?

Risk is defined as "*any factor, event or influence that threatens the successful completion of a project in terms of time, cost or quality*" European Commission (2003) or the "*probability that the actual outcome (i.e. sales, costs and profits) will deviate from the expected outcome*" OECD (2008b). This of course has to be "*outcomes*" that can be measured and quantified and must be distinguished from uncertainty "*where measurable objective or subjective probabilities cannot be calculated and ascribed to the range of possible and foreseeable outcomes*" OECD (2008b). Partnerships S.A. (2007) adds that "*allocation of risks between the public and private sector will form the backbone of any eventual service contract*" so in light of this defining impact that risk has on the identification, evaluation and implementation of a PPP project, a closer examination of the concept is very necessary. See Appendix H for Risk Types and their Definitions.

If one were constrained to identify a theme that graces the pages of PPP literature it would be the position that appropriate risk sharing lies at the heart of effective PPP design. "*If a good balance [between the Government and partner's risks] is not achieved it will result in increased costs and the inability of one or both parties to fully realize their potential*" European Commission (2004). It is apparent therefore, that there is no guarantee of attaining efficiency and effectiveness (VFM) simply because the private sector is involved. What it requires is incentivizing *both partners* and this depends crucially on the appropriate allocation of risk. **In the absence of sufficient risk allocation, service delivery can be deemed as public procurement even if a private company is involved** OECD (2008b). This is therefore suggesting that the distinguishing feature determining whether a project is defined as traditional public procurement or as a PPP should be whether or not a sufficient amount of risk has been transferred.

Some of the risks identified in the various literature may be difficult to specify in advance, for inclusion in contract terms but by way of example, Table #7 below describes the types of factors that could give rise to three general categories of risk; construction risk, commercial risk and legislative/regulatory risk.

**Table 7** Factors Contributing to Risk

Construction Risk	Legislative and Regulatory Risk	Commercial Risk
<ul style="list-style-type: none"> <li>Contract Disputes</li> <li>Industrial Disputes</li> <li>Weather Conditions</li> <li>Design Variations</li> <li>Change in scope</li> <li>Submerged Obstacles</li> <li>Materials Delays</li> <li>Equipment Problems</li> <li>Labour Shortfall</li> </ul>	<ul style="list-style-type: none"> <li>Delays in passing legislation</li> <li>Planning Approval Delays</li> <li>Changes in laws post contract execution</li> <li>Insufficient tariff structure</li> <li>Protracted dispute resolutions</li> <li>Government Policy Changes</li> </ul>	<ul style="list-style-type: none"> <li>Strength of competition or alternatives</li> <li>Size of market below expectations</li> <li>Unrealistic pricing</li> <li>FX Fluctuations</li> <li>Interest Rate Fluctuations</li> <li>Inflation rate instability</li> <li>Import Competition</li> </ul>

### 3.9.6 who bears what

According to Little (2008) the key to risk management lies within the concept of partnership and if risk can be transparently identified, equitably allocated, and costed appropriately, successful projects will result. If the objective however, is to just shift risk away from one party to the other, success will be more difficult to achieve, rather it should be borne by the party 'best able to carry it'. As clarified by the OECD (2008b) *"best able to carry it means the party who can control its occurrence and/or carry the risk at least cost, be it the government or the private partner"*. For example, the government should bear the risk of future legislation discriminating against the project while the private partner should be expected to control construction risk. See Hypothetical Risk Allocation Table at Appendix C UNESCAP (2007) recommends that *"if neither party can accept full control, then risk allocation should be based on the price the private party will charge to take on the risk and whether the government is able and willing to pay that price"*. According to Little (2008) many of the problems ascribed to PPP can be found rooted in poor risk allocation such as when governments try to shift all of the usage or revenue risk for a new facility to the private party. Grimsey and Lewis (2004) puts it best when they say *"Optimum rather than maximum risk transfer is the objective of the public private partnership arrangement"*.

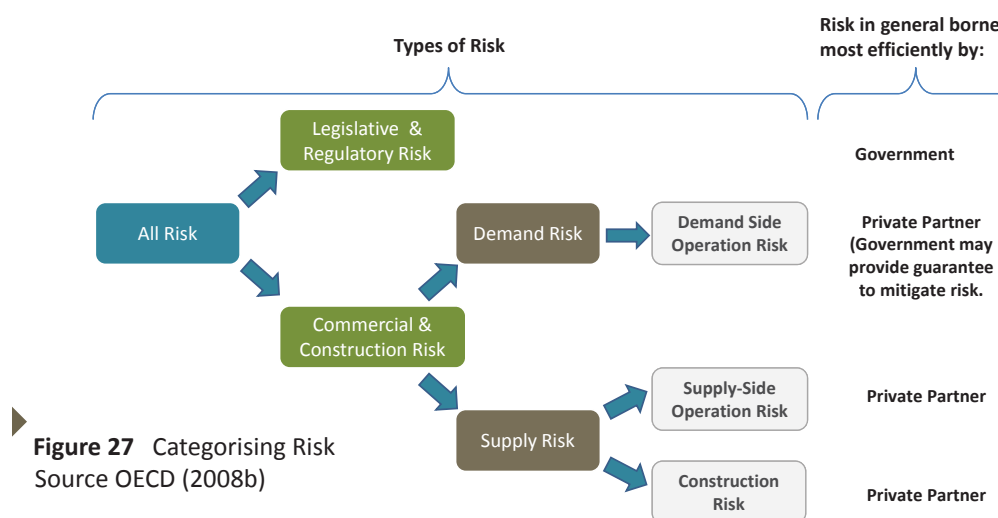




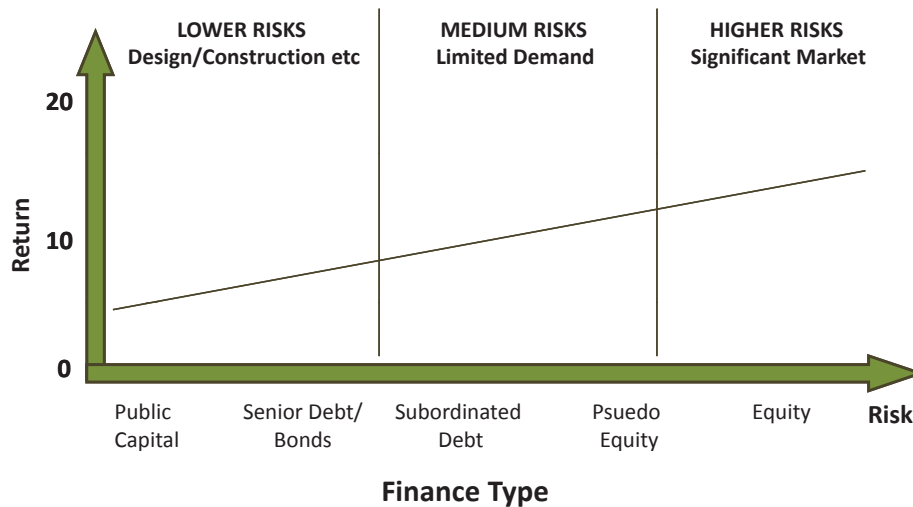
Figure #27 above shows the areas that are generally considered in a PPP project implementation process and the party generally considered better at shouldering particular project areas (risks). The private sector is better positioned to assume commercial and construction risks whereas the Government is better suited to assume legal and regulatory. The author believes however, that Hodge (2004) assessment is well-founded when he posits that *“risks allocated to the private sector are paid for by the government, which pays for the facility over the long term”*. This implies that the question before us is really, which is more costly, Government paying for the risk by ‘insuring’ the partner or the Government bearing the risk itself.

### 3.9.7 are the resources available?

All public projects, irrespective of delivery model, need to obtain finance from somewhere, whether from government or the private sector. According to Basanes et al. (1999) *“infrastructure loans are non-recourse or limited recourse loans”* which is called project financing (as opposed to corporate financing). This refers to financing in which lenders look to the cash flows of an investment for repayment, without necessarily having recourse to either equity sponsors or the public sector to make up any shortfall.

#### instruments of project finance

The project finance may come from a variety of sources. The literature informs that the main sources include equity, debt, and government grants and that the project relies on generating enough cash flow to service its debt and produce a reasonable return on equity UN/ECE BOT Expert Advisory Group (2000, UNESCAP (2007). The primary instruments however, are debt and equity financing.



▲ **Figure 28** PPP Project Finance and Risk Source

Equity is a long term financing instrument and refers to capital invested by sponsor(s) of PPP projects and others. The main providers of equity identified in the literature are project sponsors, government, third party and private investors. Commitment of equity for project finance comes with a designated rate of return target, which is higher than the rate of borrowed capital as debt. This is to compensate the higher risks taken by equity investors as they have junior claim to income and assets of the project. See Figure # 28 above.

Debt refers to borrowed capital from banks and other financial institutions and is the second bearer of risk since it receives interest and repayments of capital ahead of equity. In the case of insolvency, debt holders have recourse to the company assets ahead of equity holders. It has fixed maturity and a fixed rate of interest is paid on the principal. Lenders of debt capital have senior claim on income and assets of the project.

Generally, debt finance makes up the major share of investment needs in PPP projects. The common debt instruments as identified by UN/ECE (2007, UNESCAP (2007) are commercial loans, bridge financing, sub-ordinated loans and bonds. However more general research finding point to other options are open for to avenues such as grants from donor countries that may or may not come with conditionalities, or guarantees from third party organization (for example the Multilateral Investment Guarantee Agency) soft loans from multilateral and bilateral agencies and municipal bonds at the local government level.

The recommendations made by the PPIAF et al. (2009a) relating to negotiating project financing are first, that the currency of the project's cash flow should match the currency of the debt service, or the risk of any mismatch must be credibly covered either through hedging or by government taking the risk. Second, negotiating a long tenure of debt also increases the project's affordability as it will allow for lower capital repayments and lower annual costs.

### providers of finance

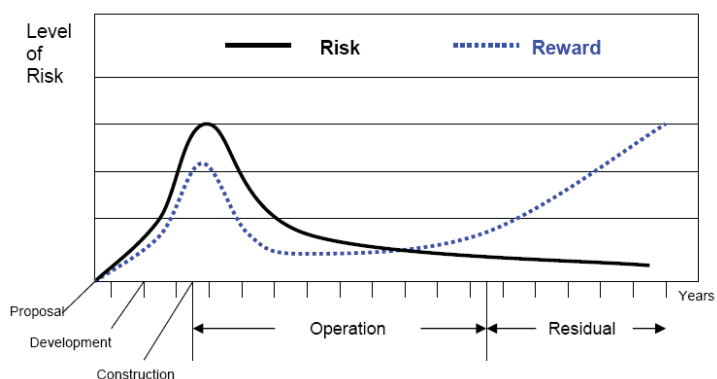
As mentioned above, bankers secure loans for infrastructure projects on the basis of the revenue stream of the project and not the asset itself (its nigh impossible to re-possess a highway or a sewage treatment plant for re-sale). Infrastructure assets are therefore quite worthless without the supporting contractual structure, making the detailed terms and conditions, and legal effectiveness, of the PPP contract very important. The main providers of finance for an infrastructure project are:

- i. Equity investment from project promoters and individual investors
- ii. National and foreign commercial banks and financial institutions
- iii. Institutional investors
- iv. Capital market
- v. International financial institutions

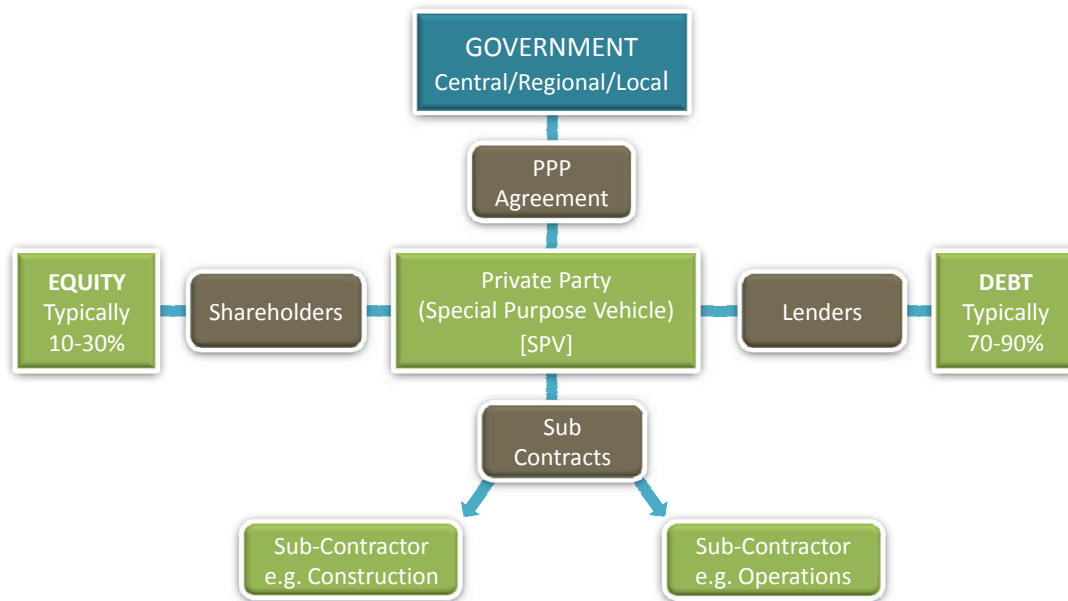
### financial structure

Careful analysis of alternative financial structures is required to establish the right financing structure for a project. As the expected return on equity is higher than return on debt, the relative shares of debt and equity in the total financing package have important implications for cash flow of the project. Higher proportion of debt, however, requires larger cash flow for debt servicing, which could be problematic, particularly in the early years of project operation when the revenue earnings could be low.

► **Figure 29** Relationship between Risk & Reward Source UN ESCAP (unknown)



As demonstrated graphically in Figure #29 above, the cost of capital of may be lowered through refinancing of PPP projects after their construction phase. Some sponsors may be required to provide a significant amount of equity capital at the beginning of a project during the construction phase when the risk is high. Once the construction is complete, the construction risks associated with it have been overcome, and the cash flow begins to materialize, the expensive equity or debt capital can be refinanced using cheaper debt capital thus lowering the total cost of capital. Figure # 29 below demonstrates links primary players and financing contributions.



▲ **Figure 30 Generic Project Finance Structure**  
Source UN NESCAP (2007)

**Compensation to project sponsor/developer**

The final but equally important aspect of structuring finance involves compensating There are five main ways to compensate a private investor of a PPP project:

- Direct charging of users
- Indirect charging of (third party) beneficiaries
- Cross-subsidization between project components
- Grants and subsidies
- Payment by the Government (periodic fixed amount or according to use of the facility, product or service)

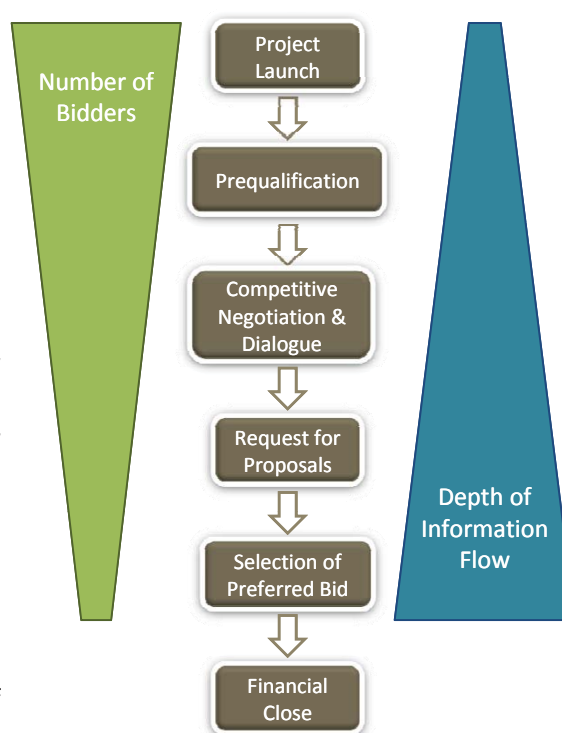
In closing, Basanes et al. (1999) in the Inter American Development Bank study of five Latin American country perspectives on PPP states that the project lenders that are focusing on a project’s bankability are looking out for certain contract specifics. These include criteria for project completion and commencement of operations to charge fees, provisions affecting the reliability of revenue streams, events of termination and enforceability of lender security over project and its assets. As such great care must be taken in the wording of agreements to ensure confidence in the project. Failure to do so “will result in higher transaction costs to the project sponsors, who may be forced to offer indemnities and guarantees to their project lenders to cover any potential shortfalls” Basanes et al. (1999).

### 3.9.8 who is the best partner for the job?

The procurement process itself, and the way in which it is managed and undertaken, can also have a major impact on delivering value for money. As defined by Bult-Spiering and Dewulf (2006) procurement is the “*process of selecting the right (private) parties for development, design, construction, maintenance, operation or exploitation*”. UN/ECE (2007) sets out the principle that governs the critical steps of selecting a private sector partner.

The selection of the bidder should be undertaken following a transparent, neutral and non-discriminatory selection process that promotes competition and strikes a balance between the need to reduce the length of time and cost of the bid process and, acquiring the best proposal.<sup>29</sup>

As demonstrated by the flow in Figure # 31, first, the public authority launches the project which is about attracting as many responsive bidders as possible and increasingly detailed information flow as the process progresses. The notice/invitation to bid must define the project very clearly and unambiguously setting out the needs to be met. Traditional project procurement has usually focused on inputs, but PPPs involve fundamental changes in the way projects are prepared and in the information that needs to be provided to private sector investors PPIAF et al. (2009b). This is done in terms of outputs or performance standards desired by the procuring authority. OECD (2008b) recommends leaving the design to the private partner in order to create room for the private partner to be innovative in its design and thereby improve the level of efficiency of the service. It is held that, if the government prescribes the design, it would also have to carry the risk resulting from faulty design. Good bidders will be very interested in assessing the quality of the public sector team and its advisers before deciding whether to prequalify.



▲ **Figure 31** Outline of Procurement Process  
Source PPIAF et al (2009a)

Choosing a partner should be done according to a set of criteria, amongst which are service, price, competence and resources to implement the contract. PPIAF/World Bank (2006) identifies three primary processes used to select and reach agreement with the operator.

<sup>29</sup> *Transparency refers to the openness of procurement policies and practices. Neutrality refers to clear, specific and predictable rules that do not provide scope for discretion and prevent any conflict of interest and provide a means of complaint and monitoring the implementation of the rules. Non-Discrimination refers to all fair and equal treatment of all economic entities, public and private, foreign and domestic in the competition for PPP contracts. UN/ECE (2007) Guidebook on Promoting Good Governance in Public-Private Partnerships, New York and Geneva, United Nations.*

- Competitive Tendering
- Competitive Negotiation
- Direct Negotiation

One of the most vexed debates surrounds the question of how to deal with the unsolicited proposal. This occurs when the private company submits a project idea or concept that was not being contemplated by the Government. This is one way of stimulating innovative ideas and encouraging initiative, however *“this raises concerns regarding transparency and opens the door to serve special interests, suppress competition and reduce the value received by society”* PPIAF et al. (2009a). Some Governments simply reject such proposals however others allow that initiating company to prepare a detailed project proposal, to compete against other bidders, but allowing the original proponent an additional theoretical value attached to its bid or have the right to match a better offer or to participate in a final round of bidding. Some view this as an opportunity to finance project development at the initiating company’s cost, requiring the successful bidder to reimburse the other.

The purpose of the request-for-proposal phase is to encourage the delivery of bids of sufficient quality and comparability from the prequalified group of bidders. From these, a bid can be selected that best meets the public authority’s criteria. At the end of the single-tender submission or dialogue phase, selection of a final or preferred bidder takes place following a predetermined evaluation. Prior to financial close<sup>30</sup>, a formal approval process often takes place within the public authority.

### Corruption

Efficient handling of the procurement process is extremely important but for reasons beyond the technical and financial assessment of bidders. It is the area most sensitive to opportunities for corruption, which has been a feature of many privatisation and PPP projects around the world. The reasons for this has been summarised in a World Bank paper, Rose-Ackerman (1996) *“Although privatising state-owned enterprises reduces opportunities for corruption, the privatisation process itself can create corrupt incentives.... firms that make payoffs may expect not only to win the contract or the privatization auction, but also to obtain inefficient subsidies, monopoly benefits, and regulatory laxness in the future”*.

<sup>30</sup> Means that both the contract and the financing documentation have been signed and that all conditions required by these documents have been met.

#### Box 2 Cases of Corruption in WSS Sector

**F**rance - Bribery by the water multinationals  
 Executives of Générale des Eaux were also convicted of bribing the mayor of St-Denis (Ile de la Réunion) to obtain the water concession. The same groups - Suez-Lyonnaise and Vivendi, together with Bouygues – have been investigated in France for corruption practiced by their construction divisions, in a scandal described as ‘an agreed system for misappropriation of public funds’. The companies ran a corrupt cartel over building work for schools in the Ile-de-France region (around Paris) between 1989 and 1996. Contracts worth FF2.8 billion (about US\$500m) were shared out by the three groups.

**L**esotho - multinational bribes for water scheme  
 Subsidiaries of a dozen multinationals - from the UK, France, Italy, Germany, Canada, Sweden and Switzerland - are being prosecuted for paying bribes to obtain contracts in the Lesotho Highlands project – a huge water supply scheme. The companies included subsidiaries of Suez-Lyonnaise, Bouygues, and RWE (the German parent of Thames Water).

Hall, D. (2001) *Water In Public Hands*. London, Public Services International Research Unit.

This paper asks two questions and finds the answers in a report prepared by USAID's Center for Democracy and Governance (1999).

**Wherein lies the danger in corruption?** It introduces other inefficiencies into government contracting. Projects may be too large and too numerous if bribe revenues increase with the dollar volume of procurement. They may also be too technically complex, since corrupt payments are easier to hide in one-of-a-kind projects. Quality may suffer if contractors make payoffs to be allowed to cut corners.

**Who gains and who losses?** The gains accrue to winning bidders and public officials rather than to the state and ordinary citizens. However, to make up for high contract prices and the disappointing revenue generated by privatizations, the state must raise taxes or cut spending. Consumers suffer too as they may end up with low-quality products if bribes are paid to induce regulatory officials to overlook dangerous conditions or permit firms to reduce quality. Enforcement of workplace safety rules and environmental regulations can be compromised by payoffs.

It is not in the interest of society for government to go the route of public private partnerships to improve efficiency and services only to have this compromised by corruption. It lies outside the scope of this study but there are several instruments available to minimise if not erase corruption practices within the public sector. Suffice it to say however, that 'competitive' tenders are not in and of itself a fool proof method and every bit of care is to be exercise to make the process transparent and open as possible.

### 3.9.9 how will it be implemented?

The private sector party contracting with the public sector is usually a special purpose vehicle (SPV). The SPV is a common legal technique used in private financing to quarantine and administer risks Chan et al. (2009). This is typically a "*consortium of financial institutions and private companies responsible for all the activities of a PPP, including the coordination of the financing and the service delivery and delivery of the project*" OECD (2008b), and can have one or more shareholders. The SPV is paid a fee for the service it provides to the public sector. The fee is often referred to as a unitary payment and includes principal and interest payments on the debt and a return to the SPV's shareholders, as well as an amount based on the expected operating cost of providing the services delivered and maintaining the assets. The unitary payment normally commences after completion of construction once services start being delivered and continues over the rest of the contract life.

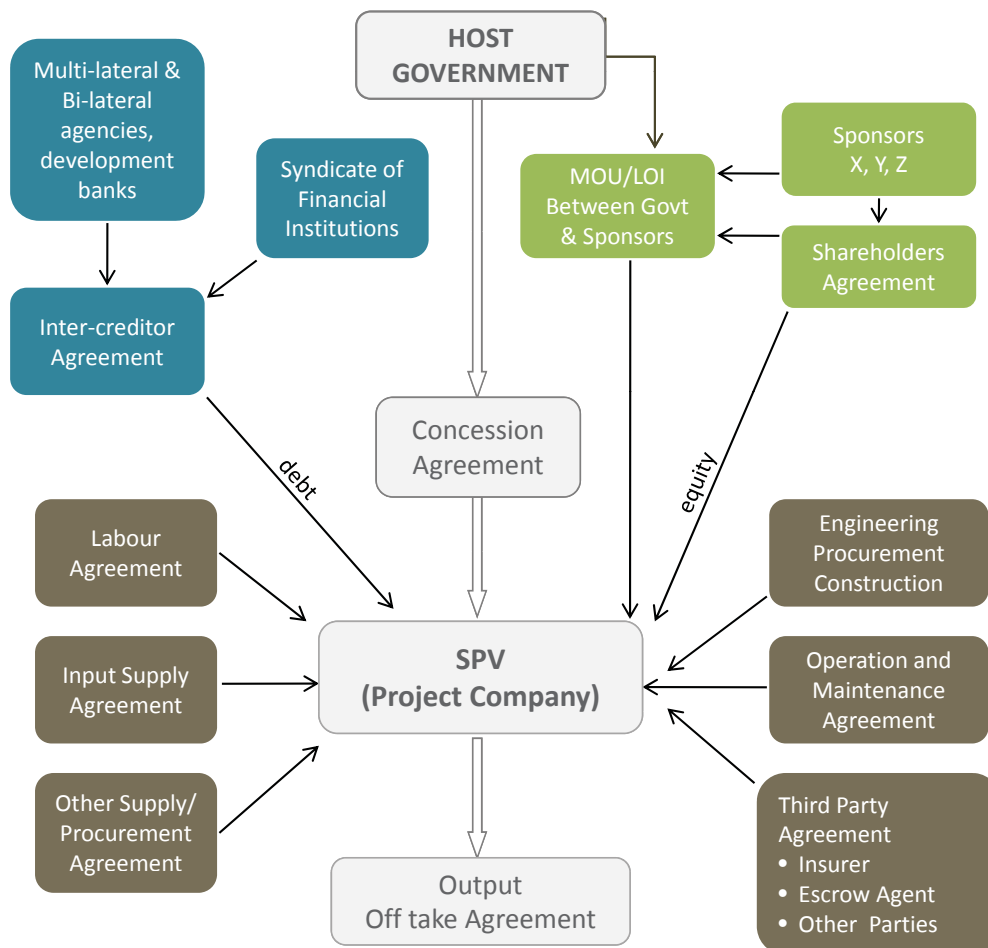
According to Grimsey and Lewis (2004) SPVs are used in PPPs for the following reasons:

- Risk Diversification – facilitates the allocation and diversification of risk and financing requirements to more than one party.
- Project Financing - allows lending to the project to be non-recourse to the sponsors by virtue of the limited liability nature of the SPV;
- Risk Mitigation - enables the assets and liabilities of the project not to appear on the sponsors' balance sheets, by virtue of no sponsor having more than 50 per cent of the shares in the SPV and the application of normal consolidation principles when preparing the group accounts; and for the benefit of the project lenders, to help to insulate the project from a potential bankruptcy of any of the sponsors ('bankruptcy remoteness')

### 3.9.10 how do we define the relationship?

When decisions have been made regarding risks, responsibilities and what mechanisms will govern the undertaking, the substance and structure of a contract begins to take shape. To engage the interest of serious bidders and enhance the credibility of the public sector and the project, a realistic allocation of risks and contractual terms must be established at the start of the process. The PPP contract will define the parameters of the relationship and limit the activities of all parties. It determines if the private provider will be able to keep any easements from its efficiencies, if disconnection of delinquent customers will be permitted, if they are allowed any say in additional investment decisions regarding expansion, etc. It is also the contract stipulations that will give the lenders as their comfort level is heavily dependent on premature termination clauses, lender's ability to take security over the contract, how the risks are allocated etc. It will need to provide both sufficient flexibility and control to ensure objectives of all parties are met and that differences can be resolved to the benefit of the project. PPIAF/World Bank (2006) advises that the best way of doing this will "depend on local legal systems and political cultures".

The contract which spells out the details of the arrangement is a significant factor. Figure #32 below diagrammatises the typical contracts that govern the PPP process.



▲ **Figure 32** Sample Agreement in a Typical PPP Arrangement  
Source UN ESCAP (2007)

Some of those must have considerations must include.

1. What are the investors' rights (what happens if a contract is terminated early)?
2. How will repatriation of profits be treated for overseas investors, and what restrictions, if any, will there be on the use of expatriate personnel?
3. What are the lenders' rights (for example, the lenders' ability to take security over the contract—lenders do not usually have security over the underlying infrastructure asset, as this ultimately belongs to the public sector)?
4. How will contract disputes be resolved, and what rights/obligations are required of either party in the event that the project does not go according to plan?
5. How will payments be taxed under the project (for example, sales or value-added taxes on construction costs or service payments)?
6. How to handle contract changes and what compensation mechanisms will be used?
7. Are unsolicited proposals permitted, and, if so, how will they be treated?

### 3.9.11 how do we manage the relationship?

A contract management process needs to be in place from the outset to ensure timely completion and operation of a project. Contract management is a process that takes place throughout the life of the PPP contract. The contract management process not only helps to fix responsibilities, but also allows timely response to any deviation in project implementation or operation from the provisions in the contract agreements and thus helps to avoid disputes between the parties at later stages.



▲ **Figure 33** Contract Management Functions  
Source: [www.ppp.gov.za](http://www.ppp.gov.za)

What this clearly indicates is that contract management is not limited to being a “legal exercise” but involves all activities that will facilitate the meeting of the project’s objectives, throughout the life of the contract. PPIAF et al. (2009a) advises strongly that consideration be given to establishing a proper budget for the public authority’s cost of monitoring the long-term contract, identifying the contract manager and the team, and ensuring that they are trained and familiar with the terms of the contract. As those involved with the procurement phase are often not involved with



contract management, it is also wise to involve, in the final stages of the procurement phase, those who will be managing the contract so that they become familiar with the project and the PPP contract terms. Involving contract managers in the procurement phase can also help to ensure that operational issues are better reflected in the terms of the contract, as tensions may arise if such matters have to be dealt with in the early stages of operations. Figure #33 above highlights the tripartite relationship between the three critical areas and the qualities to be relied on from each to get the job done.

Contract management is required by the implementing agency, regulator and the government. The main tasks will include:

- Formalisation of management responsibilities by organization and at different levels
- Monitoring of project delivery (construction phase) (by implementing agency)
- Management of variations during project implementation (time schedule, change of design and specification etc.) (by implementing agency)
- Monitoring of operational aspects and service outputs after project implementation (implementing agency and regulator)
- Maintaining the integrity of the contract (implementing agency)
- Fiscal obligations of the government (concerned ministry of the government)
- Financial matters related to debt servicing (central bank)

### 3.9.12 how can transparency and accountability be facilitated?

Both transparency and accountability are considered a very necessary element to incentivizing all parties involved in a PPP, both government and private sector entity alike. Much of the literature overlooks this factor but considering the huge sums of money involved in infrastructure projects and the fact that the Government is merely a steward of public funds, it is critical that decisions taken are available for public scrutiny and the ‘threat’ of having to answer for decisions or lack thereof, will go a long way in driving and incentivizing the potential partners.

Transparency as defined by Flyvbjerg et al. (2003) speaks to the Government permitting public scrutiny of contracts and documents related to the project and facilitating participation not for mere public relations but for value added input in the decision making process. Prior to project approval this can be done through public hearings, surveys, advisory committees, peer reviews etc but in principle we can be guided by including all persons affected by the decision. Box #3 below highlights some steps that can be taken during the life of the project.

For each PPP project or group of similar projects, government budget documents and year-end financial statements should provide information on the following:

- Future service payments and receipts (such as concessions and operating lease fees) by Government specified in PPP contracts for the following 20-30 years.
- Details of contract provisions that give rise to contingent payments or receipts (such as guarantees, shadow tolls, profit-sharing arrangements and events triggering contract re-negotiation), with the payments and receipts valued to the extent feasible.
- Amount and terms of financing and other support for PPPs provided through government on-lending or via public financial institutions and other entities (such as SPVs) owned or controlled by government; and
- How the project affects the reported fiscal balance and public debt, whether PPP assets are recognized as assets on the government balance sheet of any SPV or the private sector partner.

#### Box 3 Detailed Disclosure Requirements for PPPs

Flyvbjerg *et al.* (2003) identifies four useful instruments of accountability that he considers key to the “*establishment of an appropriate process and institutional set-up for the development of major infrastructure projects*”.

1. **Performance Specification and Targets** – Simply put this allows all parties to be able to ascertain what the expected outcome it to be and give clarity on the objectives of the project. With this known to all it becomes much easier to assess in a measurable way when a goal has been compromised.
2. **Regulatory Regime** – This offers some oversight on project operators that assists in determining when standards are compromised and what disincentives can be applied to prevent an exacerbation of the situation.
3. **Risk Capital** – One way of reinforcing accountability is the Government’s structuring its financial plan without providing a sovereign guarantee. This type of commitment on the part of the private investor increases his watchfulness and forces him to bear the consequences of poor decisions. It also increases the level of oversight that a bank is willing to provide knowing that its money is at risk which makes for added accountability.
4. I would add that laws be put in place that will criminalize acts that are proven to have been taken for the benefit of dishonest gain or immoral benefit.

Each country will have to determine within the context of its own laws and policies what mechanism will be most suitable but the principle of transparency and its most necessary carry over into accountability is of great importance to the health of a project and are major avenues of motivating the players (both public and private sector) to follow the rules and work for project success in the interest of all and not a few.

This paper recognises however, that specific types of information will need to be exempted from public scrutiny. These as identified by the New South Wales government include:

- Commercial-in-confidence material, including the private entity’s cost structure or profit margins.
- Matters relating to intellectual property and trade secrets.
- Matters that could potentially place the private-sector sponsor at a commercial
- Disadvantage with competitors in bidding for future projects.

### 3.9.13 how will disputes be resolved?

The legal basis for the settlement of disputes is an important consideration in implementation of PPP projects. Private parties (concessionaire, financiers and contractors) feel encouraged to participate in PPP projects when they have the confidence that any disputes between the contracting authority and other governmental agencies and the concessionaire, or between the concessionaire and other parties (for example, the users or customers of the facility), or between the private parties themselves can be resolved fairly and efficiently. Disputes may arise in all phases of a PPP project namely, construction, operation, and final handover to the government.

The commonly used methods for dispute resolution include:

- i. Facilitated negotiation
- ii. Conciliation and mediation
- iii. Non-binding expert appraisal

- iv. Review of technical disputes by independent experts
- v. Arbitration
- vi. Legal proceedings

The Inter American Bank supported study by Basanes et al. (1999) posits that many governments with a civil law system tend to prefer the use of judicial courts despite the heavy case backlog in developing countries. They recommend however the use of mediation and arbitration as these *“mechanisms are internationally recognized and provide a viable means to resolve disputes between the contracting parties in an expeditious and transparent manner”*.

### 3.9.14 Conclusion

The PPP process is an iterative one which requires revisiting the same questions many times. That means for example, that the assessment for value for money ought to occur at various stages during the project planning as more information becomes available and assessment can be more precise. This partnership has much to offer if done right but can be financially disastrous if not. Before a project receives approval then, a country must satisfy itself that the objectives can be met to reflect the interests of all stakeholders and that the resources are in place to support the end goal. These objectives could include:-

1. Ensuring public services are delivered in the most economical, effective and efficient manner, World Bank (2007).
2. Creating opportunities for private sector growth for contribution to overall economic development of a country Grimsey and Lewis (2004).
3. Ensuring that the best interests of the public, the business sector and the community are served through an appropriate allocation of risks and returns between partners OECD (2008b).

There are benefits to be reaped but care must be taken and measured steps towards success which is defined below.

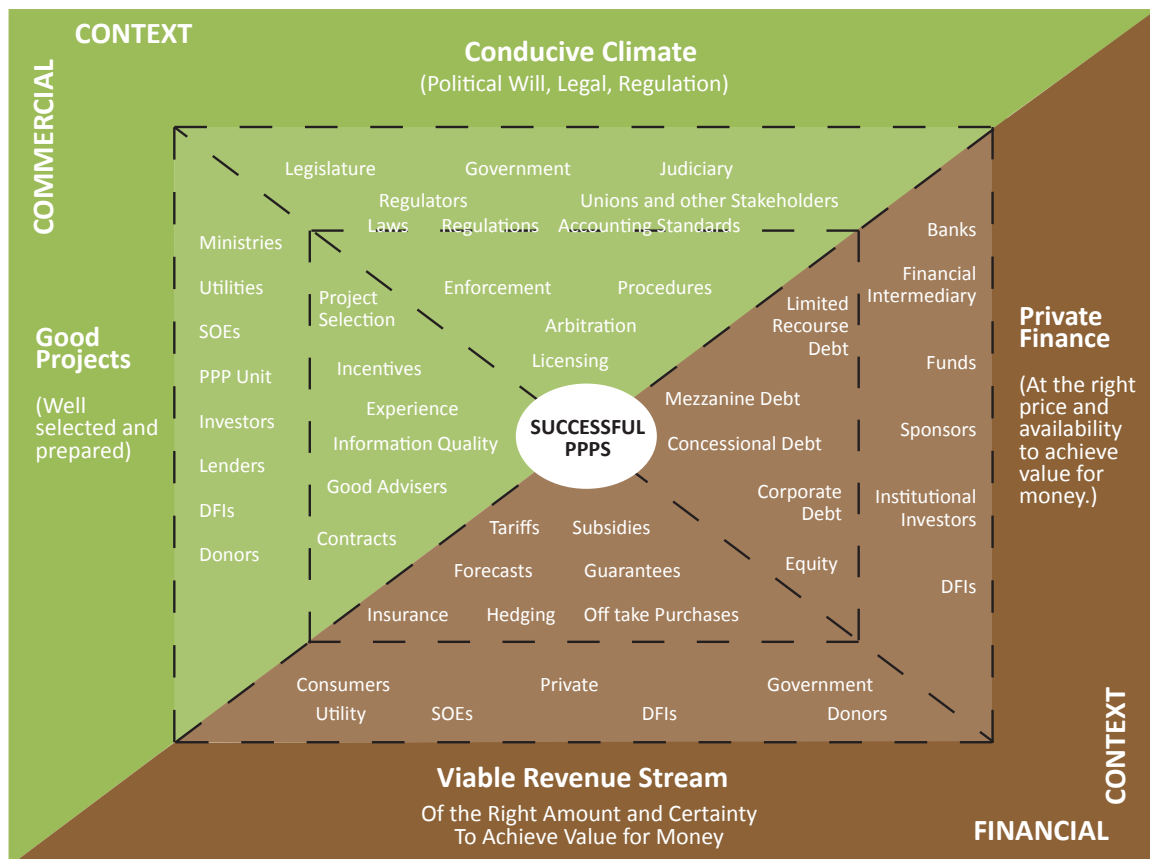
### 3.9.15 success components

In closing the chapter where the focus was to the present the concepts and theories behind PPP, the definition of project success should be clearly outlined. Below are the various aspects that act as a checklist to guide the determination on whether a PPP will be likely to achieve its objectives or not.

1. Political and fiscal stability are basic conditions to encourage investment and a PPP programme/project will require clear and unambiguous support from politicians within its Ministries and senior officials heading the various agencies.
2. A clear legal and regulatory structure that identifies the various steps in the process, together with rights and obligations of all involved must be in place with strong enforcement mechanisms.
3. Efficient organization and streamlined decision making are critical. This can be facilitated through the establishment of special-purpose authorities charged with overseeing their implementation.
4. Proper procurement procedures via competitive tender to ensure effective risk transfer

to the parties best able to cost-effectively manage them.

5. Proper feasibility assessments must be conducted to determine whole life costing, affordability and value for money.
6. A well crafted agreement to define the rights and obligations of the parties involved which establishes a framework for responding to new situations as they arise and to create co-dependence and transparency through checks and balances that enables all parties to meet their goal.
7. Proposed tariff structures will require careful review by independent and informed regulators in terms of their overall affordability, their ability to gain public and political support, and their ability to finance the needed improvements.
8. Strong institutional reinforcement for the monitoring and enforcement of permit and licence requirements.



**Figure 34** Enabling Environment for PPPs  
Adapted from Delmon (2008)

### 3.10 International Trends

It makes sense to build on what works and to learn for the ‘mistakes’ of others. There have been improvements to the approaches to implementing PPPs and this section highlights approaches and key lessons that have been tried and tested for the benefit of governments embarking on such ventures.

#### PPP units

As extracted from the ADB’s PPP Handbook, a 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. For private proponents, the units provide transparency and consistency. For public stakeholders and the public at large, the units are able to disseminate information and provide specialized management of a specialized process. They should not to be confused with the Project Implementation Unit (PIU) which is the Government’s vehicle to plan or implement a project.

One of the main reasons cited for this Unit stems from the fact that a lack of knowledge about the financial intricacies of PPPs may lead government departments to over commit financially. Gosling (2004) notes that in resource-constrained departments the off-balance sheet nature of the capital acquisition component of a PFI/PPP creates a clear advantage in favour of going the PPP route, which then creates a potential bias in the policy environment.

PPP Units have been established as a means of providing support and knowledge to governments. The French Government has set up a Unit – the Mission d’Appui Partenariats Public-Privé – to oversee the introduction of new legislation, develop guidance and take on the role as a mediator to resolve disputes. The Netherlands however, has followed the model of the United Kingdom and established a PPP unit in every major government department as well as a PPP centre in the Ministry of Finance.

#### Tax Increment Financing

The creation of tax increment financing funds (TIF) and TIF districts is an innovative way of securing the necessary cash flow in order to raise debt financing for infrastructure projects. Under tax increment financing project sponsors pay property taxes based on the value of the property prior to any improvements. However, owing to the improvements or new infrastructure there is an increase in property values and thus an increase in property taxes within the designated TIF. The difference between the pre-improvement taxes and the new tax amount is directed into a fund, which in turn will go to finance the improvements or service the debt.

The TIF system relies on the appreciation in value of the land and buildings in the TIF district. If a development is profitable, then the debt and other costs will be paid for by the growth of property tax revenues. If the property fails to increase in value, the improvement costs fall back on the general taxpayer. Though there is an obvious risk to the taxpayer if the project is not successful, the risk must be weighed against the alternative, which for some communities means no improvements.

### **PPP law**

Whether legally required or not, a law offers several advantages in that it offers an immediate and concrete statement of political support for and commitment to the process. Brazil passed legislation on PPPs in 2004 and created PPP forums to discuss implementation and best practices from international experience. Poland in 2005 passed a Public Private Partnership Act, however, an assessment of the impact of the Act on such PPPs deemed the provision unsuccessful as three years after its passing only one major initiative was taken under a PPP scheme. Experts posited that there were two major reasons from which we can learn very instructive lessons. One, was that the procedures laid down in the Act was extremely time-consuming and complex, especially as it related to elaborate financial and risk assessment analyses. Second, was the atmosphere of suspicion and on the part of public officials regarding the nature of the projects undertaken and the benefits expected by partners. In February 2009, a new Act was passed which eliminated the excessive administrative procedures and restrictions and offered the parties freedom of selecting the forms of partnership and the projects to be undertaken. The new philosophy driving the amendment, which would also serve as good advice for all practitioners was to:-

1. Let when possible, the existing laws govern the partnerships without creating new regulations.
2. Give partners leeway to be bound by general legal frameworks rather than stiff, rigorous terms.
3. Leave feasibility assessment to the discretion of the partners concerned.

### **twinning projects**

From the perspective of creating strong governance arrangements, the Czech government has entered into partnership with the United Kingdom and the Netherlands through an EU ‘twinning project’. These countries provide PPP expertise to the Czech Ministry of Finance to help increase efficiency and develop PPP methodology and standards. Jamaica, in this instance could consider engaging other developing countries (for example, South Africa) that have developed both a more fully developed PPP policy and institutional framework and a strong pipeline of PPP projects to benefit from their learning curve.

### **funding schemes**

The Government of India has established the Viability Gap Funding (VGF) scheme as a special facility to support the financial viability of those infrastructure projects which are economically justifiable but not viable commercially in the immediate future. It involves upfront grant assistance of up to 20% of the project cost for state or central PPP projects that are implemented by a private sector developer who is selected through competitive bidding. An “Empowered Committee” is set up for quick processing of cases. It is perceived that a seamless approval process will build up a good pipeline of projects. See Appendix D for Project Application Criteria.

The VGF scheme provides funding for state or central PPP projects implemented by the private sector developer on a BOT basis (selected through a process of competitive bidding). Funding is available for 20% of the project cost. If required, an additional 20% can be made available by the sponsoring Ministry/ agency or it can come from the state government or any sponsoring statutory agency like local bodies.

### **project development funds (PDFs)**

Another growing trend revolves around mobilizing resources for project development. With this approach the government establishes and manages a revolving project development fund, possibly with donor support. This Fund can be used for standardization of methodology, documentation and dissemination of best practices. The cost of the bidding process can be funded here and the winning bidders effectively refinance such costs at contract signing, recycling funds back to support other public project development processes. An example of such a fund is the South African Treasury's PPP Project Development Facility (South Africa, National Treasury 2004a). This approach can also provide some discipline, consistency, and quality control in the appointment of advisers.

### **guarantee funds**

A mechanism currently being considered by a number of governments involves the creation of a fund of liquid assets that can be rapidly mobilized in the event that a contingent liability is realized. The fund would have its own balance sheet, be removed from the annual budget cycle, benefit from independent governance and would not be available for other purposes. The fund could be used to:

1. Reduce the likelihood of diversion of such funds for inefficient use;
2. Limit liabilities for government support provided to PPP projects to the value of its capitalization of the fund;
3. Reassure the public that government liabilities in the face of PPP projects are less likely to have catastrophic consequences, improving the credit enhancement function of government support; and
4. Help the government in their risk management of contingent liabilities (increasing efficiency and targeting of guarantees and ring-fencing government contingent liabilities). Shifting contingent liabilities to a separate entity with its own capital and limited liability will help to ensure there are no hidden risks in the government accounts, and that the government's exposure is limited by its equity in the fund.

### **integrity pacts**

Transparency International has developed a tool called the 'integrity pact' (IP) to enhance the transparency and quality of public contracting. The pact consists of an agreement between the government or government department and all bidders for a public sector contract that they will abstain from bribery both during the selection process and the implementation of the contract. See Appendix E for a fuller explanation of its operation.

The IP is intended to accomplish two primary objectives:

- To enable companies to abstain from bribing by providing assurances to them that their competitors will also refrain from bribing, and government procurement, privatisation or licensing agencies will undertake to prevent corruption, including extortion, by their officials and to follow transparent procedures; and
- To enable governments to reduce the high cost and the distortionary impact of corruption on public procurement, privatisation or licensing.

**special purpose vehicles**

The sponsors of a project to establish a special purpose vehicle company (SPV) in which they are principal shareholders, as uses private finance, usually a mix of equity and debt, to fund the up-front construction works. The SPV is paid a fee for the service it provides to the public sector. The fee is often referred to as a unitary payment and includes principal and interest payments on the debt and a return to the SPV's shareholders, as well as an amount based on the expected operating cost of providing the services delivered and maintaining the assets. The unitary payment normally commences after completion of construction once services start being delivered and continues over the rest of the contract life. The unitary payment is at risk to the SPV's performance during the life of the contract, such that payment is reduced if performance falls below the required standard; and the SPV manages and delivers the required services to specified standards, while sustaining the quality of underlying assets.

**public sector comparators**

Competition and risk allocation are pre-conditions but do not guarantee value for money. The possibility of achieving extra value for money by implementing a PPP can be estimated with a twofold analysis. This analysis is conducted prior to the PPP implementation and comprises, first, the calculation of the benchmark cost of providing the specified service under traditional procurement and, second, a comparison of this benchmark cost with the cost of providing the specified service under a PPP scheme. The benchmark cost of providing the specified service with traditional procurement is known as the public sector comparator (PSC). It is intended to promote full cost pricing at an early stage and is a good management tool for during the procurement process however, it is not without criticism, the PPIAF has opined on a number of concerns which users must bear in mind. These refer to the high cost and time consumed for the financial modeling, danger of manipulation, requires second guessing by government officials for what private parties will do – a very inexact science, high reluctance to cancel a procurement process on the grounds that the bid price is higher and no consensus on the discount rate makes a significant difference in PSC results, Leighland (2006).

**regulatory delinking**

This trend is a worthwhile alternative for countries who are dogged with difficulties in moving to PPP because of the vicious circle of poor services, inability to pay, unwillingness to pay, service provider inability to cover cost etc. Designers of PPP projects have creatively delinked (separated) the remuneration to the private operator from customer tariffs. This effectively allows regulators to adjust tariffs more gradually and in keeping with service improvements and customer's ability/willingness to pay. Until that point arrives, the Government covers the operational deficit through a payment to the operator.

From these summaries of ten 'trends' we find suggestions for improving the way PPPs are funded, assessed, monitored, implemented with a view to plugging some of the loopholes that exist along the PPP learning curve. None are panaceas and none can take the place of "getting it right from the start" with solid due diligence and preparation. They are aids to projects who already have a solid foundation to improve in their performance.





“ Politics:  
A strife of interests masquerading as a contest of principles.  
The conduct of public affairs for private advantage. ”

— Ambrose Bierce (1842-1914)



## Chapter 4. FINDINGS AND ANALYSIS

This Chapter shares the overall findings of the research study regarding the nature of public private partnerships in Jamaica and the Netherlands. It commences by addressing the setting at the macro level in Jamaica in order to determine her state of readiness not for merely for PPP projects in general then more specifically the Soapberry Waste Water project in Kingston. It then looks at the micro level and evaluates the process it follows from conception, formulation, implementation and operation of the Soapberry PPP, against the approaches recommended in the theoretical review, in order to determine where the strengths but moreso the where weaknesses (risks) lie. Finally, it provides an overview of the Dutch application of a PPP also in the waste water sector at Harnaschpolder to further establish where the Jamaican experience requires improvement.

### INTRODUCTION

Sanitation services is a Basic Human Need (BHN), normally pegged to the provision of potable water and is very necessary in protecting the environment and safeguarding the health of citizens via disease control. As revealed during the literature review process, many governments in the 1990s embarked on a variety of ambitious reforms of their respective urban WSS sector with varying degrees of success. According to Marin (2009), since 1990, more than 260 contracts have been awarded to private operators for the management of urban water and sanitation utilities in the developing world. There have been however, controversial and the highly publicized contract terminations that raised doubts in the mind of many considering the value of PPPs. Marin however argues that these fears have more been driven by *“ideology than objective analysis”* as of the 260 contracts, 84% were still active at the end of 2007 with only 9 terminations. Its vulnerabilities though are there as its easily hijacked by special interests, capacity is lacking, information can be unreliable, transparency and accountability are more a language game and private operators do utilize these all deficiencies to their greater advantage. So the question arises, is the Government of Jamaica choosing wisely and/or acting prematurely in the use of the public private partnership model in the provision of urban infrastructure?

At the direction of the GOJ, under the pen of Cabinet approval, Jamaica’s agency responsible for the WSS sector – the National Water Commission – entered into country’s first PPP for the construction, operation and management of sewage treatment facilities. The first section provides a background to the Soapberry Water Treatment Project, why it was necessary, the implementation route they took and the challenges facing the WSS sector. Then a review of the country’s policy, macro-economic, policy, institutional, legal and regulatory framework will assist in determining the extent to which Jamaica was ready for this public private project. The final section zeroes in on the actual project, which presents the findings of the research on the process and steps taken in planning and executing the PPP and an analysis of the approaches taken.

### 4.1 SOAPBERRY WASTE WATER TREATMENT PROJECT

Over two decades ago, George Yarrow (1986) in *Privatisation in Theory and In Practice* posited that *“in general, competition and regulation are likely to be more important determinants of economic performance than ownership”*. This suggests that where there are deficiencies, the policy priority should be to increase competition and improve regulation, not necessarily to transfer these activities to the private sector. Jamaica however, like many other developing countries have assessed the state of its infrastructure and acknowledged the double challenge from increasing

demand with ageing assets, coupled with an ever growing debt burden that has crippled its financial capacity. As a consequence, policy makers are increasingly departing from Yarrow's assertion and depending more on private sector involvement to "attract investment and mobilize private sector resources for the benefit of society and sustainable development" OECD (2007). This has required the re-evaluation of both the goals and instruments Jamaica has used since its emergence as a modern state. One of her most recent demonstration of this shift and the subject of this paper, is the collaboration with the private sector for the design, construction, operation and maintenance of the Soapberry Waste Water Treatment Plant.

#### 4.1.1 background

The sewerage system in Kingston Metropolitan Region (KMR) has been in a deplorable state for some three decades and was considered one of the primary contributors to the deterioration of the Kingston harbour<sup>31</sup> which is located on the south-eastern coast of Jamaica, bordering the Capital and operating as the country's major port (See Figure #41 below). At present, only about 30% of the estimated 272.7 million litres (60 million gallons) per day of the capital's waste is being collected by the National Water Commission (NWC) network. Owing largely to lack of maintenance and the conveyance of sewage well beyond their design capacity, two major existing treatment plants, operated by the state agency have failed to function adequately. Consequently, large volumes of untreated sewage were discharged daily<sup>32</sup>, resulting in the ecological deterioration of the harbour which is considered a major environmental asset.



▲ **Figure 35** Kingston Harbour - Red Algae Proliferation triggered by pollution  
Source: NEPA, 2009

The Kingston Harbour is used mainly for fishing, shipping, recreation, industry and commerce. The greatest and most immediate impact of the harbour's pollution is being felt by the fishing activities of the 3,386 fishermen who operate from seven (7) fishing villages, bringing approximately 1.1million kg (1,100 tonnes) of fish per annum<sup>33</sup>.

In addition to the plants, the extension of the sewerage system in the KMR was also neglected and consequently, most of the buildings in the city are not connected to sewers but to absorption pits which permit only a very basic level of treatment. See Figure #42 below. A further consequence of this situation is that the aquifers under the city currently have unacceptably high nitrate levels and cannot be used as a source of increased water supplies.

31 *The Kingston Harbour is the world's 7th largest natural harbour.*

32 *Approximately 68-91million litres (15-20 million gallons) of poorly treated sewage.*

33 *<http://www.nrca.org/kingston%20harbour/html/Resources.htm> Website of the NEPA*

In spite of a tariff structure that not only allows for cost recovery (capital and operational), but also rehabilitation and improvements, the NWC has been unable to generate adequate surpluses to finance regular maintenance and expansion of the system. A sectoral diagnosis done by the Ministry of Water and Housing in 1999 resulted in a Water Sector Policy which speaks to the sewerage of all major towns by 2020 and the rehabilitation of existing facilities to meet current tertiary standards set by the National Environmental Planning Agency (NEPA). Such goals coupled with limited funds explained the policy decision to open sanitation services to the private sector, on condition that entrants into the market did not compete against the State agency.

This laid the ground work for the decision that faced the Jamaican Government regarding the aforementioned sewage treatment problems in the KMR. But what was the catalyst that would trigger the construction of a solution some thirty years in the making?

#### 4.1.2 the catalyst & the project

In 2004 the Government of Jamaica (GOJ), commenced the Inner City Housing Programme for the provision of high density housing solutions in Kingston's inner city. Completion of the project was contingent upon the construction of new sewage plants as NEPA determined that no additional sewage flows would be allowed into the malfunctioning plants. With the timely completion of the housing development hanging in the balance, the Government dusted off the studies done in 1993 for the Soapberry Wastewater Treatment Plant (shown in Figure



# 36) which was conceptualized around a comprehensive programme<sup>34</sup>.

The Soapberry PPP is nested within this comprehensive programme that was projected to cost some USD \$400 million and involves three distinct phases<sup>35</sup> namely:

▲ **Figure 36** Aerial Photo of the Soapberry Plant, Jamaica  
Source: WOMC

- Phase 1A: Retire existing older plants and construct new treatment works at Soapberry to collect and treat existing flows.
- Phase 1B: Extend the central sewer network to selected areas.
- Phase 2: Further expansion of sewers and plant.

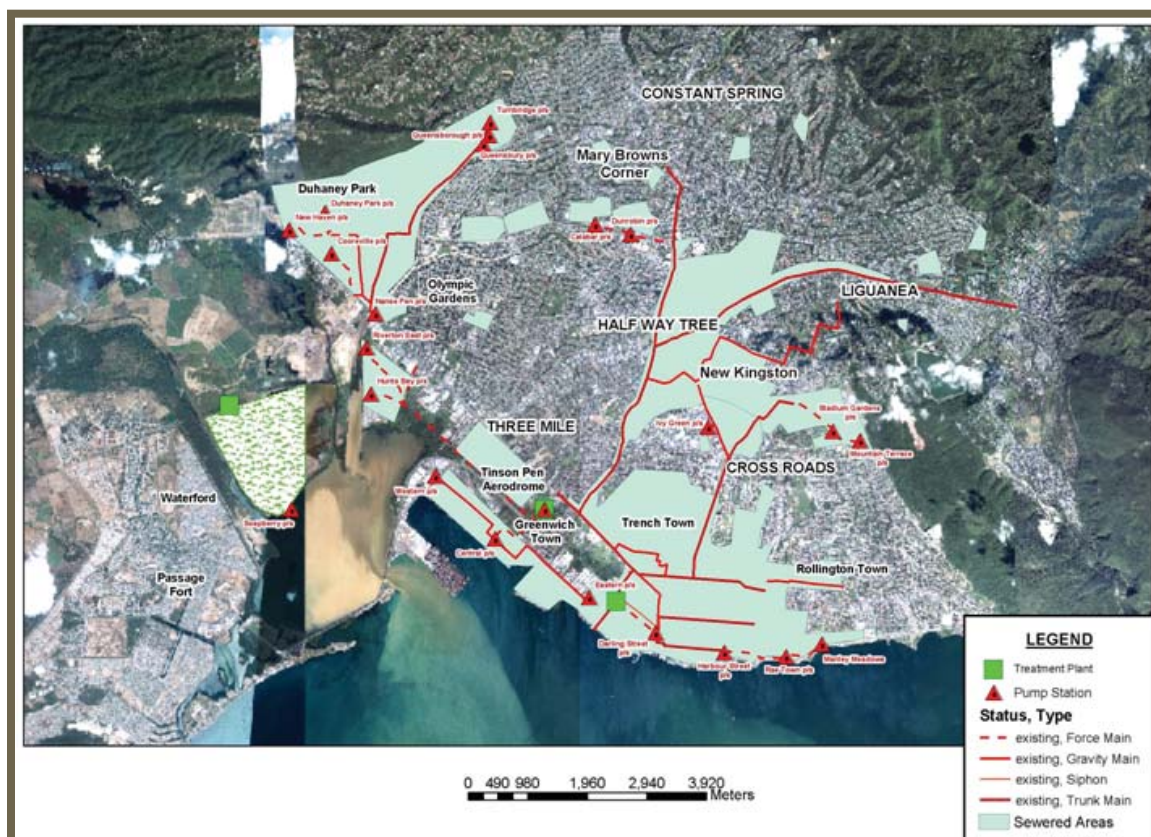
The Public private partnership addressed Phase 1A and included:--

- Construction of a 20 million gallon per day plant

<sup>34</sup> SENTAR, (December 1993) *Kingston Harbour Environmental Project – Final Phase II Report*

<sup>35</sup> NWC report to the Board of Directors – dated November 2, 2004.

- Construction of trunk sewers
- Connection /rehabilitation of existing pump station.



▲ **Figure 37** Map of Sewered & Unsewered Areas of Kingston  
Source: NWC

The limiting factor for the Government of Jamaica was the question of how the project would be financed. According to Vining and Boardman (2008) despite the many variations, there are basically three major options for infrastructure delivery; direct public provision, contracting-out or public-private partnerships (P3s). The GOJ opted to employ the model of public-private partnerships. But before I make scrutiny of the project at the micro-level by evaluating its consistency with the literature on PPPs, we must first seek to understand the peculiar challenges facing the sanitation sector that must be taken into consideration in the design and development of the PPP process.

#### 4.1.3 challenges facing the sector

All infrastructure projects carry risks, however the water and sanitation sector with which sewage collection, treatment and disposal in associated can be more challenging than others. According to IMTA-OECD (2008), it is usually very capital intensive, involving high initial investment, long payback periods, and low rate of return<sup>36</sup>. The infrastructure is “fixed, very specific and cannot be used for other purposes or removed from the country” and is associated with important externalities on health and the environment. Revenues are mainly from user fees and/or government subsidies

<sup>36</sup> Estimated by the African Development Bank to be between 5 and 10 percent (compared to 17-25 percent in the power sector and 25-30 percent in telecommunications).

in a local currency which exposes it to foreign exchange risk. Finally, this sector carries with it, social and political repercussions that have led to rigid tariff setting without enough consideration for real costs and increases in political interference. Kessides (2004) in the World Bank's policy research report on Reforming Infrastructure posits that *"underinvestment, largely caused by under pricing, has been the key problem of the state-owned utility model"*. This of course, leads to deterioration in the quality of the service provided.

In the Jamaican context, that assessment rings true but the challenges are even more dire, as the large stock of public debt places a claim on the country's future tax receipts and the government's borrowing ability. Implicitly, the government's future income stream is allocated to debt repayment and therefore less is allocated to the development and maintenance of infrastructure which would encourage private investment. Consistent with recommendations for long term financial sustainability, policy decisions in the early 1990s significantly lessened the NWC's dependence on Central Government transfers and with the support of the OUR has placed reliance on user tariffs that allow for cost recovery. Notwithstanding, its last audited financial statement reported *"revenues of almost \$14 billion against expenses of \$16.3 billion during the financial year ending March 2009, posting a net operating deficit of \$2.4 billion."*<sup>37</sup>

With all of these resident challenges, direct competition which is so important in increasing efficiency and driving costs down tend to be undermined by limited bidders. Added to that, Daniels and Trebilcock (1996) acknowledge that while tangible efficiency gains can be realized by remitting some responsibility to the private sector, *"those gains can be easily offset by losses that derive from faulty design of both the selection process, contractual arrangements for its implementation and/or abuse of Government's legislative/policy powers"*.

It is precisely for these reasons that examining the macro-economic, institutional, policy, legal and regulatory setting within which this PPP was undertaken, becomes critical in understanding why certain decisions were taken and where the impediments to successful PPPs lie.



▲ **Figure 38** NWC WSS Sector Projects  
Source: NWC



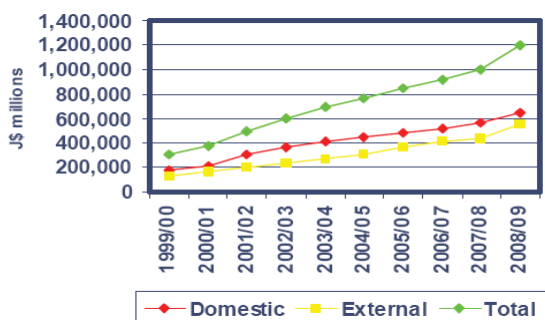
<sup>37</sup> A significant increase in comparison to the OUR's Annual Report citing NWC losses of \$985 million in 2006.

## 4.2 MACRO ENVIRONMENT

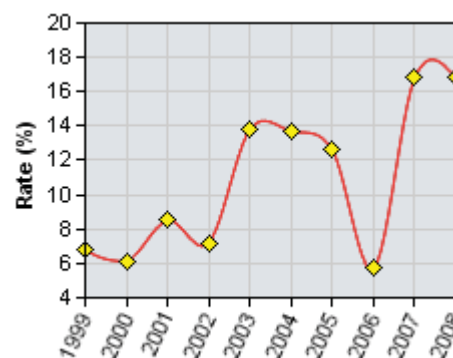
### 4.2.1 macro-economic profile

As the literature review points out, this partnership approach is deemed particularly appealing to countries experiencing high level of fiscal stress and limitations. So the question at this stage becomes, where on the road to sustainable growth is Jamaica and to what extent has its fiscal position influenced its interest in and approach to public private partnerships?

Between 1952-1972, Jamaica enjoyed rapid GDP growth of 6.3% annually, a rate vastly ahead of most countries in the Caribbean and Latin America. However, the period since has been quite difficult - per capita income has been stagnant for the last three decades with major periodic macro-economic problems including high inflation, large debt accumulation and the relatively recent banking financial crisis of the 90s (World Bank, 2004). This financial crisis together with a huge government wage bill and falling revenue has increased public debt sharply, particularly domestic debt, leaving the island with a crippling debt to GDP ratio, that reversed the gains made in the early 1990s and which has remained in excess of 110% since 2001.



▲ **Figure 39** National Ten Year Debt Summary  
Source: Price Waterhouse Coopers (April 2009)



▲ **Figure 39a** Ten Year Inflation Rate Summary  
Source: Central Bank website (Nov 2009)

This debt load arose largely over a period of seven years between 1996 and 2003 when the public debt as a percentage of GDP went from 79-141%, King and Richards (2008). Over the same period the crime rate rose, giving Jamaica the unenviable placement as the third most violent country in the world. This has exacted a yearly cost on the economy, equivalent to approximately 4% of GDP<sup>38</sup>. Reaching fiscal and debt sustainability is critical to achieving sustained growth. According to D Thomas (2004) gaining ground from revenue will not be easy, as Jamaica also has a fairly high ratio of taxes, which currently stands at 27% to GDP.

**Table 8** Economy At a Glance as at October 2009<sup>39</sup>

	Total GDP	GDP/capita:	GDP growth rate:	Debt to GDP ratio	Fiscal Deficit	External Debt to GDP	Domestic Debt to GDP
Jamaica	20.91 Billion	7,500	-0.6%	108.94%	35 Billion	59.14%	49.80%
World	120	123	205	4			
Credit Rating	Standards and Poor - CCC (investment grade rating is BBB - and above)						

38 *Planning Institute of Jamaica*

39 *Ministry of Finance, Debt Management Unit 17-Apr-09*



The World Bank report (2004) concludes however, that Jamaica's growth "will depend on a policy environment that increases external competitiveness, as well as **key infrastructure investments**". But the national debt limits the capacity of Government to increase infrastructure spending to stimulate growth, and continued dependence on borrowing that does not translate into economic growth will continue to feed into this vicious cycle. **Infrastructure spending** is the very area of investment that is the backbone of this study.

### investment readiness

Drawing on the Doing Business 2010 survey, Jamaica's standing has not improved from her previous position but has fallen to No. 75 out of 183 economies<sup>40</sup> and positions herself at 10th place among regional countries. One of the areas of greatest concern for policy makers has to be the tax environment as the World Bank/IFC current assessment on Jamaica's tax friendliness places us one notch higher than previous year but at 174 we remain entrenched among the worst 10 tax jurisdictions. According to the assessment, companies in Jamaica are now estimated to give back 51.3% in taxes in 72 transactions per year. By comparison the rest of the region averages 33 transactions and the rich OECD countries do 13 and 48% and 43% respectively in taxes<sup>41</sup>.

Table # 9 provides data from the various institutional indices for an indicator on Jamaica's business environment as assessed in 2008.

**Table 9** Business Governance Assessment

INDEX	RANK	SCORE
Transparency International Corruption Perception Index	96/180	3.1/10
World Bank Ease of Doing Business	63/181	
World Bank Governance Indicators 2007 – Control of Corruption	39.1	-0.49
World Bank Governance Indicators 2007 – Political Stability	43.3	
World Bank Governance Indicators 2007 – Regulatory Quality	61.7	0.31
World Bank Governance Indicators 2007 - Rule of Law	31.9	-0.03
World Economic Forum Global Competitive Index 2008-09	86/134	3.89/7

From Table 9 above, one can cull a fair appreciation of the state of governance in Jamaica. The only area where Jamaica seems to be, is in regulatory efficiency, all others fall below the half mark and would require serious attention. The writer does disagree however, with its evaluation of the country's political stability, as Jamaica has had relatively peaceful elections over the last 15 years. A change of Government in 2007 has demonstrated a level of maturity in our political leaders as programmes and projects instituted by the previous administrations have, for the most part, proceeded as planned. Contracts made prior to the election have been honoured and as such, the

<sup>40</sup> In 2008, Jamaica was ranked 67th in the revised Doing Business 2009 survey, adjusted to 63.

<sup>41</sup> Financial Gleaner, Page 8, September 11, 2009

writer would grant Jamaica at least 60 points in rating political stability.

From all intents, the Jamaican Government is ‘relatively’ open to foreign investment although from a data set of 183 countries, Jamaica fell 8 points in 2009 to No. 67 in the Ease of Doing Business Index. A closer look at the breakdown of this report (See Appendix F) indicates that the island stacks up reasonably well against the OECD countries. There are no legal distinctions made between domestic and foreign companies and all sectors of the economy are open to foreign investors. There are also no limits on foreign ownership of local companies, foreigners are not restricted from land ownership and neither are they restricted in the repatriation of capital or profits. Investors can petition local courts and international arbitration is accepted as a means for settling investment disputes between private parties. A number of incentives are offered to investors including exemptions from income and dividend taxes for up to ten years for manufactured exports, income, import and dividend tax relief for hotels, duty relief and income tax exemptions for motion picture producers, income tax relief for up to ten years for investors in agriculture and duty and income tax concessions for shipping companies. Finally, according to the World Investment Report published by the United Nations, Jamaica’s FDI inflows experienced a 65% increase to US \$1.44 billion in 2008, an indicator that interest has been established by international investors and if handled properly can set the stage for increased credibility and additional investment in the public private partnership programme.

## 4.2.1 POLICY FRAMEWORK

### general PPP policy

The interviews began at the Office of the Prime Minister who advised that despite Jamaica’s venture into the world of public-private partnership via projects such as the Highway 2000 BOT, Sandal Whitehouse Hotel project, expansion and management of the Sangster’s International Airport etc., there is no policy document in place to govern the manner in which these projects are identified, assessed, negotiated, structured or financed. Notwithstanding, some significant groundwork has been made via dialogue with a community of stakeholders – civil servants, private sector members, labour and trade unionists, civil society – for the purpose of constructing a social partnership<sup>42</sup> to counteract significant economic and financial pressures within the island. This collaboration had grown out of a common need to combat the growing dilemma facing the entire country.

Known as the Partnership for Progress initiative, its aim was to have “*a social dialogue and partnership agreement designed to build trust and seek consensus on issues of national importance, with the objective of promoting a climate which will foster sustained economic growth, equity and social justice for the benefit of the widest cross-section of the Jamaican people*” CaPRI (2008). It failed. An assessment carried out by the Caribbean Policy Research Institute, identified insufficient government buy-in (the process was largely being driven and funded by the private sector), lack of coherence between the parties on what exactly this social partnership meant and insufficient research into case studies to guide the Jamaican model.

The OPM interview also revealed that the current political administration is pursuing a similar initiative - Partnership for Transformation - to facilitate public-private dialogue and intends to use this as one vehicle, around which the policy position on PPPs can coalesce.

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42 Please see glossary for definition on the concept of Social Partnership.

## Wastewater Sector Policy

With regards to the Soapberry project, Jamaica adopted a new Water Sector Policy in 1999 which reinforces their support of the private sector initiatives to improve sector performance. On the political and policy setting side, responsibility for this rests with the Minister of Water and Housing.

The policy states that owing to the capital intensity of providing sanitation services *“private operation of water services will be encouraged to relieve the Government of the full burden of financing the sector”*. It identified private participation as a means not an end in itself and set out the criteria that such future undertakings should meet. The projects had to satisfy:-

1. Terms for privatisation that are in the country’s best interest;
2. Improve economic efficiency in the sector, in both operating performance and the use of capital investment;
3. Technical and managerial expertise and new technology into the sector to achieve productivity improvements;
4. Injection of large-scale investment capital into the sector and/or access to private capital markets, thereby reducing public investment;
5. Insulation of the sector from short-term political intervention in utility operations and limitation of opportunities for intervention by powerful interest groups;
6. Transfer of the risks and responsibilities of ownership from Government to the private sector over the long term;
7. Delivery of a reliable and efficient service to communities throughout the island;
8. Making the sector more responsive to consumers’ needs and preferences.

This represents part of the yardstick to which the Soapberry project will be measured in Chapter Five, in order to determine the level of its success in the planning and implementation of the partnership.

### major concerns

The research probe has also revealed three major concerns that require redress by the MWH, namely:-

1. The interview with the Minister of Water and Housing revealed that as chief policy maker, he has requested a review of the water sector policy. He believes it contains *“contradictions and unreasonable proposals”* which for example creates *“the impracticality of private suppliers charging water rates competitive with the rate charged by the National Water Commission”*. This in essence will require a policy debate on whether it’s in the national interest to maintain the protections granted to the NWC or to leave the delivery of WSS services to the market. He also voiced the need to embed in law definitive timelines for the review of the sector tariffs. This is a response to the view that the NWC often goes with the needed increase in tariff to match the increase in cost because of political machinations.
2. With the entry of the private sector as sewerage providers, the NWC will no longer be responsible for operation and maintenance and as such they no longer have oversight responsibility to monitor the quality of work done during construction of sewage treatment facilities. The Commission has noted that no entity has been identified to replace this supervision and has

- voiced this as one of their concerns which needs to be addressed by policy makers.
3. Finding policy position or plans for the wastewater sector was difficult if not impossible, as in practice and in policy both services references were only made to water supply and a distinct leaning towards provisions for same, to the neglect of sewage. There seems to be no 'ownership' of sewage and unlike water, no master plan is in place. Perhaps before this was not of any moment, as the NWC being the sole provider tended to treat them as one service, but they are in fact not. This requires redress as the private market treats them separately and in so doing provides one and not the other; in which case the investor providing sewage treatment is left without much of a guide and understanding of what the Government's intentions and plans are for wastewater management and how they can respond to those needs and strategize for future involvement in the sector. The completion of the Water Supply and Sewerage Services Bill and the Wastewater and Sludge Regulations will significantly enhance being driven by NEPA will significantly improve this concern.
  4. In reviewing the WSS policy, it became necessary to better understand this transition from solely public provision to public private partnerships but it was also very useful to understand to what extent it allows for a smooth entry of the private providers into the market for the WSS sector. On the strength of interviews conducted with two of the earliest entrants, Can Cara Environment Ltd (CCEL) and Dynamic Environmental Management Ltd (DEML) have both experience unrecovered losses owing to the following
    - i. No provisions were made for two separate providers for water and sewage serving the same customer. With a sole provider, failure to pay for service was managed through disconnection of water supply, which served as an effective inducement for payment. The sole sewage provider (CCEL) now finds the firm without that option and owing to the technical difficulty with sewage service disconnection, the "free-rider" problem emerges and non-paying customers benefit without penalty. When no solution proposed by the private sector sewage provider was considered acceptable to the NWC (water provider), the firm proceeded to physically remove sewage connections to customers. This resulted in an uproar from residents AND the regulatory agencies (NEPA, OUR and MOH), however at the insistence of CCEL, residents began making payments and the service was restored. This however, did not happen until after CCEL suffered losses and bad publicity. The reverse has happened with instances where the NWC is the sewage provider and the private party is the water provider. The policy is silent on these matters.
    - ii. The private sector also experienced additional market entry difficulties when different sewage rates are approved for customers who reside in the same area and even the same neighbourhood. DEML had huge hurdles to cross when housing developers agreed to their providing service and not the State agency. The latter's rates were lower owing to Government subsidy and resulted in conflict between the private sector's customers and public sector customers who were merely doors away from each other. The policy is silent on these matters.
    - iii. Finally, the private sector shared their frustration with the absence of provision in the policy for a customer to 'migrate' from one service provider to the next. DEML cited problems of providing service to one hundred customers in a neighbourhood that the NWC was unable to serve but had continued to bill. DEML was unable to collect for several months and only when threats to discontinue the service was made, were they able bill

and collect fees. The monies paid over to the NWC however, were not remitted to DEML, who had to write that off as a loss.

It is very fair to conclude that despite a clear invitation to the private sector to participate in the water supply and sanitation sector since 1999 and the policy's update in 2004 there are fundamental issues that have to be addressed. Yes the emergence of private sector "competitors" will not be greeted with open arms by the State agency who is already in need of funding but the Ministry of Water and Housing needs to contemplate how these 'knots' are to be unraveled and can only do that by having both parties debate the issues and sign off on the way forward. The private sector parties on the other hand need to have the weight of Private Sector Organisation of Jamaica and the Fair Trade Commission to behind them and not attempt to resolve the issues on a case by case basis but to take on a more wholistic comprehensive approach.

### **anti-corruption policy**

Efficient handling of the procurement process is extremely important but for reasons beyond the technical and financial assessment of bidders and the need for capable negotiation skills; it is the area most sensitive to opportunities for corruption, which has been a feature of many privatisation and PPP projects around the world. The reasons for this has been summarised in a World Bank paper, Rose-Ackerman (1996) *"Although privatising state-owned enterprises reduces opportunities for corruption, the privatisation process itself can create corrupt incentives.... firms that make payoffs may expect not only to win the contract or the privatization auction, but also to obtain inefficient subsidies, monopoly benefits, and regulatory laxness in the future"*.

In spite of Jamaica's scoring 3.2 out of 10 and rating of 96th out of 180 countries on Transparency International's corruption perception index, its policy makers over the last decade have put several measures in place to reduce the perception both locally and internationally as a corrupt nation. Some of these measures have included:-

- Establishing the Office of Contractor General, 1985 responsible for the monitoring of the awarding of Government contracts and licences to ensure compliance with procedure.
- Establishing of the National Contracts Commission in 1999 with responsibility for the registration of contractors and contract endorsements for Government procurement.
- Passing of the Corruption Prevention Act in 2000 compelling public servants to declare assets, liabilities and income in order to eliminate bribery and corruption in the sector.
- Provision of a Handbook of Public Sector Procurement Procedures (2001, updated 2008) that insists on competitive procurement of goods and services.
- Instituting the Public Bodies Management and Accountability Act, (2001) seeking to improve governance and accountability in reporting to Parliament and Ministry of Finance with sanctions for failure to comply.
- Passing of an Access to Information Act in 2002

All of these, coupled with mounting pressure from local investigative journalism reinforce the public relations campaigns against corruption and the work of civic advocacy groups. In the writer's estimation, Jamaica compares solidly with the recommendations laid out in the USAID Handbook on Fighting Corruption, and has put a robust framework in place for a reduction in actual and perceived corrupt practices, thus laying a sound foundation for the engagement in PPP procurement. What remains is the matter of enforcement which we shall see in the next section, leaves much to be desired.

## conclusion

Sound public private partnerships need to be based on firm policy foundations which for the private investor, becomes a measure of the government's long-term political commitment. In the absence of such a policy in Jamaica, the writer recommends that policy makers undertake the following tasks, prior to arriving at a position:-

- i. Perform a needs assessment and establish which objectives are of greatest priority. For example, is it reducing tariffs, expanding coverage, adequate environmental design specification, improving management efficiencies etc. This would guide the policy makers towards partner criteria and rules for competition.
- ii. Consider Jamaica's commitment to devolving responsibility to local government the GOJ needs to establish if the project objectives be more achievable if the PPP debate took place within the context of the local government decentralization reform or on a case specific basis within each sector.
- iii. Determine the extent to which projects can be made attractive to local private investors and the extent to which they will require additional support from government. This support needs to focus on the details that include those raised by DEML and CCEL as they jostle with the State Agency for customers and revenue.

## 4.2.2 INSTITUTIONAL FRAMEWORK

As stated in Chapter Two, the institutional framework is *"determined by a country's administrative, legal and commercial traditions and practices; competence of its public administration, degree of corruption in the system, Guislain (1997)."* In light of the co-relation between economic performance and institutional strength it would not be baseless to suggest that Jamaica is in need of an institutional overhaul. This is borne out from at least two development indices. From a multi-sectoral standpoint Jamaica is currently rated by the Ease of Doing Business Report 2010 at 75 out of 183 countries surveyed<sup>43</sup>, and as it relates to corruption or the perception thereof, Jamaica placed 96th out of 180 countries on the 2008 Transparency International Scale. Neither augurs well for investment prospects, be it local or foreign. The Government needs to lead the change by adopting best practices that have improved the rankings of other developing countries with similar challenges.

As it relates directly to the water and sanitation sector looking at the ease with which the Government can anticipate private sector interests in waste water service delivery becomes relevant to this paper.

Based on the findings during the OPM interview, there is no central agency directing or advising on the planning and execution of a PPP. The Development Bank of Jamaica however, seems best poised to take on such a role. The DBJ, created in April 2000 is Jamaica's investment bank<sup>44</sup> and among other duties is responsible for coordinating and supporting divestment transactions undertaken by the GOJ. The divestment division of the DBJ has a privatization unit which administers the privatization process, including identifying entities for divestment, preparing

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<sup>43</sup> Report measures how conducive a country's environment is to business operations. Jamaica has slipped significantly from its placement of 63 out of 180 countries in the 2009 report.

<sup>44</sup> Created from the merger with from the merger of the Agricultural Credit Bank of Jamaica Limited and the National Development Bank of Jamaica Limited.

valuations, conducting technical analyses, reviewing offers, assisting in negotiations and preparing reports and submission the Cabinet.

The DBJ concurred during interviews that one of their biggest needs is a boost in capacity to provide the level of advice and support commensurate with PPP contracts. Despite their involvement in some PPP projects such as the Highway 2000 BOT project and the Soapberry Plant, there is no mandate or policy that compels Government agencies or Ministries to conduct their divestment procedures with the administrative assistance of the Development Bank of Jamaica. This is unfortunate, as despite its limitations the DBJ undoubtedly has garnered an extensive privatisation knowledge base and more so than any other entity in the country. The Ministry Paper #34 of 1991 “Privatization Policy and Procedures” merely lays out what is to be done in the event that the assistance of the DBJ is requested by a Ministry or if so instructed by Cabinet. These procedures however are related to general divestment activities and not specifically as it relates to public private partnerships. For steps involved in the process see Appendix G . The DBJ has put on record however, that next to deficiency in human resource capacity, the next greatest need of the Bank or any future PPP unit in forming partnerships out of existing Government assets would be the huge financial resources required to first put these facilities in a condition worth attracting a private sector investor.

Beyond the DBJ, Table #10 below demonstrates that the management of Jamaica’s water and sanitation sector is shared by a number of agencies which are responsible for setting policy, providing services and ensuring that regulatory standards are being met.

**Table 10** Institutional Organisation with Statutory Responsibilities for Sanitation services

INSTITUTION AND LEGISLATION	GENERAL RESPONSIBILITY	RESPONSIBILITY TO SOAPBERRY PROJECT
<b>Ministry of Health</b> Public Health Act	Develop and implement health policies and legislation to promote appropriate-sanitation practices	Determines design parameters and the standards operators need to meet for effluent discharge.
<b>Ministry of Water &amp; Housing</b> National Water Sector Policy 2002	Develop and implement policies for the management of water supplies, waste water treatment /disposal systems.	Determines implementation framework by setting the policy for the efficient provision of sewage treatment and disposal
<b>National Water Commission</b> National Water Commission Act (1980 & 2004)	Provision of water supply services and treatment, collection & disposal of sewage. Prescribe rates to be charged for NWC services	Unlike before the NWC has no approval or supervisory responsibilities for private operator facilities.
<b>National Environment Planning Agency</b> National Resource Conservation Act 1991	Management and conservation and protection of the natural resources of Jamaica.	Process application for licence to construct sewage facility & permit to discharge effluent, monitor for compliance with effluent standards.
<b>Water Resources Authority</b> Water Resources Act (1995)	Management of water resources, planning and approval of water resource development and preservation of our aquatic systems.	Comment on technical design proposal to ensure treatment and disposal does not threaten underground water sources.
<b>Office of Utility Regulation</b> Office of Utility Regulation Act (1995 & 2000)	Safeguard public interest by Approval of tariffs and fees based on the prescribed /approved minimum quality of for services.	Process application for commercial operations, set tariffs and ensure standards and quality are maintained.

INSTITUTION AND LEGISLATION	GENERAL RESPONSIBILITY	RESPONSIBILITY TO SOAPBERRY PROJECT
<b>Fair Trade Commission</b>  Fair Trade Competition Act 1993	Maintain and encourage competition in conducting business and supply of services to provide competitive prices and choices.	With the entrants of private sewage providers, FTC will ensure fair competition in the market and restrict abuse of monopoly power.
National Solid Waste Management Authority  NSWMA Act	Manage the collection, treatment & disposal of solid waste island-wide in order to safeguard public health.	Establish the standards and criteria for operators and licences for disposal site operators.

One study, commissioned by the GOJ in 2002 characterized the legal framework of these institutions as “a number of statutes that govern without coordination between them” (McCalla 2002 in D Thomas (IADB) (2004). Interviews were conducted with each of these entities (excluding the Water Resources Authority) to clearly delineate their roles and responsibilities with regards to a private investor’s application for permits and licences to construct a sewage treatment plant and the monitoring and evaluation of the quality of service received by customers. Based on those interviews, we can conclude that there has been much improvement since the 2002 study, as each entity underscored that determining standards for permits and post-construction monitoring for compliance was a collaborative effort. Despite the involvement of different institutions, there is an ease of applying for construction permits and licences as this is done via one agency, NEPA, who consults with the other institutions. As borne out by Doing Business 2010, there has been a significant improvement in this area moving from permits taking 236 days in 2008 to 156 in 2009 and 2010. There is also a relatively equal ease in applying to the Office of Utility Regulation, the central regulatory agency for utility service provision. These are two critical steps that will be very important to any investor and augurs well for the country’s readiness assessment.

### 4.2.3 LEGISLATIVE FRAMEWORK

Jamaica has a fairly stable history of parliamentary representative democracy since 1962 independence from Britain. Its constitution stipulates that the executive arm of government, specifically the cabinet, is collectively responsible to the Parliament. The power to make laws for the peace, order, and good government of Jamaica is vested in the parliament, “*subject to the provisions*” of the constitution. The Jamaican legal and judicial system is based on the English common law tradition and a constitution (1962) which establishes three important principles: the independence of the judiciary, the presumption of innocence, and trial by jury for serious criminal cases.

Notwithstanding, there is a distinct perception that financial crimes have impunity. The judicial system in Jamaica is severely compromised by the number of murder cases which delays other judicial matters. It is a widely accepted view that “*justice delayed, is justice denied*”. An example is provided by Lander and Zavala (2003) where in the case of credit collateral, foreclosure in Jamaica could take between 18 and 48 months, during which assets lose value and the collateral misses its purpose. This combined with a lack of capacity for commercial cases led to the establishment of the Commercial Court as a specialized branch of the Supreme Court and a full-time judge for this exclusive purpose. Notwithstanding, this does not augur well for would-be investors. In addition, Case management in civil cases was implemented in 2001 to reduce the backlog. This has enhanced efficiency and reduced the cost of reaching a resolution on the part of both the State and parties involved.



As it relates directly to the delivery of sanitation services by the private sector, the primary legislative instruments are:

- Public Health Act, 1974
- National Solid Waste Act, 2002
- Fair Competition Act, 1995
- National Water Commission Act, 1980, (amended in 2004)
- Office of Utility Regulations Act, 1995 (amended in 2000)
- GOJ Procurement Policy 2001
- National Water Sector Policy 1999

### **Legislative coherence**

Jamaica is making some progress with ironing out the kinks in its legislative operations. This however, is being done not on a comprehensive legislative overhaul but on a case by case basis as the needs arise during each PPP project process. In the case of the Highway 2000 BOT concession a new bill, the Toll Act, had to be enacted to facilitate toll collection by a private operator and similar adjustments were made to facilitate the management contracts for the Sangster's International Airport.

As it relates to the sanitation sector, there are legislative conflicts to be resolved. In one instance, the Minister of Water and Housing has placed a moratorium on the issuing of licences for private water and sewage providers until the policy is revised. This he explains was instigated by poor follow through on the policy decision to incorporate private sector in service delivery without the legislative support allowing them bill collection rights. The law books currently name the NWC as the only entity with such authority. This has resulted in the inability of private providers to take legal action against delinquent customers for non-payment of bills.

Another area of incoherence identified by the research was that of monitoring and enforcing the utility provider's compliance with their permit and licences. As it relates to non-compliant sanitation operators, there is a legislative overlap. The Environmental Health Unit at the Ministry of Health under the Public Health Act is authorized to serve notices on those in breach and to bring the perpetrator before the Court of Law for penalty to be determined. The Monitoring and Enforcement Branch of NEPA however, is empowered to fine those found guilty under the NRCA Act without the involvement of the local court. As well as the Office of Utility Regulation whose law allows them to prescribe the minimum standards of the service. It leaves some uncertainty on the part of the officers of the agencies as to who are the "first responders" in the event of a breach and who will bring them to book. This flaw also has the potential to cast doubt on the agencies, regarding who has jurisdiction over the development matters that arise.

### **fiscal legislature**

The fiscal legislature that governs the country is also very significant in the implementation of a successful PPP programme. The two main pieces of legislation guiding the activities of fiscal institutions are the Constitution of Jamaica which established the creation of a Consolidated Fund and prepared the setting for a centralized control of fiscal policy; as well as the Financial Administration and Audit Act (FAA) which gives the legal framework for the management of the funds appropriated by the House of Representatives.

Despite Jamaica's high debt overhang which has been attributed mostly to the banking financial

crisis of the 1990s, it has managed to honour its debt payments and receive a reasonable assessment from the Inter American Bank on the soundness of its fiscal framework. The assessment conducted was summed up in the following manner by Artana et al. (2003).

“Our review of existing legislation on fiscal institutions in Jamaica corroborates the presence of the sound institutional framework that has been captured by previous comparative studies on budget institutions in Latin America and the Caribbean. Constitutional provisions work effectively in creating an environment for fiscal control by making debt service mandatory as the first charge on resources and by giving a centralized role to the Ministry of Finance and Planning.”

Notwithstanding, the report does point to a need for improvements in two areas. These include legislative design that would improve transparency and accountability as *“public sector enterprises and other fiscal operations that fall outside Central Government do not allow an easy consolidation of public accounts to assess fiscal performance”* and *“design of additional explicit fiscal rules that act as constraints that insulate or insure fiscal outcomes from fiscal surprises”*.

From the writer’s perspective the absence of explicit fiscal rules in the form of fiscal responsibility laws that constraint deficits or debt is a significant contributor to our debt burden and needs to be embedded in law prior to the cementing of any PPP programme.

#### **4.2.4 REGULATORY FRAMEWORK**

After decades of State control Jamaica underwent a stream of privatization exercises which began in the 1980s and was further fueled by the Structural Adjustment Programme of the IMF. In 1989 alone, privatization reached 12 firms and between 1989–1996, 66 new firms were added Paredes (2003). It was this privatization process that highlighted the need for mechanisms that would promote equity, transparency, accountability, and fair trading practices. Many of these services were natural monopolies that with an island as small as this, it only accentuated the need for regulation. Before privatization there was no clear, official and accountable regulatory institution regulating State owned monopolies as *“the prevailing idea was that these monopolies are self-regulated, and do not need a different regulatory body”* Paredes (2003) . As well-needed a move as this was, the challenge as identified by D Thomas (IADB) (2004) was the implementation of these reforms during the privatization process. This left very little time for sufficient monitoring and evaluation which were necessary to determine if the best policy decisions were taken.

The paramount aim of competition (regulatory) policy is to raise living standards by making the economy as efficient as possible. A business environment conducive to competition among private enterprises allows the most efficient firms to prosper, thus attracting resources that may have been wasted elsewhere, Sampson (1997). So in order to reinforce and strengthen Jamaica’s economic efficiency and competitiveness, two critical pieces of legislation were enacted. The stated objective of the Jamaican Government was to create an institutional framework within which the country could achieve economic gains through reliance on market forces. The Fair Competition Act (FCA), was introduced in 1993 to *“maintain and encourage competition in conducting trade, business, and supply of services in Jamaica to provide consumers competitive prices and product choices”*. This Act prohibits abuse of dominant position (i.e., restrictive business practices) exclusive dealing, and market restriction in the Jamaican market.

To implement the law, the Act created the Fair Trade Commission which consisted of as many as five

commissioners that are appointed by the Minister of Industry, Commerce, and Technology and a staff headed by an executive director. As confirmed by the FTC in the interview, there remains until today, some limitations that compromise the effectiveness of the Commission. These include:-

1. No authority to impose fines or fees and is absolutely dependent on the Government for financing and member designation by the Minister in the absence of explicit criteria for candidacy.
2. The Minister is explicitly allowed to exempt a sector, which has been the case with the coffee board and the electricity company, which can lead to special interest lobbying and undermining of the FTC's mandate.
3. Absence of Commission's input in lawmaking process. The Telecommunications Act 2000, is the only legislation that acknowledges the Act. *"Within the present legal framework, there is no official means by which the Commission's voice can be heard.....essentially, the Commission has to await such invitations."* Lee (2004)<sup>45</sup>
4. A Court of Appeal 2001 judgment that held that the Commission being vested with both investigative and adjudicatory powers was a breach of natural justice. This emasculated the Commission, as it now operates on moral suasion and consent agreement rather than formal hearings, which have been on hold for some three years.
5. Poor capacity caused by understaffing. According to Lee (2006)<sup>46</sup> the professional staff consists of three economists and three lawyers. The latter was juggling at the time of the paper (2006) 352 cases among them and none of the attorneys is trained in competition law.

This was followed by the Office of Utility Regulations Act, which was enacted in 1995 to empower the Office of Utilities Regulations to process and evaluate licensing applications for operation and to define appropriate regulations for utility companies in a transparent and consistent manner. They are the *"invisible hand that substitutes for the lack of market forces"* Marin (2009) and are charged with regulating the following sectors: Electricity, Telecommunications, Water and Sewerage and Public Transportation (road, rail, ferry). Jamaica opted for a multi-sectoral regulatory structure in order to benefit from reduction in the risk of "capture", political interference, distortions due to inconsistent decisions on similar issues and the opportunity to facilitate learning across common issues such as tariff setting.

The OUR has faced several criticisms regarding its effectiveness, however research findings have revealed that amendments made to the Act in 1995 have reinforced the Agency's autonomy where despite the Directors appointment being made on the recommendation of the Minister to the Prime Minister and the Prime Minister to the Governor General, their tenure is secured for a minimum of three years except in the case of merited dismissal strictly on the grounds of failure to perform. Further amendments have empowered the OUR (no longer the Minister) to set tariffs. The research confirmed via interview with the Deputy Director General, that in keeping with the Water Sector Policy position, as set out by the MWH *"in setting tariffs, OUR will take into account exceptional circumstances that dictate the need for additional funding for systems improvement*

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<sup>45</sup> Considering that three years have passed since this assessment was done, interviews were held with the FTC in order to verify the extent to which these concerns remained with the Commission.

<sup>46</sup> Same applies as above.

*and rehabilitation”* the OUR has allowed for a “K-Factor”<sup>47</sup>

Except for adjustments made for annual and monthly inflation, tariff adjustments take place every five years. As set out in the Act, rates are determined based on operating costs and capital costs and allows for a fair return on the investment which is benchmarked against what obtains in other countries in similar situations. The licence, which is a legal document states the basis for the tariff and anything contrary, the operator can go to court on the basis of that document<sup>48</sup> to have the law enforce the contract if the investor determines that is in its interest.

Lastly, contrary to the situation in 2004 when the IADB study was done, the OUR is now fully self-financing through licensing fees, which has increased its independence and autonomy from central government. Interviews with the FTC indicated that there is room for improved synergy between themselves and the OUR as there is some institutional overlap. Their concern lies with the OUR’s failure to consult and include the FTC in matters the Commission believe lies under their purview. This is clearly not the ideal and will require redress via cooperation as a matter of priority. The FTC has a matter of even greater priority, needs to establish autonomy and secure independence from the Central Government.

#### **4.2.5 CONCLUSION**

Jamaica is currently very low on the PPP maturity curve. There is a very unclear governing framework caused by the absence of a policy to guide either the investor or the civil servant on the Government’s position on the use and application of this method of procurement. This is a significantly limiting factor that will inhibit overall efficiency of the PPP project development process. It is fair to say, that the country has a robust regulatory system which is fairly consistent with the recommendations of the World Bank (1997a) and ought to serve the process of PPPs well. Jamaica’s legal structure does not show any inherent conflicts with the needs of private investors, beyond the concern regarding timely hearing of cases, for which a facilities has been put in place for amelioration. There has also been improvements to the various legislative acts which in turn have strengthened the institutional efficiency of the various agencies. There still remains an institutional overlap but research findings point to a fairly good rapport and synergy between agencies responsible for operator compliance which reduces potential conflict. Despite the shortcomings within the general frameworks governing the process, Jamaica’s PPP landscape does not appear to be unduly handicapped. Two words of caution however. Notwithstanding all said above it would be highly recommended that a PPP readiness assessment be done on a sector by sector and project by project basis prior to proceeding and the second relates to the issues of perception. Many an investor makes a decision on the basis of his/her perception of country and at times not necessarily on the ‘facts’ culled and presented by the country or international agencies. Jamaica would then need to not only plug the loopholes highlighted but begin to actively work on its image and market itself as investment ready as vigorously as it does the ‘sand, sea and sun’.

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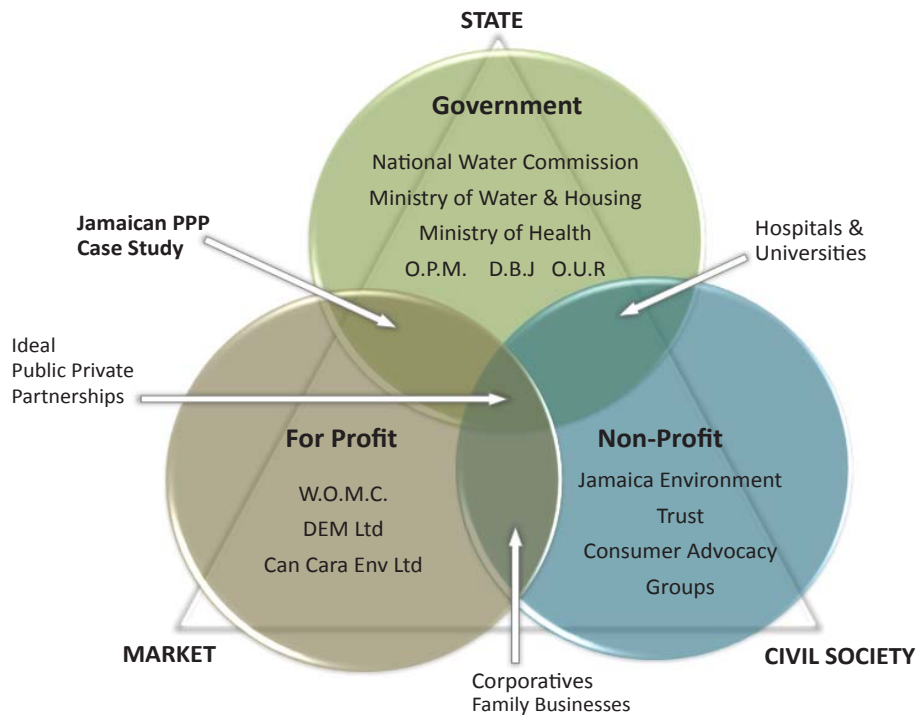
<sup>47</sup> *The ‘K’ Factor is a special mechanism incorporated into a tariff structure to provide additional funding for identified and monitored projects over a specified time period.*

<sup>48</sup> *The OUR took a Minister of Govt to court for attempting to dictate to them on the behalf of a telecommunications provider. They lost at the Supreme Court and won at the Appellate Court. This has served to increase their credibility and authority in the eyes of the citizens.*

### 4.3 MICRO ENVIRONMENT

The National Water Commission (NWC) as the State’s water and sanitation provider has signed a Design Build Finance Operate & Maintain Agreement with the Central Waste Water Company (CWTC) which is a consortium of four shareholders. It consists of three state agencies (the Urban Development Corp. (UDC), the National Housing Trust (NHT) and the NWC) and a private company, Ashtrom Jamaica Limited. The CWTC has in turn engaged Wastewater Operators and Maintenance Company Ltd to perform O&M services at Soapberry, for a period of twenty years on behalf of the Company.

Figure # 44 below illustrates the three major groupings of stakeholders – the State (public sector), the Market (private sector) and Civil Society, how they overlap and become “hybrid” institutions to fulfill different function and provide different services to society.



▲ **Figure 40** Soapberry PPP Stakeholders  
Source Author

This section presents the evidence collated and analysed from the research survey conducted in Kingston, Jamaica, July-August 2009. It is organised around answering the critical questions that form the backbone of successful public private partnerships, as identified in Chapter \*\*. This section seeks to identify if these questions were asked of the Soapberry and Harnaschpolder project planners and how adequately they were addressed in the implementation process.

#### 4.3.1 should the project be undertaken via PPP?

Two dated reports assists with answer we seek for this question. The first, the WASH Report was commissioned by the GOJ in 1992 titled – Management Analysis and Privatization Options of the National Water Commission, Jamaica. The purpose of the study was to provide guidance to the GOJ on how to provide water and waste water services on a financially self-sustaining basis.

The consultants had concluded, that *“the situation at NWC has reached a critical point. Without effective action, service to the public will deteriorate to unacceptable levels and the cost of subsidies to the Government will become unworkable. Privatization may prove to be a successful solution and should be thoroughly explored.”* Cullivan et al. (1992).” The report goes on to warn against full divestiture of the assets and services. It recommended however, that with whatever privatization options taken, there should be a continuing role for the NWC and as such, the GOJ should proceed immediately with the strengthening of the National Water Commission. Some seventeen years hence despite significant infrastructural capital investment, the situation remains fairly consistent with this report.

The second was an engineering report, done a year later in 1993, known as the Kingston Harbour Environmental Project which re-established the need for the Soapberry Plant which had been documented in various earlier reports as far back as 1975. Completed designs have remained dormant since then and with both the historical, institutional and operational challenges facing the NWC, the GOJ concluded that this project and public would be better served by going the route of a public private partnership. In other words, the KMR was in dire need of the infrastructure and the State had not demonstrated capacity to successfully provide this service. Historically, NWC has contracted with the private sector in several areas, including engineering services, security services, operation and maintenance of small wastewater treatment plants, and payroll services. However, nothing had ever been attempted on this scale, using this approach.

The Soapberry project was attempted in the 1990s by the NWC but the agency being unconvinced at the time that the Office of Utility Regulation would grant tariffs to facilitate recovery of the investment, postponed the project. Further delays were encountered as later attempts for assistance via the International Development Bank (IDB) was thwarted by the Bank's decision to sponsor only the water portion of their Kingston Sanitation project. The NWC also approached the IFC, who was reluctant to approve the funding, largely attributed to their discomfort with the level of Government involvement.

Annual reports requested from the Office of Utility Regulations indicated that the NWC is providing excellent water quality but as it has for decades, it still suffers from unaccounted for water of approximately 67%, losses of 20-30% from illegal connections and a current operating deficit of \$2.4 billion. There was also the very legitimate concern regarding the NWC's failure to adequately maintain and operate the existing sewage treatment plants in Kingston (majority of which now act as a mere conduit for sewage). This suggests that despite the situation in 1992 and the recommendations made by the WASH report, the NWC remained unable to resolve its operational and financial setbacks and needed to close the infrastructure gap that has delayed the development of the WSS sector in the Kingston Metropolitan Region. The writer therefore assumes these were major contributing factors for the decision that if Soapberry was to be built it would require the technical and managerial skills residing within the private sector. For these reasons, the answer to the question is yes, if can be, it should be delivered by PPP.

### **4.3.2 can the project be delivered via PPP?**

Despite the clear position that the NWC did not have the capacity to deliver this project and would opt to engage the private sector, the project needed to satisfy other requirements in order to justify PPP procurement. No one's interest would be served by taking a route that would fail to meet its objectives. The question therefore evolves from should Soapberry to could Soapberry be

delivered by PPP? These requirements were that it:-

- i. Be affordable, be it by the State, the direct users or both.
- ii. Demonstrates the taxpayer receiving value for money spent.
- iii. Identifies the risks that were likely to threaten the project, and determine if these risks could be successfully managed and which party could best facilitate avoid, and/or minimise those risks and allocate them accordingly.

### 4.3.3 Is the project affordable?

This query is actually raising the fundamental question as to who will pay for the services, how and for how long will they be able to? Will it be the Government, the end user or both? The first matter to address was the ability of the Jamaican Government or the consumers to accommodate the cost of providing the plant within its current levels of expenditure and beyond. This raises the question of feasibility analyses and what types of assessment the GOJ undertook to determine (1) if the project was both economically and financially viable, (2) that funds were available to cover transaction costs, the initial capital outlay and the monthly service fees (3) that the project would receive a tariff structure that would enable the project to repay the loans secured with enough responsive bidders within the private sector to drive the process and make it competitive. Finally, the NWC/GOJ had to identify additional funds for the expansion of the sewerage network as the additional customers for cost recovery and the actual increase in waste for optimized plant functionality would enhance the projects viability.

As concluded in earlier, private sector investors will only come to the table if the source and level of revenue to cover the project's costs are clear and predictable. According to PPIAF et al. (2009a) *"Sectors such as water [and wastewater] where revenue growth is often affected by challenges related to the level or collection of fees, are likely to be particularly difficult"*. The decision was therefore taken by the Government to shoulder the responsibility for direct payments due to the plant operator and to apply for a tariff structure from the OUR that would cover both capital and operating costs. This might have been prompted by two reasons. One being, that the NWC Act names that agency as the only entity empowered to charge and collect fees for WSS services and two, that the GOJ desired to expedite the project process and any adjustments to the law would require a much longer time frame. This question however, becomes extremely relevant considering not only the debt position of the country itself but that of the implementing agency that has been operating at significant financial losses for years.

From the interviews conducted the research uncovered conflicting responses from those involved in the project development phase regarding the nature of the feasibility studies performed. The Office of the Prime Minister advised that although the Cabinet does require that a proper feasibility analysis is performed to inform their decisions, *"regrettably it is not always done"*. OPM further conceded that projects dependent on external funding is predicated on studies speaking to viability and affordability and *"tend to be done in those instances because we have to."* The NWC, on the other hand, was unable to state precisely what type of feasibility study was conducted but posited that *"as the contractor was going to be the operator, they would ensure that it [the plant] was designed and built properly"*. This implies that the as the contract and operator had the same parent company that would ensure the plant was built well to support operation and maintenance. The response of the Central Waste Water Treatment Company (the Special Purpose Vehicle) conveyed however, that *"two international and a local company assessed the specifications and pricing in the bills of quantities proposed"* by Ashtrom Building Systems Jamaica

Ltd.,(the sole bidder) “which demonstrated that there was about USD\$5.5 million in savings”. This option is identified in literature as price benchmarking and is meant to imply that the proposal received by the prospective partner was deemed competitively priced as the proposed contract sum for construction was USD\$5.5 million less than that priced by the consulting firms. The use of a PSC was therefore pointless as the agency had concluded that with or without this option, it was not in a position to provide those services.

If affordability is determined by a project’s ability to be accommodated within the intergenerational budgetary constraint of the Government, then this approach to determining ability to cover the costs of the project and service the loan is inadequate. If the response of the SPV is taken as given, then this exercise covered only part of the assessment which was to determine how reasonably priced the project was and had no bearing on the State’s ability to cover cost; neither within present budgetary limitations or that of the immediate future.

### **4.3.5 are the resources available?**

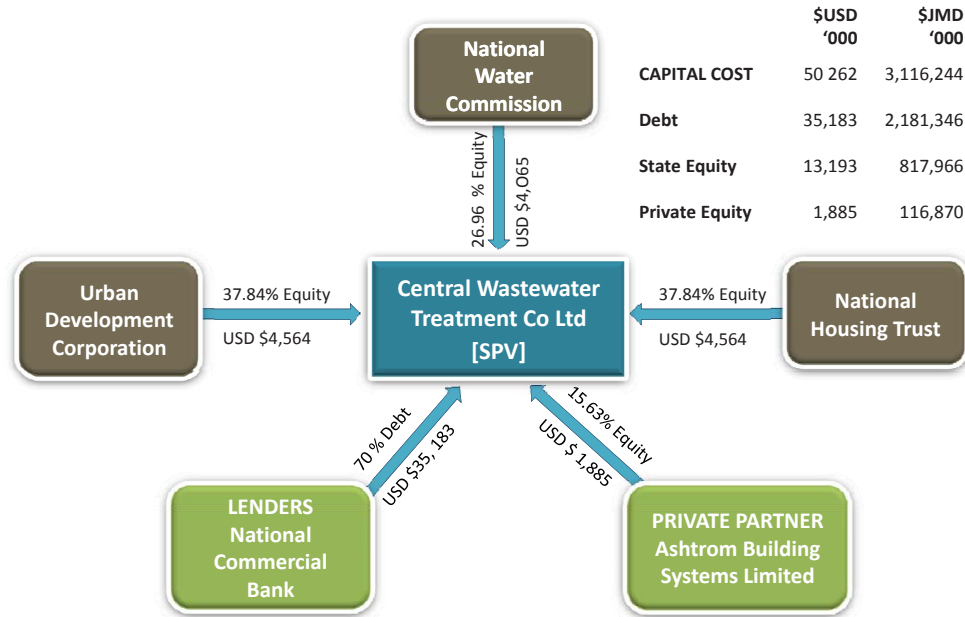
As the theoretical chapter informs, infrastructure project loans are non-recourse loans, where lenders agree to terms that depend on the cash flows of a project to securitize debt procured. With no commitments for assistance from multilateral agencies, discussions were held with the sole bidder (Ashtrom Building Systems) who expressed the capacity to finance the project. NWC however, rejected the offer as the terms were deemed prohibitive.

The decision was then taken to incorporate a Special Purpose Vehicle whose shareholders included three government agencies under whose portfolio the service would fall and the private partner. These were:-

1. The National Water Commission (equity holdings of 8.69%) under whose mandate sanitation services fall.
2. The Urban Development Corporation (equity holdings of 37.84%) whose mandate is to improve the “urban fabric of the metropolitan areas, the coverage and quality of urban infrastructure”.
3. The National Housing Trust (equity holdings of 37.84%) who was the agency with direct responsibility for the Inner city Housing Project which had triggered the need for the plant.
4. Ashtrom Building Systems Limited (equity holdings of 15.63%) who was the main contractor on the NHT’s housing project and the sole bidder.

Capital was injected by the UDC and the NHT as they were considered to have much healthier balance sheets than the NWC. Though not openly disclosed in project documents, it was gleaned from interviews that the primary driver, was the need to expedite the project and to then sell their shares to a private sector party as soon as the plant was operational and a tariff was in place to provide more accurate information on the plant’s viability. The diagram below in Figure # 45 illustrates the PPP financial structure which seems on the surface of it to be fairly consistent with that presented in the PPP literature in that construction costs were paid from the funds raised from debt and equity and operating and maintenance costs were met directly from the project’s cash flow. The GOJ ensured there was equity input on the part of the private partner but largely as a means of garnering their commitment rather than to leverage funds. This is unusual as typically it’s the other way around where the partner has the greater share of the investment and the Government a minority shareholder, primarily to demonstrate commitment and maintain some control.





The loan was secured on the domestic capital market from the former State bank, the National Commercial Bank for a period 20 years. The project carries a reasonable debt to equity ratio of 70:30. PPP theory suggests that this was a reasonable mix as “long term debt finance typically varies from 70-90% of total funding requirement” PPIAF et al. (2009a). Debt is a cheaper source of funding than equity but it is a balancing act as a higher debt position can stress the plant’s cash flow in the early years when the project revenue is lower. This position however, can be expected to improve for two reasons. First, though not directly a part of the scope of works for the PPP, the NWC is expected to expand the sewage collection network which will both allow for greater efficiency of the plant’s treatment capacity and greater revenue flow from the additional customers. Second, the loan was negotiated with a refinancing clause that allowed for the interest to be rolled back as soon as the civil works and plant construction was completed. This phase of the PPP is considered to be the riskiest and as such financial institutions are willing to reduce interest rates to reflect the reduction in the risk to their capital.

Besides debt, the equity on the part of the four stakeholders closed the gap on the financial requirements of the plant. The equity contribution of the private partner at 15.63% could be considered a bit low to incentivise performance at the desired level. According to Ehrhardt, D. & Irwin, T. (2004) whose study specifically seeks to address the question of taxpayer bailouts, they recommend private partner equity injection of 20-25% of capital cost. The return on equity depends on the performance of the project after construction and operating costs are honoured. It is anticipated that this would incentivize the State agencies to act with alacrity and efficiency in making decisions as acting in the interest of the project and the country will be synonymous with acting on behalf of their investment. Though this is the intention, we will see in the section addressing implementation, that this does not necessarily apply.

One particularly impressive (and unusual in the Jamaican context) feature of this financial structure was the State’s ability to effectively negotiate the terms of the loan without having to increase its exposure to greater risk by providing a sovereign guarantee. One decision however, that has posed threats to the NWC’s ability to meet its financial obligations and consequently the

project's financial health is the fact that the loan was denominated in United States Dollars. It is a credit to the local capital market that the financing was obtained within Jamaica and this ought to have signalled the huge plus in Failing to match the currency in a country where the exchange rate moved significantly against the US Dollar, in a ten year period (from JMD \$39.98 = USD \$1.00 in October 1999 to JMD \$89.11 = USD \$1.00 in October 2009) was an extremely risky venture. It is worthy of note that since the contracts were signed on December 1, 2004, the Jamaican dollar devalued against its US counterpart dollar by \$27.15. Considering the history of devaluation and its impact on other PPP projects<sup>49</sup> this was definitely a decision that was likely to work in favour of the lenders and not the project.

Finally, with respect to insurance, in limited or non-recourse financing, insurance forms an important part of the lender's security, and therefore the scope and quality of insurance protecting the project assets and revenue will be of particular importance. This is especially true in territories that may be unfamiliar to financiers. In the case of Soapberry, the PPP Agreement between the NWC and CWTC required that full insurance coverage be put in place to cover all construction related activities, the Plant on completion, its workers and also the NWC's Interconnection Facilities and workers. Contract ensures that no material changes, cancellation or renewal can be made to the policy without a figure 41 The Soapberry Plant Financial Structure

Source: NWC

In light of the absence of a feasibility study on the part of the Government, one can only assume and in assuming find comfort that the lenders had carried out a credit risk appraisal and looked at various project economics to be comforted that the debt can be fully serviced from the project revenues and the project was bankable. Beyond that only time and a balance sheet can tell.

### 4.3.6 how effectively were the risks managed?

Achieving value for money, which this paper embraced as the key motivation for PPPs, is heavily dependent on optimal transfer of risk to the party best able to manage it. This writer believes another word is responsibility. Risk allocation is an attempt to determine what major and critical tasks need to be handled and which party has the resources to manage this responsibility/risk most cost-efficiently. In any infrastructure project, a wide range of risks exists and is no less so for Soapberry. There was no evidence to support that the Jamaican public officials had conducted a formal risk assessment or risk management plan. However, the contract does assign responsibilities and Table # 11 below outlines the risks identified and the party who has accepted the risk of retaining them. A very critical misstep will be made however, if that party is given that responsibility without sufficient incentive to shoulder that responsibility/risk. As we will see in later sections, the unforeseen did happen and the responsibilities/risks as allocated proved less than optimal for the Soapberry Public Private Partnership.

PPP theorists all concur that the key to risk management lies within the concept of partnership and figuring out who does what best. If risk can be transparently identified, equitably allocated, and costed appropriately, successful projects will result. If the objective is to just shift risk away from one party to the other, success will be more difficult to achieve. It is also argued that risk is to be carried by the party able to manage it most cost-effectively. The question therefore is, how successful were the architects of the Soapberry project in adhering to those "rules of thumb"?

<sup>49</sup> July 24th 2009 interview, Managing Director of the Highway 2000 BOT project that has sustained billions of dollars in losses to date, informed that the majority of those losses can be attributed to the Jamaican dollar weakening against the US dollar and the mismatch between loan and cash flow currency.

**Table 11** Soapberry Risk Assessment

RISK	RETAINED BY	COMMENTS
<b>Design &amp; Construction</b>		Unable to comment as no access given to EPC Agreement between CWTC and ABS
<b>OPERATIONAL</b>		
<b>Operational</b>	CWTC	<ul style="list-style-type: none"> <li>Responsible “for all losses, damages and liabilities incurred during operations sustained or suffered” except that it be at the negligence of the NWC.</li> </ul>
	CWTC	<ul style="list-style-type: none"> <li>Delays in commissioning not caused by the NWC or force majeure, CWTC is required to pay amounts for each day of delay.</li> </ul>
	NWC & CWTC	<ul style="list-style-type: none"> <li>NWC and CWTC are responsible for joint writing of the operation procedures but with each party being responsible for its own losses or damages arising from such.</li> </ul>
	NWC	<ul style="list-style-type: none"> <li>NWC takes over plant if operation halts for 168 consecutive hours except when the fault is NWC’s or force majeure.</li> </ul>
	NWC	<ul style="list-style-type: none"> <li>Liquidated damages incurred under the agreement is not to exceed an agreed Liquidated Damages Cap.</li> </ul>
	NWC & CWTC	<ul style="list-style-type: none"> <li>NWC has retained an option to purchase “at the Buyout Purchase Price minus any costs to effect reasonably required repairs, fair wear and tear excepted”</li> </ul>
<b>Interdependence/ Interface Risk</b>	NWC	<ul style="list-style-type: none"> <li>Responsible for all activities associated with the provision of Interconnection Facilities. Failure to complete facilities as per schedule requires fixed payment to be made to CWTC.</li> </ul>
<b>COMMERCIAL</b>		
<b>Market Risk</b>	CWTC	<ul style="list-style-type: none"> <li>Is contractually required to design, finance, construct, own, operate and maintain the Complex.</li> </ul>
<b>Residual</b>	CWTC	<ul style="list-style-type: none"> <li>Upon expiration of this Agreement CWTC shall, “transfer the Complex in proper working order, fair wear and tear excepted, to NWC at the Termination Purchase Price”.</li> </ul>
<b>Foreign Exchange</b>	NWC	<ul style="list-style-type: none"> <li>Indexation and Adjustments speaks to a monthly and annual adjustment of fees with respect to the FX market. If OUR performs in a timely manner the risk is reduced as adjustments are also made to tariffs on the same time interval.</li> </ul>
<b>Demand Risk</b>	CWTC & NWC	<ul style="list-style-type: none"> <li>NWC shall pay to CWTC each Month, in arrears, an amount to cover the Wastewater Treatment Price for Water discharged from NWC Sewerage through the Interconnection Point. CWTC loses or gains revenue as influent increases or decreases BUT the NWC is required to deliver a minimum quantity.</li> </ul>
<b>Payment Risk</b>	Central Government	<ul style="list-style-type: none"> <li>Central Government provided a guarantee which was limited to undertaking NWC payments to the SPV.</li> </ul>
<b>LEGISLATIVE &amp; REGULATORY RISK</b>		
<b>Permit /Licence Risk</b>	CWTC	The contract places the cost and responsibility for obtaining all permits, licences and approvals with the SPV.
<b>Land Acquisition</b>	GOJ/MWH/NWC	Responsibility for securing property for the placement of the plant was that of the Government via Ministry of Housing landowner.

For the most part, the contract seems to have captured the essential risk factors and allocated

them in a manner typical of PPP arrangements. There are however, a few anomalies. In the absence of the EPC Agreement we can assume that construction, site, commissioning and permit risks were satisfactorily shared as the project was completed on time and within budget. Assessing the plants real capacity however, has been constrained. Though the plant has been commissioned with a Commercial Operation Date of March 1, 2008 its optimal efficiency has not yet been determined as its design capacity cannot be properly tested until sewage flow increases. This is dependent on expansion of the network by the NWC which has been delayed. This is considered an interdependence risk but is absent from the contract and has in turn triggered revenue risk which is primarily a function of utilisation and tariffs both issues have materialized and will be explored in greater detail. The contract does not address this threat and in the absence of a penalty clause has not effectively created an incentive for the NWC to comply.

Clause 4.5 of the Operations and Maintenance Agreement takes an unusual deviation from standard practice by reposing “sole cost and expense” of obtaining “the Relevant Consents” and maintaining in effect “all permits, licences and approvals required by all agencies, commissions and authorities with jurisdiction over the Company and the Complex in order to enable it to perform its obligations under this Agreement”. This obligation was smoothly fulfilled under the construction period but has created significant complications for operations which will be address in a later section.

Another Clause of interest is that of the Waste Water Agreement where the Central Government provides a limited undertaking (not a debt service guarantee to the Commercial lender) to the SPV should the NWC fails to make payments. In the future policy makers should add a clause to the contract making these payments a subordinated debt of the SPV which must be repaid when they return to a defined profit margin.

When a PPP contract fails due to faulty risk sharing, it is the taxpayer that bears the consequences since it will then have to indirectly incur the service costs. What was needed in the case of Soapberry was expert advisors which does serve to reduce risk and in this case might have assisted with better framing of the contract. What this analysis so clearly points out is that notwithstanding the care taken and the identification of most of the risks, failure to satisfactorily address only one can be sufficient to ruin a project.

This gives some insight to the study’s main question of why the risks seem to remain with the taxpayer even when it is deemed to have been transferred via contract. This is the crux of the matter and largely because the benefits to effective transfer are significant when achieved. When allocated properly the:-

- **Users:** receive a stable pricing and payment structure that they can afford.
- **Government:** receives better agency outcomes, value for money spent and timely delivery.
- **Contractor:** delivers project outputs under a well defined pricing and payment regime that affords a reasonable rate of return on their investment.
- **Executing Agency:** will have a more focussed strategic direction, a clearer understanding of its operational environment and its relationship to private sector partner.
- **Taxpayer:** receives spillover benefits from value received on taxes paid.

#### 4.3.7 how was the partner identified and selected?

One of the key if not the key determinant for achieving value for money is to ensure that there is 'competition for the market'. The research survey revealed that the GOJ opted for direct negotiation with a single bidder using direct contracting methodology, which in principle is considered highly inadvisable. The NWC and CWTC advised that this was predicated on the fact that Kingston's ICHP was on a tight schedule for hand over to purchasers and the main contractor on the housing project had the capacity to undertake construction works of project the scale of the Soapberry Plant.

There have however, been shades of differences regarding the justification given for sole sourcing. The question was posed to the NHT (major shareholder and entity responsible for the ICHP) "Considering that the problem with both Innerscity housing deficiencies and the need for adequate sewage treatment for the KMA have existed for almost 30 years what was the nature of the emergency why both projects could not have been tendered at the same time?" The response of the NHT (via electronic mail dated September 16, 2009) was "The sewage issues had very little to do with the ICHP project and was done more for convenience than anything else. Ashtrom had prepared their design and approached the Government for a joint venture partnership more than a year before the conceptualization of the ICHP". When contacted twice to asked if this approach did not contravene the guidelines of the GOJ's procurement policy, no response was afforded.

Interviews with the private partner revealed that studies were done of a similar sewage treatment plant in Israel (where the parent company is based) that had demonstrated efficiency using proven technology that would reduce the need for land space while increasing the plant capacity at Soapberry. Designs were completed by via consultation with these Israeli engineers and submitted to the Government for approval.

The NCC was asked to confirm if such approval was granted, what was the justification for sole sourcing and on what basis was Ashtrom Building Systems was deemed the best "partner" for the project? The answer which was three months in coming was provided via telephone call on October 28, 2009. The NCC found no indication in their database that the Commission's approval was sought for using sole source procurement. This research effort has not unearthed sufficient information to make any such determination but in light of the difficulty regarding the basis on which sole source procurement was chosen and in the absence of an approval from the NCC, (the state body with authority to grant such) the question of corruption does arise.

In the absence of doing a public sector comparator<sup>50</sup>, or a cost benefit analysis on the proposal submitted by ABS, it was critical that the GOJ determine its partner by comparing tenders between varying private sector interests. In the absence of all three, the process was lacking in transparency, and ability to determine if value for money was achieved, was handicapped. That the GOJ accepted a competent private sector party is borne out by the track record of the company and the completed works at Soapberry but, what remains in dispute is whether the Jamaican taxpayer had the benefit of the best.

One of the strongest arguments for a PPP arrangement for infrastructure has been the ability to incentivize the partner to deliver the best design and wearing the hat of 'contractor' to build a

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*50 The PPIAF opines that the PSC may be hypothetical, but it must refer to a project that could actually be implemented if private financing was unavailable. If public funding is unavailable, the PSC is largely irrelevant. Leighland, J. (2006) Is the public sector comparator right for developing countries? Gridlines: Public-Private Infrastructure Advisory Facility, Note No. 4. .*

robust facility by tying building and operating contracts together. The research found that in the instance of Soapberry, the Jamaican government has two separate contracts with the ‘builder’ and the ‘operator’. Though both companies (respectively, Ashtrom Building Systems and Waste Water Treatment Company) are of the same parent company (Ashtrom Jamaica Ltd) the parent company has effectively limited their exposure from the operations contract by setting up a “paper” company to handle the O&M. There seems to be no fixed tie and obligation on the part of the parent or building company should any liabilities arise regarding defective works done on the plant.

This presents another troubling procurement issue as far as the contracts are concerned, the NWC contracted with two different companies for two different services and as such there ought to have been a competitive tender exercise for the operations and maintenance of the plant. When asked to justify not tendering for the most capable operator offering the best price, the OUR advised that the firm’s argument was that the warranty would be null and void if ‘the right people’ were not the operators.

#### 4.3.8 how are the obligations and relationships defined?

As has become a key feature for PPPs, a separate commercial entity (referred to in the literature as a Special Purpose Vehicle), was incorporated. It is a legal entity that is established to undertake the activities defined in a contract between the SPV and the Government. All contractual agreements between the various parties are negotiated between themselves and the SPV, in this instance named the Central Waste Water Treatment Company (CWTC). There are five main agreements governing the implementation of the PPP which are illustrated in Figure # 46 below; namely,

1. Shareholder Agreement between all proposed shareholders in CWTC which defines the ownership structure, as well as the respective rights and responsibilities of each.
2. Construction Agreement between CWTC and ABS which speaks to the design, engineering and construction of the plant.
3. Project Management Agreement between CWTC and UDC, where UDC provides project management service during the life of the construction phase.
4. Waste Water Treatment Agreement between CWTC and NWC
5. Operation & Maintenance Agreement between CWTC and ABS, which speaks to the long term arrangement between the plant operator and the day to day operation and maintenance of Soapberry

#### Box 4 Requirements of the GOJ Procurement Handbook

Jamaica’s - Handbook of Procurement Procedures provides this information:-

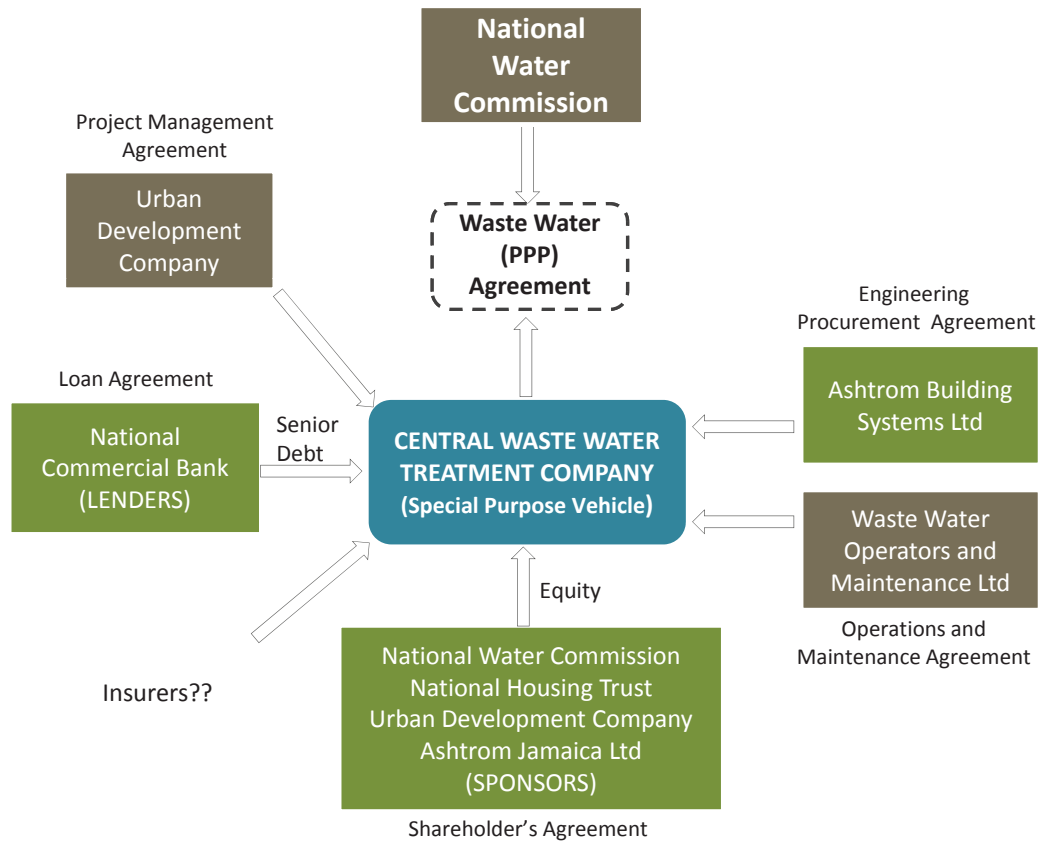
Sole Source means there is only one provider of the particular good, service or work. Direct Contracting means only one contractor is invited to participate. Use of this method may be justified when:

1. In response to a catastrophic event, making it impractical to use other methods of procurement because of the time involved in using those methods.
2. For the purposes of research, experiment, study or development.
3. In emergency circumstances

The Head of the Procuring Entity may approve sole source/direct contracting up to J\$3M. Contract values above this threshold will require the pre-approval of the NCC.

The Handbook further instructs that contracts above J\$30 million requires not limited or selective tender but an open tender exercise.

It is noted that the structure of this PPP stands up well in comparison to the typical contractual framework and that of Harnaspolder in Figure Nos. 30 and \*\* respectively. The SPV is a signatory to all the agreements and is the ‘hub’ around which all other parties and their activities revolved.



▲ **Figure 42** Soapberry Contractual Arrangements  
Source: Author, 2009

#### 4.2.9 how are the obligations and relationships to be managed?

PPIAF et al. (2009a) advises that good governance and good project management, along with risk mitigation and quality control, are essential elements of managing a successful PPP process. During the construction the operation phase, it involves dealing with changes in the project and unforeseen events. This section looks at how the public private partnership is being implemented and assesses the extent to which the players have followed or deviated from recommended best practices. Preparation of the contract management phase begins during the project preparation phase, where budgets and staff to monitor the project are identified on both the public and private sector side and their ability to maintain the integrity of the contract and ensure project objectives are met is assessed.

Central Wastewater Treatment Company Limited (CWTC) is a special purpose company established for the implementation of Phase 1A of the KMR Wastewater Treatment Project on 81 hectares (200 acres) of land. CWTC was incorporated as a limited liability company under the laws of Jamaica. Its shareholders are Urban Development Corporation, (UDC), National Housing Trust (NHT), Ashtrom Jamaica Ltd and National Water Commission (NWC). A project board was instituted to provide a

regular forum for resolving key issues and for making decisions above the powers delegated to the project management group.

One of the commendable aspects of Soapberry, which is not typical of Jamaica's local infrastructure projects, is that the construction works (August 2005 to November 2007) was completed on time and under budget. This for many would represent reason enough to laud the Government for its decision to use PPPs and to hand down a verdict of "answer to prayer". This promising start however, soon evolved into complications which can be attributed to three major concerns.

- i. Failure on the part of CWTC to invoke a clause in the loan agreement which allows for the loan to be refinanced at a lower interest rate with the lender on completion of construction.
- ii. After the successful negotiation with the lenders to agree to a loan facility without a t, the Government in August 2009 agreed to the bank's demands and provided one.
- iii. Lastly, after eighteen months into operation of the plant, the government is being asked and is considering buying out the interests of two shareholders (UDC and the NHT) on a project that was not undertaken in the last 30 years because of its Government's inability to finance infrastructure of that scale and cost.

The question to be answered is what allowed for this created this turn of events? Could they have been reasonably anticipated and prevented?

### **Management**

The Soapberry project has experienced a number of operational difficulties since start up, which in turn made management of the project problematic. One fundamental problem relates to the lack of continuity in the management personnel. The SPV (CWTC) has hired three General Managers over the 18 months of plant operations and though the latter is no fault of their own making, it has had three different boards of directors in the same period. This continuity gap has led to a disruption in work flow and achieving targets that have significantly harmed the financial health of the project. It is the opinion of the writer however, that a delay is understandable but considering the critical nature of the issue, action should have been taken prior to the seventeen months and counting. Rather than 'independent, neutral' members, the board representatives are mostly heads of the companies that are shareholders. In light of the difficulties facing the project the question regarding who the board reports to is relevant. The answer from the NWC was that each board member reported to their respective Minister. A classic case of "too many Chiefs and too few Indians". Recent checks on the status of the project revealed (by WOMC) that *"the Office of the Prime Minister has taken a direct hand in the project"*. All attempts to identify the officer or department given that charge has proven futile. OPM is a policy based and driven organization and as such it would be with great concern should their involvement in the day to day management of the project be considered the solution.

### **Administration**

Soapberry has experienced two major setbacks arising from poor administration. The first involves the failure on the part of CWTC to successfully apply for an operating licence from the OUR. Missing this target has singularly created a multiplier effect on the critical path of the project. The CWTC tariff was scheduled to be in place prior to the NWC's application to the OUR for their (every five year) increase in tariff, which would allow the OUR to structure the NWC tariff in light of this new expense. The absence of a licence means primarily that the OUR was only left to make an educated guess which might impact on the NWC's already strapped cash flow should



the projection be less than the actual cost. This also impacts on the management of WOMC, the operator who in the absence of the licence and tariff is being paid a “flat fee” which is less than revenue projected. The OUR advised that licence applications were submitted by CWTC but was rejected twice by the agency on account of insufficient information to form a judgment. As of this writing, October 2009, the licence has not been awarded and consequently the tariff structure remains unknown.

The second challenge emanated again from CWTC’s failure to capitalize on the very useful clause in the loan agreement which allows the company to apply for a lower interest rate when the high risk activities associated with the construction phase are satisfactorily complete. This has not been done to date, which effectively has resulted in the project having to pay 18 months of interest at higher rates than was necessary. This resulted in the unused funds from the construction phase being allocated to unbudgeted interest costs rather than put into the operational phase as working capital.

In light of these project misfortunes the writer enquired after CWTC’s capacity to perform its duties and has concluded that CWTC has not been properly ‘operationalised’ with the resources the company would require to perform its administrative obligations. For one, the office of CWTC is located within the offices of the Urban Development Corporation (a shareholder) and utilizes the resources of the UDC to support its activities (for example, accounting personnel). This has been deemed by other stakeholders to be an impediment to the independence of the operations and decision making process of CWTC. Despite recommendations, no formal arrangement has been put in place for a ‘hands-off’ relationship between the UDC and CWTC. Be it true or not, it is perceived by stakeholders that CWTC is unduly influenced by the UDC in its day to day operations and is a ‘spanner in the works’ for the smooth implementation of the partnership<sup>51</sup>.

## Operations

The project has not been exempt from plant operational difficulties. Using their experience with the operating costs for other treatment plants, the NWC made cost projections and agreed to pay CWTC a monthly provisional sum to cover expenses of WOMC. This occurred for a number of months but at the time of research, the management of WOMC advised that the CWTC has been remitting significantly less than the agreed amount, hence operating efficiency has been below par. Management of the WOMC credits the fact that they have been able to continue operating on the basis that the parent company (Ashtrom Jamaica Ltd) has been able to assist and because the plant is new, it presently requires very little maintenance work. When asked to acknowledge that the situation was unsustainable, WOMC agreed and advised that their solution was to request that the government consider full divestiture of which they would be willing to make an offer. In response, the NWC indicates that though full divestment is unlikely, all avenues are being explored but could not comment further, as they had not received a formal offer from WOMC.

## Relations

**NWC AND WOMC.** Laying all technicalities aside, the project is further endangered by one of the

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<sup>51</sup> As a side note, the researcher’s questions to the General Manager of CWTC to have a look at the contract documents was greeted with a telephone call to the General Manager of the UDC for an opinion. This does suggest that there is a referral upwards for even small decisions that if considered outside the purview of the CWTC Manager ought to have rightly been referred to the legal department (who later contrary to the UDC’s General Manager’s instruction did grant permission for the release of the documents).

threats least acknowledged by the partnership – disruption of trust. It is difficult to detect in its early stages and more challenging to repair than most. Interviews with the parties, brought to the fore an underlying yet distinctive tension. The respondents however, were not asked a specific question regarding trust; as such this is a purely speculative commentary. What is factual is a disagreement which occurred very early in the construction stage, where ABS installed meters in a position considered by the NWC to be inconsistent with the location on the approved working drawings. ABS held to the position that this was an agreed change and refused to relocate the meters at their cost as requested by the NWC. ABS eventually acquiesced and relocated the meters but not before obtaining lawyers to defend their actions. It appears to the writer that NWC considered this a huge affront, an insult, a breach of faith and confidence in their partner and lastly an indication that they could not be trusted. This seems to have led to NWC taking a very stiff-necked approach to the difficulties the project now finds itself in. For example, the NWC has opined that they are under no legal obligation to pay CWTC until a tariff is in place and will not be pressured beyond what is deemed reasonable. By reasonable, the NWC advised that the current payments to CWTC are done on the basis of a flat provisional sum. When the licence has been awarded and the tariff is in place the NWC has voiced no intention of making additional payments in the event that the tariff is higher than the provisional sum projected. From appearances this seems baseless but the NWC is standing ground on this position. It is not known what WOMC's response will be but from all indications this will not be accepted without a dispute.

**UDC, NHT & CENTRAL GOVERNMENT** - The relationship between the shareholders and the government has also been impacted by the delay in obtaining the licence and a tariff. The interviews further revealed that in order to meet the Government timeline for the readiness of the plant, it was agreed that tendering for a private sector partner with the capacity to not just build the plant but finance it would have been time consuming. The agreement of the UDC and the NHT to provide equity financing for the project was predicated on the premise that the project was not just economically but financially viable and would be very attractive to the private sector once a tariff was in place to confirm its profitability. The UDC and NHT then would be only be upfront capital in the short run in anticipation of selling their shares to prospective interests. Reports are that there has been disgruntlement from these entities as the delay in obtaining the licence has delayed their ability to sell their shares, instead being required to make monthly contributions to the payment of CWTC. With pressure being placed on the Government, discussions are now being held to have Central Government purchase the shares from these State agencies. A very unfortunate turn of events, as the country is simply not in a financial position to facilitate this unbudgeted expense without doing injury to an already precarious balance sheet.

#### **4.2.10 how will disputes be resolved?**

In light of the aforementioned difficulties, it would not be baseless conjecture to suggest that this will also be an area tested by the Soapberry experience. Having not been granted access to the Construction Agreement, the comments are relevant only to the Wastewater PPP Agreement signed between the NWC and CWTC. From all appearances the Agreement has in place a clear mechanism for the steps to engage in the event that such unfortunate occasions arise. The Agreement refers to the use of three of the six options recommended in Chapter Two, namely:

- Mutual discussions
- Referral to an expert if dispute goes beyond 30 days, who has seven days to set a hearing date which cannot be more than 45 days after his engagement.
- Arbitration if the dispute is not settled within 90 days of referral to the expert.

The Agreement requires that the NWC agrees that *“the execution, delivery and performance by it of this Agreement to which it is a Party constitute private and commercial acts rather than public or governmental acts”*; and as such waives immunity rights for any present and future assets.

There is much to be said for the skill of process managers who are able to act as mediators between the parties to stave off potential conflicts early in the game before matters escalate to the point of having to invoke such clauses. As indicated in the assessment of Jamaica’s legislative framework, the primary concern for investor rests largely with the length of time associated with backlog of cases. This agreement reflects the recommendation of the IAB, Basanes et al. (1999) to use mediation and arbitration which is internationally recognized and are a viable option to expediting disputes in a transparent manner.

#### 4.2.11 Governance

Consistent with the characteristics of good governance as outlined in Chapter One, Table #12 gives an overview of how each criterion could be interpreted in the context of good sewage system governance and then measures the Soapberry project against same.

**Table 12** Soapberry Governance Assessment

CRITERION	APPLICATION EXAMPLE	SOAPBERRY PPP
Accountability	Timely publication of audited financial statements.  Securing project approval of both Cabinet and Parliament.	<ul style="list-style-type: none"> <li>• Audited financial statements for WOMC are to be tabled in Parliament yearly. SPV has not submitted first year’s report.</li> <li>• Though the Westminster System of Government does not mandate tabling in Parliament, it is de facto practice in Jamaica. Soapberry was not afforded Parliamentary review</li> </ul>
Responsiveness	Preparing a development plan showing anticipation of future needs and capacity to respond.	<ul style="list-style-type: none"> <li>• Development Plan designed by the NWC is in place to extend coverage. OUR 2008 sewerage tariff permitted a ‘K-factor’ to finance expansion. This expansion has not commenced as scheduled by the NWC</li> </ul>
Effectiveness & Efficiency	Ensuring repairs to sewage mains are timely and when necessary, are scheduled with road repairs done by the National Works Agency.	<ul style="list-style-type: none"> <li>• Historically, this has not been the practice of NWC and Road agency. During the research period such problems did occur and the response of the SPV was timely.</li> </ul>
Transparency	Partner selection by competitive tender. Publication of sewage effluent quality.	<ul style="list-style-type: none"> <li>• Contrary to GOJ procurement rules, partner was selected via direct contracting.</li> <li>• Sewage effluent quality not published but is accessible via Access to Information Act.</li> </ul>
Participation	Facilitating public consultations on developmental works, especially for those residing close to plants.  Tariff structure to be determined in consultation with the public.	<ul style="list-style-type: none"> <li>• As per EIA, 2004, socio-economic assessment included consultations and interviews with four potentially affected communities.</li> <li>• OUR finances public fora for discussion those impacted by the changes in fees.</li> </ul>
Respect for Rule of Law	Ensuring that plant is operated in compliance with licence and permit.	<ul style="list-style-type: none"> <li>• Onsite lab performs daily tests and weekly test samples are submitted to an independent lab. NEPA has confirmed compliance to date.</li> </ul>

The only documented information on civil society response was capture in the Soapberry Environmental Impact Assessment. It revealed that “knowledge of the project was minimal and was viewed with apprehension and cynicism”. Members of the neighbouring communities cite the poor dysfunctional state and persistent odour of the existing plants as the basis for their fears. The general consensus was the belief that the main problem was a lack of faith in the both private and public sector to maintain the plant during its lifetime. The respondents also cited lack of job opportunities on the project as another basis for their rejection of the Government’s handling of the development process. See Appendix I for additional measures of governance in PPP projects.

#### **4.2.12 Conclusion: will jamaica receive value for money?**

It ought not to be deemed unreasonable to say from the get-go that the architects of this public private partnership did not put themselves or the Cabinet of Jamaica in a position to credibly address this question. In the absence a satisfactory feasibility analysis which needed to include at the very least an affordability assessment, (though a risk and VFM assessment would be ideal) it is fair to say that the Government is indeed pinning its hopes, not on realistic projections but an outright ‘pie in the sky’ gamble that on a “once it’s in the ground we will find a way to make it work” mentality.

As gleaned from the literature, one of the main reasons for establishing an SPV is to allow various investors to pool equity and spread potential risks and thus reduce the aggregate cost for each entity. In a bid to prevent the National Commercial Bank from calling the loan, the Government decided in September (18 months after date of operations), to offer the bank a sovereign guarantee. It could undoubtedly be argued that this has put the project in no less risk. Soapberry is now, as many projects before it, being underwritten by the taxpayer. What the Government has effectively done is transfer the risk to the risk bearers least able to control the project variables and or protect themselves against potential loss – the taxpayer. Further in so doing, the Government has arguably reduced the incentives on the part of the other stakeholders to perform and hence, possibly increased the risk of project failure.

Soapberry has not only taken a hit from the Government’s (perhaps unavoidable) retention of foreign exchange risk but also from the interface risk of the NWC needing to expand the KMR sewage network on a phased but timely manner. The Jamaica Information Service through which the Government advises the country of decisions and updates on activities have released several announcements of the commencement of the expansion since the plant was completed. In its most recent release on May 28, 2009 the country was advised of funding to be secured via the Japanese Government (who is awaiting the completion of existing projects prior). This delay has failed to allow for the additional customers and revenue that the NWC had anticipated and a significant portion of the existing customers are located in marginal and depressed communities that as customary in many countries are non-revenue beneficiaries. Interviews with the NWC also indicate that with the economic recession, revenue has fallen as regularly paying customers have also fallen into delinquency.

Considering the seventeen months it has taken CWTC to obtain a licence or refinance the loan and the failure on the part of the Government to arrive at a solution to a problem seemingly well within the control of the parties involved, it is fair to say that there has been inadequate risk management that is now surfacing primarily in areas of poor management. Soapberry seems to have fallen into the trap of the unrealistic Everything-According-To-Plan (EGAP) principle and is as

a consequence, short on options to pull itself out of what can only be described as a self-induced difficulty. It begs a question that has dogged this research during the entire data collection process – Why did the Cabinet approve the Soapberry public private partnership?

Though it is not the remit of this researcher to speculate outside of empirical data, it would not be the first PPP that has been procured in a country out of political expediency. However, in the stark neglect of either receiving Parliamentary approval<sup>52</sup> or National Contract Commission approval it does beg the question, why? There have been journalists who question the motives of the then administration. In a piece titled “Patterson’s Legacy” Dawn Ritch, journalist wrote an opinion in *The Gleaner*, dated February 12, 2006.

The question must, therefore, be asked: Did the Prime Minister [Mr. Percival James Patterson] arrogantly turn his back on these institutions [World Bank and the IMF] in order to allow his Government to engage in profligate spending and unacceptable deficits that have produced no economic expansion? A national disaster has only been averted because opportunistic foreign lenders have provided loans, based upon increasing remittances and not economic performance. The departing Prime Minister is making a mad dash about the place honouring himself. Patterson has been making a rash of promises. He announced ‘Soapberry’, a US\$50 million sewerage plant in Ferry to be built by Ashtrom, a company that has become publicly controversial with regard to persons connected to the PNP regime. – Dawn Ritch

It is an opinion, but in matters of corruption the perception of it is as damaging as the fact of it. More than just negotiating for the best price – ethics weigh in heavily in securing value for money. The Australian Government for example has determined that VFM is the core principle underpinning Australian Government procurement, incorporating ethical behaviour and the ethical use of resources Partnerships Victoria (2005). The absence of a competitive tender for Soapberry does not in isolation point to unethical use of state power but it does point to poor governance.

In concluding, we refer back to our conceptual framework, where receiving value for money spent and ability to sustainably cover the cost of both providing the service (on the part of the Government) and paying for the service (on the part of the customers) were deemed the key objectives. On the question of value for money, one is only left to make assumptions as in the absence of tendering we can only speculate. Regarding its viability, we are again forced to assume perhaps that if the National Commercial Bank was willing to finance the project without a Government’s guarantee, the bank would have conducted its own due diligence and found the project to be ‘bankable’ in terms of its ability to deliver and satisfy its financial obligations. All evidence to the contrary, in light of their recent request for such guarantee. In terms of affordability, projections are doubtful, as based on the NWC’s struggle to meet payments so soon after project start up, viability is questionable at best. Risk identified as a driving incentive is rarely effectively transferred without competition. In the absence of competition, National Contract’s Committee approval and Parliamentary review, transparency as an anchor of PPP remained a fixture of theory and its partner, accountability is going to be left up the agencies responsible for enforcement of due process and the taxpaying citizens of Jamaica.

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<sup>52</sup> *Not required by law but is considered de facto a good governance practice and as such project of this size and nature would have been expected to be tabled in parliament for collective decision.*

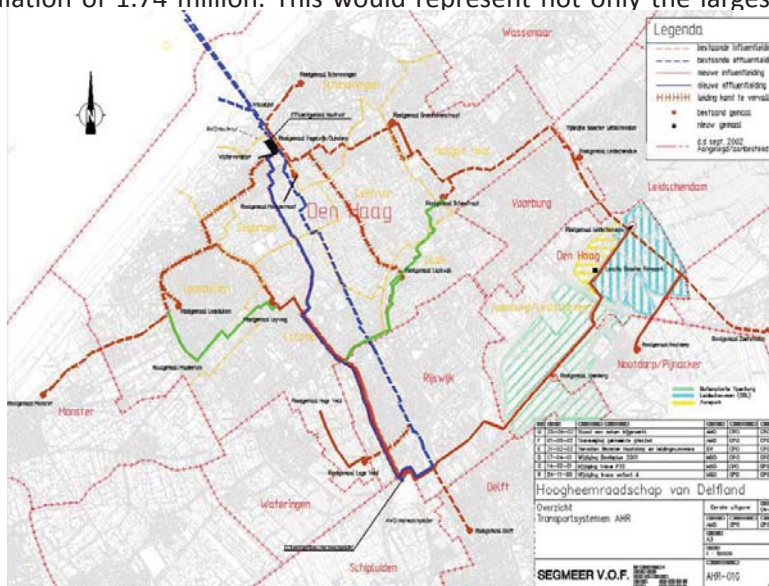
## 4.4 HARNASCHPOLDER WASTE WATER TREATMENT PROJECT

### 4.4.1 project justification

The Harnaschpolder project was conceived in responses to two triggers. One being, that in the late 1990s the European Union issued new environmental standards to regulate the treatment and disposal of sewage. The existing plant located at Houtrust in The Hague, (see Fig. # 43 below) which was constructed in 1967 was still operating satisfactorily for its design objectives but was not be able to meet the new requirements which would protect the harbour that served as a final discharge point for the effluent. The second trigger was the anticipated population growth in The Hague Region, which the existing Houtrust plant would not be able to support. With space limitations preventing expansion, there was no other alternative but to construct a new system that could address all these concerns.

Approximately 25 hectares (61.7 acres) of lands were identified in The Hague Region and on December 5th 2003 a Design Built Finance Operate, 30 year contract was signed between the Delfland Water Board and Delfluent BV (a consortium of five companies) for the construction, operation and maintenance of the Harnaschpolder plant (Greenfield project) (See Fig # 44 below) and upgrade of the Houtrust plant (Brownfield project) - See Fig# 45 below. This was to be completed by December 2008. This project was designed to support the treatment of 49.7 million litres of raw water per hour for a population of 1.74 million. This would represent not only the largest wastewater treatment facility in the Netherlands but the first public private partnership in the WSS sector and has been considered a success by both the private and public sector. The following section summarizes the steps taken by both sectors to create an environment that would secure the desired objectives of all stakeholders.

The same questions established in the theoretical chapter and those posed for the Soapberry PPP will also be put to the Harnaschpolder PPP, to facilitate as direct a comparison as permissible.



▲ **Figure 43** Location Map Harnaschpolder Plant  
Source: Delfluent BV

### 4.4.2 Can the project be delivered by PPP?

The Hoogheemraadschap Hollands Noorderkwartier - HHNK (Regional Water Board) is a government body with its own democratically elected management board and independent tax system with responsibility for the maintenance of dykes and dams, water level control and water quality control. The responsibility for the existing Houtrust plant fell under their jurisdiction and with very clear objectives in place, a design was commissioned by them for the proposed works



▲ **Figure 44** Aerial Photo of Harnaschpolder Plant  
Source: Aeroview Rotterdam

with the intention of using the customary “contracting out” procurement option. The cost of the development however, was subsequently deemed in excess of what could be afforded by the Water Board. On the strength of the scale of the project (an appeal for PPP investors), the undertaking of similar investments in other countries, the general success and track record of PPP projects in the Netherlands since the 1980s (though in other sectors), the Delfland Water Board made the decision to explore the possibilities of a public private partnership. In light of the general success of the country’s PPP programme that the policy, legal and institutional environment was there to support the endeavour.

#### **4.4.3 Should the project be delivered by PPP?**

The answer to that question was to be found primarily in the use of two financial modeling instruments. The Water Board had already commissioned a design and had priced the project before deciding to go the route of a PPP. These costs were therefore available as a benchmark in determining the financial value or advantage of PPP procurement.

One of the two main instruments to provide that level of insight was the Public Private Comparator (PPC). The final choice between the public and PPP procurement of a project is taken after weighing all the financial and non-financial arguments. At this stage however, the primary diagnosis focused on the financial benefits i.e. whether a Design Build contract or a PPP would be cheaper. The Delfland Water Board, with the assistance of the Ministry of Finance’s PPP Knowledge Centre, did a comparison between both procurement options using the criterion of (1) Income (2) Costs and (3) Risks. Only when satisfied that the PPP option had a greater financial benefit, was the decision taken to prepare an invitation for tenders which drew on the information already available from the PPC process.

The second instrument utilised was the Public Sector Comparator (PSC). This instrument required emphasis on total project costs but now included the entire project’s life cycle and compelled the

Water Board to do a level of analysis that would not ordinarily be applied if strictly considering the customary Design Build approach. After the private tenders were evaluated and with the assistance of the PPP Knowledge Centre in the Ministry of Finance, the PPP bids were subjected to a Public Sector Comparator. The PSC concluded that the PPP bid had greater value for money than the public sector option. Interviews with the Ministry of Finance revealed that to date they have not encountered a project where the PSC pronounced the public sector option the better option.

The results of the comparison between the option proposed via traditional procurement and that of the PPP, indicated savings of approximately 10.5% for the Water Board which was deemed sufficient to make the project possible. Satisfied that the project can and should be delivered by PPP, financial and legal advisers were hired to take the process to a more mature level.

From the policy perspective, interviews with the Ministry of Finance revealed that the lack of funding is not the primary reason for undertaking partnerships with the private sector. Service improvement was deemed the deciding factor. However, when asked how Value For Money determined, the criteria seemed to have been based almost

solely on cost using the PPC and the PSC. The other criterion given was timing, the assumption being that providing access to the service sooner than the public sector could would be considered an improvement in delivery. The lowest price however, is not necessarily 'the best' and quantitative analysis is only as good as the data used and we find strong criticisms being leveled against it (as indicated in section \*\*\*). In tandem with recommendations made in Partnerships Victoria (2001) the Netherlands ought to include in the PSC qualitative factors considering that money is not their primary focus. These factors include but are not limited to:-

- i. The identity, credit standing and proven reputation of the bidder
- ii. Any wider net benefits or costs that a PPP approach may bring e.g. innovation.
- iii. The accuracy and comprehensiveness of the information used and the assumptions made in the PSC.

This becomes even more necessary when the differences between private sector bids are marginal, then greater weighting needs to be given to the qualitative assessment, Her Majesty's Treasury (2006). According to Renda and Schrefler (2006) the United Kingdom uses the Benefit-Cost Ratio rather than the PSC index because of "its inability to take into account qualitative elements" and "its findings are much easier to manipulate".

#### 4.4.4. Who is the best partner for the job?

Based on the scope and project specification prepared for the Public Private Comparator (PPC), the Water Board was then in a position to advertise for an open and competitive tender on the



▲ **Figure 44** Aerial Photo of Houtrust Plant  
Source: Aeroview Rotterdam



European Union Market. Initially, there were eight responsive bidders to the call, which were reduced to four and finally two firms – one who became the preferred bidder and the other the reserve bidder in the event that the former’s unsuccessful negotiation with the procurement team. After submitting their ‘Best And Final Offer’, Delfluent BV, a consortium of five companies namely; Veolia Water (40%), Evides (40%), Rabobank (10%), Heijmans (5%) and Strukton (5%) were awarded the contract for the works at Harnaschpolder and Houtrust. The period counting from the Invitation To Tender to the signing the Project Development Agreement took three years and an additional year to negotiate and sign the DBFO contract<sup>53</sup>.

Innovation has often been mentioned in the literature as one benefit of private sector participation and is typically a part of the criteria between bidders. Delfluent BV indicated that they had submitted two bids, one of which was using “cutting edge technology”, however the Delfland Water Board advised that the decision was taken not to attempt anything beyond “tried and proven” technology. It was felt that the PPP methodology was already new to the Water Board and as such, they did not want to add more risk by attempting a design that was well known to the industry. but was rejected on the grounds of being ‘untried’. According to the Dutch PPP Knowledge Centre, innovation is not emphasised in their assessment criteria but efficiency and cost is, on the assumption that those two factors will lead to innovation in the pursuit of winning a bid.

The Dutch Ministry of Finance has indicated that on average, responses to tender invitations are limited to four bidders and they also tend to be the same bidders. This is a concern that is not unique to the Netherlands and is attributed largely to the general complexity of PPP projects and the prohibitive costs associated with preparing the tender. The Ministry however, expressed no major concerns for this as their major objective is to have improvement of services at the least cost and the question of repeated contract awards to the same company is not troubling as long as the decision was taken via competitive tender in an open and transparent manner.

#### **4.4.5 Are the resources available?**

The questions facing the Water Board were the same as for the National Water Commission namely, who would pay, how and was it sustainable? The Water Board established very early that they would not be able to finance a design to fit the needs of the growing population and the new environmental standards. The decision to use a public private partnership allowed the Water Board to pace the demands on its cash flow, as payment to the private partner did not begin until the service was available. Had they opted for traditional procurement the initial capital outlay would have been prohibitive. Focusing on whole life cycle costs allowed the Board to determine not just value for money but affordability, as projections were made thirty years into the future with the assurances that the Board’s revenue could sustainably support those obligations. Being an entity with tax levying powers, the Water Board projects that an increase in fees to the public would not be necessary now but when it arises over the course of the 30 years contract, the Board anticipates the increase in rates that will facilitate continuity in service.

Contrary to the policy position in Jamaica, the Dutch waste water sector does not utilize a central regulatory agency responsible for tariff setting. Instead this is set by the Water Board who uses

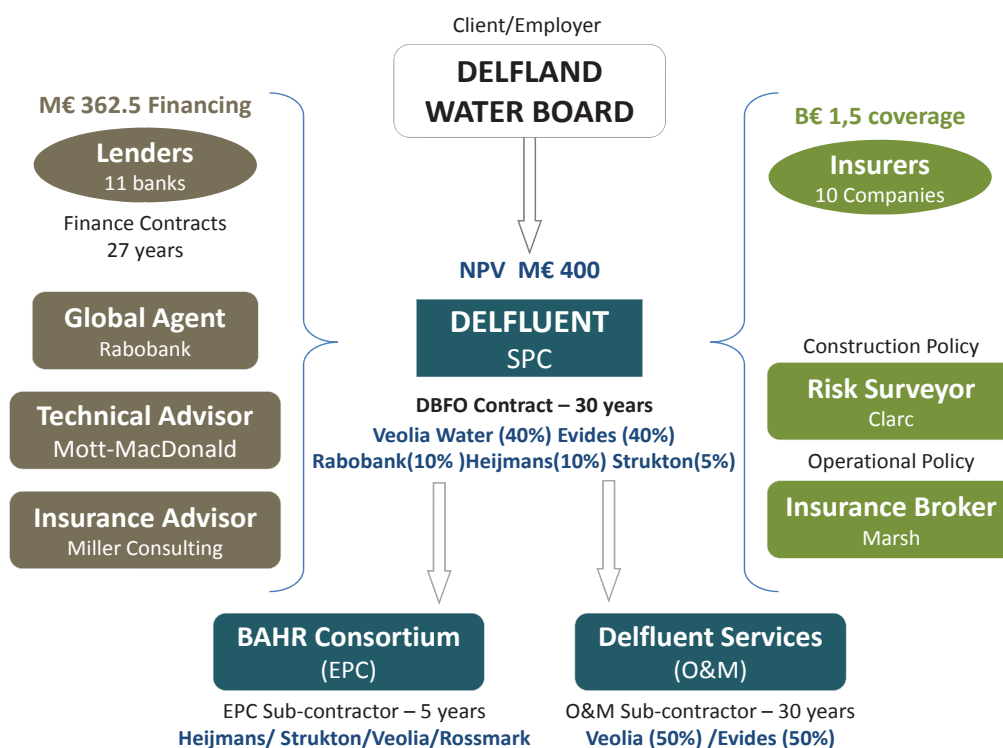
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<sup>53</sup> *By way of comparison, Delfluent informed that similar project tender, spearheaded by the private sector would on average take five months to complete.*

benchmarking for costs and quality against other European countries.

#### 4.4.6 Financial Structure

Initially, the project was brought to the attention of Veolia Water (one of two large shareholders) by the Rabobank (commercial bankers), who along with two other banks financed the initial bid. An additional 10 banks made financial commitments thus effectively spreading the risk. Not being the landowner, Delfluent BV could not offer the land or the infrastructure as collateral. Financing for the project was therefore secured using limited recourse project financing based on the cash flow from the project itself. The lender's security then became access to the rights of the project which effectively means they have the right to appoint an operator in the event that the current one goes into failure mode. What this implies is that the banks had to ensure via their own due diligence that the project was fundamentally a bankable one. Meaning, that if the project went into failure mode it would remain a financially viable project that a replacement of the operator should rectify.



▲ **Figure 46** Harnaschpolder Finance Structure

Source: Delfluent BV

The financial package required was € 362,5 million and the project was financed with a debt to equity ratio of 82:18 and is detailed below with and illustrated in Figure # 48

- Main Loan Facility M€ 166,4 46%
- EIB Guarantee Facility M€ 132,5 37%
- Shareholder funding / Junior Facility M€ 43,6 12%
- Stand-by Facilities M€ 20,0 5%

The Stand-by Facility was a reserve fund of M€12.5 to cover any changes to the contract and M€7.5 to cover any changes to design and construction. An innovative feature of the structure is that the interest risk was hedged during the tender phase via an interest swap that Rabobank concluded. This swap essentially amounted to the determination of a fixed rate of interest which went further in removing uncertainty from interest rate risk.

Some risks can be avoided some cannot. Insurance will be required for protection against the such, like “acts of God” and political risks etc. Insurance was taken out against the project by Delfluent BV who paid the premiums but placed the lenders and the client on the insurance which meant that any justifiable claim can be made by either of the parties involved.

#### **4.4.7 How are the relationships and obligations defined and managed?**

It is the contract that defines how each party relates to others, as well as their roles and their responsibilities. In the case of Harnaspolder there are three primary agreements that frame the Public Private Partnership, namely:-

- i. The Design Build Finance Operate Contract between Delfluent BV and Delfland Water Board.
- ii. The Engineering Procurement Construction Contract between Delfluent BV and BAHHR.
- iii. The Operations and Management Contract between Delfluent BV and Delfluent Services.

#### **Risk Management**

One of, if not the secret to PPP success is determined by a proper identification of project risks, proper determination of which party can best handle the avoidance or management of that risk and incentivising that party to follow through on doing so. If this is done properly, it will be outlined in the contract and revealed in the management process. Delfluent’s primary responsibility to the project was to secure financing and a team to carry out the works and operations. The lenders had a primary pre-condition, that being, the SPV who would be signing the contract had to demonstrate that none of the risks were being retained by the SPV but had been adequately and convincingly transferred to the parties best able to manage them. Delfluent BV placed themselves ahead of the game by limiting the unknowns as much as possible from the get-go. This meant putting into place a fixed price contract between itself and BAHHR to ensure that construction risk remained with BAHHR and that fixed price was a huge incentive for performance. The same was done via the contract with Delfluent Services for operations and maintenance. In order to reduce financial volatility, Delfluent BV negotiated an interest rate swap which fixed the rate, effectively protecting the PPP from unpredictable market fluctuations.

Asked what risks did Delfland retain, the Water Board representative indicated that legislative risks from changes in policy or regulatory laws and in principle any risk that would have been faced by the project whether it was traditional or PPP procurement was retained by the Board. Those would include for example the increase in the price of steel on the open market, which would have occurred regardless.

Another key area in the risk management of the project as identified by Delfluent BV was how the insurance policy was handled. It was so organised that any money received from the insurance company for claims submitted would be placed in an account that requires the approval of the client, Delfland prior to withdrawal. Delfluent emphasised however, that though the SPV pays the premiums the liability remains with the relevant contractor. What this ensured was access to

information regarding any claims to be made by the contractor which in turn would serve as an indicator of a technical or construction difficulty to Delfluent BV, Delfland Water Board and the lenders and therefore be an avenue to keep information on the plant available to all.

### Contract Management

Delfland Water Board as the client, advised that it's primarily the SPV's job to deliver the service via process management but for their part they ensured that Delfluent was certified as an ISO 9001 Quality Management company<sup>54</sup>. Delfland's approach was that the PPP is being managed not by one entity but by managers working for all the separate parties whose skills become more necessary at some critical junctures more than others. According to Delfland much of the success of the project is to be credited to properly synchronizing when the different managers will be most needed and allowing them to take the lead at the opportune time. This refers namely to the following:-

- Project managers who focus on the critical project milestones and ensures that they are met on schedule.
- Process managers who focus on the "how" of achieving goals in the midst of a network of project inter-dependencies that require identifying problems early and keeping the atmosphere open and constructive. This is done primarily through process audits that are conducted regularly.
- Contract managers who focus on the formal governance of the contract, to make sure the service is being delivered and the parties are performing as per the contract, and to properly administer any changes to the contract.

As in the case of Jamaica we will assess performance in the categories of administrative, operational and relational difficulties. Questions were asked of both the private and public sector parties to capture as best as possible the day to day experience of the PPP. Both sides spoke of the success and their satisfaction in achieving their own objectives up to the point of the research. Opportunities did arise for the testing of the partnership and these contracts and were resolved as follows:

**Operational Difficulties:** This manifested itself in the construction process when the sewage pipeline that would connect the Houtrust plant to the Harnaschpolder plant ended up being longer than designed. This resulted in sewage breaking prior to reaching the plant and creating a foul odour on arrival. This created bad publicity and some tension between the partners. However, contracts were clear on how such anomalies would be handled. The contractor, BAHR who had entered a fixed price contract was held as being liable. Insurance claim of € 5 million was submitted to cover the expenses of remedying the problem. This did not result in a project delay effected by protracted conflict or litigious disputations.

**Relational Difficulties:** One such example arose with regard to the foul odour at the plant. This resulted in public outcry from the neighbouring communities. However, due to the quarterly meetings that were held with residents from project inception, to inform them of project progress and events, strong ground was laid for amelioration via dialogue to explain occurrence and plans to prevent recurrence. Based on interviews with both the private and public sector representatives,

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<sup>54</sup> *Certification to an ISO 9001 standard does not guarantee any quality of end products and services; rather, it certifies that formalized business processes are being applied.*

it would be very fair to say that a robust relationship exists which has served the project well. They both concede that this was not automatic but grew over the months of interaction and communication to resolve project issues.

#### **4.4.7 And if the Private Partner Walks?**

Before concluding, it is necessary that the question that has driven the research of this paper be asked directly of the Dutch experience with Harnaschpolder; the question being what has been done to prevent contractual default and failure that would require a bailout by Delfland or the Dutch Government. When asked, the representatives at the Ministry of Finance indicated that there are no projects on record that have been subjected to a bailout or a take-over. Mention was made of a PPP that involved the provision of a tunnel where the Government had accepted volume risk and had ended up paying “three times” more than budgeted but improved risk management steps were taken that has ensure no recurrence of such losses.

The Delfland Water Board advised that such bailouts would be highly improbable owing to the manner in which incentives were built into the project and risks were effectively transferred in the manner described above. More specifically however, ensuring that you have competent firms is the place to start. You ensure performance via performance bonds and fixed contracts. You build ‘performance tension’ between the contractor and the operator by having the future operator involved in the supervision of the construction. That operator will ensure quality as anything less will compromise his future profit margin. Institutional reinforcement comes from the Government who has officers monitoring for compliance.

On the part of the Water Board, it provides a minimal level of supervision called process audits<sup>55</sup> during the building phase. It also has the power to issue fines on the operator for injurious actions on their part and also withhold. The Board also ensures that Delfluent’s monthly fee is tied not only to quality and quantity of sewage treated but by the quality and timeliness of their monthly reports this maintains transparency and keeps them informed. As a final resort, should it be deemed necessary to terminate the services of Delfluent, or if Delfluent walks, the lenders who have their money at risk, are empowered via the loan agreement and the other contracts to appoint a replacement who they have always on stand-by.

What is described here are contracts that are sufficiently output and performance based with the responsibilities clearly identified and the incentives in place to realize the technical and financial objectives of the delivering urban infrastructure via a public private partnership.

#### **4.4.8 CONCLUSION: Has the Netherlands received value for money?**

Using the parameters as outlined for us in the theoretical chapter, one would conclude that the Dutch PPP created an environment within which VFM could be achieved and followed through on a project due diligence that reinforced it. This began with Delfland having very clear objectives for this project, recognizing where they fell short and hiring experts and advisers to guide them through what can be a PPP quagmire. Despite the three year process, the use of a competitive

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<sup>55</sup> *Is a verification of the manner in which people, material and machines etc. mesh together to produce a product in order to ensure that the process is producing the desire results consistently.*

tender pitted each bidder against the other to drive efficiency upwards and costs downwards in these proposals. The proposal of the preferred bidder was subjected to the rigour of a Public Sector Comparator which signaled a 10.5% savings (notwithstanding the €5 million spent by the Delfland Water Board on transactions costs) and provided a picture of the financial demands on Delfland for the next 30 years of operation. Construction was completed ahead of time, without budget overruns. The interview with the Ministry of Finance indicated that that was a significant benefit, very rarely achieved under conventional procurement. That there is improved quality of service is substantiated by the project's compliance with the more demanding standards required by the EU. The project was not problem free but with each challenge that arose, a clear line of sight was available to determine who was responsible and what the appropriate response ought to be. Risks were well hedged and though some parties (for example BHR who had to pay out €5 million euros to correct construction anomaly) had took some unanticipated hits the PPP itself has withstood five years without any major threats to its objectives. Delfland Water Board is receiving services at a cost it can afford, for citizens who are both willing and able to pay whilst the private partner, Delfluent BV is making profits and earning a margin that continues to incentivise their operations.

**Table 13** Key PPP Features - Soapberry & Harnaspolder Comparison

PRIMARY PPP ISSUES	SOAPBERRY PPP	HARNASCHPOLDER PPP
Project Motivation	Prompted by in adequate infrastructure	Prompted by in adequate infrastructure
Project Purpose	Replace infrastructure, meet new demand regulatory guidelines & protect harbour	Replace infrastructure, meet new demand regulatory guidelines & protect harbour
Project Advisors	In-house	PPP Expert legal & financial advice
Feasibility Assessment	None confirmed	Public Sector Comparator
Partner Selection	Direct Contracting	Competitive Open Tender
Approval	Cabinet - Government's Executive Arm	Delfland Water Board (Autonomous body)
Project Vehicle	SPV - Consortium of four firms	SPV - Consortium of five firms
Public Consultation	At inception	Continuous on-going process
Debt to Equity Ratio	70:30	82:18
Majority Shareholders	Public Capital	Private Capital
Interest Rate	Floating Rate	Fixed Rate
Loan Currency	Mixed Currency	Matched Currency
Insurance	Plant and equipment insured	Plant and equipment insured
Construction Period	20 years	30 years
Completion Deliverable	On time & within budget	On time & within budget
Contract Type	Fixed	Fixed
Value	USD\$ 50, 261	€ 362,5 million
Payment	Based on volume and effluent quality	Volume effluent quality and reporting


#### 4.4.9 key lessons learnt from harnaschpolder

The key lessons learnt from tracking the Dutch case study can be summarised as follows:-

- i. As far as is possible, always select partner using competitive tender as failure to do so will significantly compromise risk transfer.
- ii. Perform a value for money assessment after assessing traditional public procurement costs AND after receiving bids.
- iii. Convert as many “unknowns” in to “knowns” as far as possible, i.e. negotiating fixed interest rates, fixed contract sums etc. using interest and currency swaps if possible.
- iv. Provide as many checks and balances without ‘bureaucratizing’ the process. For example, bringing the infrastructure operator into the picture during construction as added oversight and giving the lender “step-in” rights will add another layer of diligence and added incentive. These “step-in” rights can also be a significant alternative to Government bailout of projects.
- v. Using performance incentives such as making reporting quality a function of payment criteria will reduce information asymmetry and improve transparency.
- vi. Early consultation with communities to be affected by project is critical and continuity during the life of construction and as the need arises during operation is necessary.
- vii. Resist the urge to reduce transaction costs by avoiding the use of legal, financial and technical experts.







“ Mind takes form in the city;  
and in turn, urban forms condition mind.  
— Lewis Mumford (1895-1990) ”

## Chapter 5. CONCLUSION & RECOMMENDATIONS

### 5.1 CONCLUSION

The choice of studying public private participation emanated primarily from a growing concern regarding a personal perception of public sector malaise in infrastructure projects that was costing Jamaica public expenditure she could ill-afford. In the course of research for this paper however, sufficient evidence came to the fore to substantiate what was in effect, a very real and disturbing contagion. An excerpt from the 22nd Annual General Report from the Office of the Contractor General (2008) provides a snapshot of the problem. It reads:-

The OCG continues to observe the problem of burgeoning cost overruns in the implementation of Government projects. These cost overruns are generally the result of one or more of the following factors which impact negatively upon the public purse: late or inadequate procurement planning, the lack of proper project management, a paucity of on-site supervision, and insufficient financial resources on the part of either or both the contractor and the Government procuring entity. During the period which is under review, forty-six (46) of the 235 works contracts which were monitored by the OCG were impacted by variations which resulted in cost overruns in excess of J\$3.14 Billion Dollars. These cost overruns represent approximately 16% of the total monetary value of all of the Works contracts that were endorsed by the NCC in 2008.

With such being the case, the main thrust of this paper became both the identification of the primary impediments to the successful delivery of urban infrastructure via public private partnerships in Jamaica, by establishing what preconditions were necessary within the general macro environment of the country and at the project level. The findings of this research largely confirm what was already known; that the gains of a public private partnership are not automatic but require solid know-how and diligence to a multiplicity of areas. What was less known was where Jamaica's primary difficulties lie? The Soapberry Project represented a radical change in the project administrative culture of the executing agency (the National Water Commission) and has soundly demonstrated that the most commonly cited causes of the failure of state enterprises namely; political interference and insulation from competitive incentives do not magically vanish when private sector participates. Whilst this paper by no means purports to be the end all and be all for finding an answer it does give some insight into where some pitfalls may lie. Some of the lessons learnt were as follows:-

#### 5.1.1 MACRO PRECONDITIONS

One of the first observations was the absence of a clear policy position on PPPs which included not having a definition for what would constitute a PPP. This presented the difficulty in identifying which projects would be constituted as such. So the first task was to rely on the literature to assist in determining what type of PPP Soapberry reflected. This proved to be tricky as in one area or another it seemed to fall short of each model. In essence, Soapberry is constructed, operated and maintained by the private sector and depending on usage is paid a fee paid by the State who financed the PPP. According to Marin (2009) however, *"the most successful financing models that are emerging for long-term water PPP projects in developing countries are basically hybrid schemes."* This fits the bill for the Soapberry project which inherently is not a problem per se, what is of concern is that coming to a position on the model that would best suit this particular case did

not seem to be based on policy direction that would guide implementation with less ambiguity and better governance.

There are a number of policy anomalies existing within the WSS Sector policy and insufficient attention was paid to the changes and conflicts that would arise between the NWC and private operators. All parties need to be brought to the table to flesh out where the misfit occurs and establish new rules to discourage recurrence of the problems.

### **Macro Economy**

From a macroeconomic point there is very little that Jamaica can do in the short run to improve the fluctuations in interest rate, foreign exchange rates and inflation which are disincentives to prospective investors. From all indications, with or without PPPs, all effort is currently being made to achieve stability and economic growth, but until that is achieved, incentives will have to be provided by strengthening the other areas such as our legislative and regulatory frameworks which we have more control over. Guarantees as an incentive are not inherently unwarranted especially in a country where stability is a huge concern for investors and they are nothing to fear if the project is properly planned and instituted. These inducements do not have to be cash guarantees but assurances of no changes in tax or environmental laws that will have an adverse impact on the investment. Jamaica however, is relatively open to foreign investment, makes no legal distinctions between domestic and foreign companies and opens all sectors for participation.

### **Institutional Setting**

Public sector capacity to plan, appraise, structure, tender, and financially close PPPs remains a topmost challenge for mainstreaming of PPPs especially in light of the Government's decision to decentralize Government and devolve responsibilities back to the level of Parish Councils (local government) by 2010. The Development Bank of Jamaica despite its experience with privatization going back some two decades and its more recent charge over PPP projects is only relied on by invitation and not as a requirement but struggles itself to render the level of expertise that these projects warrant. That Jamaica would have enough projects in the pipeline to support a fulltime PPP unit needs to be determined by a infrastructure needs assessment of all sectors.

Institutional overlap often underlies bureaucratic problems. We saw this happening between the FTC and the OUR in the monitoring of competitive practices between like business. As well as in environmental monitoring where NEPA, MOH and the OUR have duplicated efforts which might lead to confusion which in turn reduces the clarity of the process for both regulatory officials and PPP participants. It is believed however, that this is significant impediment to the process, as synergy amongst the agencies have in a number of instance avoided potential difficulties, it is however an area that needs tweaking.

### **Legislative Setting**

This paper has identified seven pieces of legislature which would impact on the Soapberry Project. The streamlining of these Acts need to be done to facilitate compliance as some practices are currently in contravention of the legislation. The problem seems to arise where more recent laws fail to take into consideration previous legislation and result in legislative incoherence and conflict. This shows up mainly in the enforcement and monitoring of the plant and having a clear line of sight as to which entity empowered by which Act would be considered "first responders". The area that seems to be in greatest need however, is that of fiscal legislation that would place constraints on debt and borrowing in order to force greater fiscal prudence on the part of our Cabinet.

## **Regulatory Setting**

Jamaica has a strong and supportive regulatory institution in the OUR which has been very successful (though controversially so) in facilitating private sector service delivery at a reasonable rate of return for service at a set standard. It is independent of Central government and has instrumental in resolving disputes between competing firms and its customers. There is much room for improvement however in the FTC as it has been handicapped legislative anomalies in its Act and some degree of conflict with the OUR regarding jurisdiction.

### **5.1.2 MICRO (PROJECT) PRECONDITIONS**

PPPs are complex, and they will continue to be fraught with problems unless we learn from the failures of privatisation, existing difficulties with procurement, and past relations between business and government. That the Soapberry project was well-needed is without question however, rapid implementation was more valued than due process, which as expected, is showing up in the challenges facing the partnership.

#### **Absence of Competitive Tender**

The Government's decision to enter into direct contracting with one entity, with no comparative assessment to determine if they would receive value for money was highly inadvisable. Public private partnerships that fail to properly allocate risks to the party best able to avoid, retain or minimize threats to project objects will fail. Projects must take advantage of achieving effective and sustainable transfer introducing competition for the market, and in the market for customers or via market contestability and if such is not feasible this can also be done via an effective regulatory framework. No greater argument is necessary than the evidence of the telecommunications sector in Jamaica. It brings even more into question when the Montego Bay and Ocho Rios wastewater projects were undertaken in other parishes via public tender on the local and international market for the projects of significant scale (thought not as large) and similar technology. This decision also encouraged poor governance in the absence of either Parliamentary or NCC approvals and showed inconsistency with the promises for transparency and accountability.

#### **Financing**

The use of state funds did not bring to the project private sector involvement that would afford it the level of decision making efficiency that could have avoided this delay in refinancing the project to reduce cost or in obtaining a licence and tariff for smooth operations. Having State agencies as majority shareholders (87.5%) and the absence of independent representatives on the SPV board has brought the same level of tardiness and procrastination in taking decisions that are reminiscent of public sector service delivery. Failure to sufficiently hedge market risks by negotiating fixed interest rates or by matching loan and country currency has jeopardized Soapberry's financial success.

PPP design and documentation need to provide adequate protection to ensure the SPV's ability to service debt remains intact. This threat is usually the one that requires Government's bailout or takeover. In the absence of proper feasibility assessments that would make projections for whole life cycle costs the NWC was not in a position to determine its ability to make payments. Having payment difficulty so early in the project speaks volumes to lenders which have resulted in the request and receipt of a sovereign guarantee which might serve to undermine instead of improve project viability.

Lastly, the NWC's almost two year delay in commencing the expansion of the network has undermined both the operational efficiency of the plant and reduced the rewards for the operator who is operating with fewer customers than anticipated. This increased interdependence risk largely because the financing for the network was not sufficiently worked out prior to commencement.

### **Contract Structuring**

The contract needs to be structured so as to avoid renegotiation and changes midway and must create the incentives with the necessary rewards and penalties for both parties. This pitfall usually arises when Government gets overly optimistic and eager to commence a project and offers excessively favourable terms to the private sector. This also manifests itself in optimism bias where project planners fall into the trap of pressure to "make it happen". This only results in excessive overruns and delays further into the project life cycle which does very little for society's interest or for that matter political interest.

### **Governance**

Several major shortcomings were evident in governance around this project, starting with the absence of an economic or financial evaluation prior to commencement. The idea expressed by the NWC that *"as the contractor was going to be the operator, they would ensure that it [the plant] was designed and built properly"* is a woefully inadequate justification. This might encourage a well-built plant but it certainly does very little to ensure cost-efficiency which is a major concern for Government and citizens alike. Good governance was further compromised in the absence of NCC and Parliamentary approval and the neglect of tabling audited financial statements as is required yearly. This can be interpreted as shortsightedness on the part of the Government as in the long run the perception of corruption in public service serves as a repellent to private investment and increases the cost of infrastructure delivery.

Lastly, the failure to engage expert advisers and the dependence on most in-house expertise has reduced initial transaction costs but is now showing up the inadequacies that are likely to amount to losses in excess of early development costs.

One of the definite positives that public private partnerships and the Soapberry project no less has brought, is the exposure (for those who are looking) of unsustainable policy and performance weaknesses that require redress if service delivery is to improve. Public private partnerships can become the driver for the reform that has been long on articulation but short on implementation. What this assessment has also demonstrated is that the partnership is really a development strategy, and should not become the centerpiece but an important component of a much larger doctrine of growth and development.

### **5.1.3 PPP Theory Round Up**

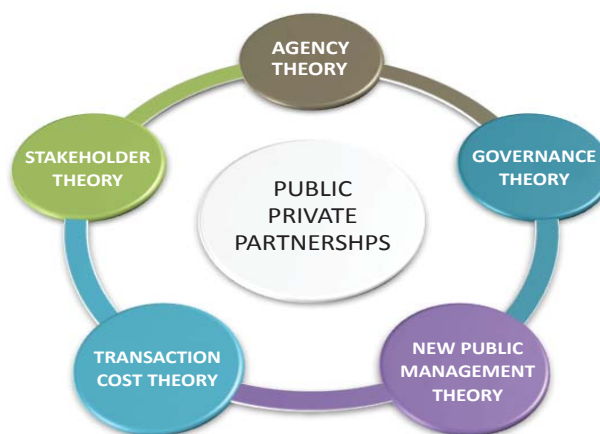
Previously in Chapter Three, three theories were highlighted that were considered by the researcher to be useful in exploring the PPP process and its results. Looking back at the evolution of the Soapberry case study in particular their relevance becomes more evident. The Stakeholder Theory and the need for consideration to be given to all arises and reveals the want in the governance of the project where insufficient consideration was paid to the value of one taxpayer's dollar. Had consumer surplus<sup>56</sup> been one of the driving objectives (as it ought) and then the decision to forgo

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<sup>56</sup> *Customers, like equityholders, debtholders, and governments, share in the value of the services the firm produces, receiving what economists call consumer surplus.*

value for money tests, as an example, would not have been a feature of this project. As it relates to the transaction cost theory, it is too early to measure the impact that the emerging tensions will create owing to operational difficulties but should a resolution attractive to all parties not be identified in the very near future these costs will rise if disputes lead to litigation. The absence of regular payments on the part of the NWC led to a break down in confidence and with that the costs of administration and monitoring on the part of all stakeholders is likely to increase and put into question what savings were received by going the PPP route. It is fair to say that the very act of trying to reduce transaction costs by not drawing on the expertise of PPP advisors is the very act that stands to increase those very costs.

Finally, the principal agent theory does arise with Soapberry, where the principals are taxpaying Jamaicans and the agents are the elected representatives and the civil service who are paid and entrusted to act in the interest of the society. That there lies a significant asymmetry of information is certain as all checks and balances that would afford access to project information (NCC, OCG and Parliamentary review) was overlooked. It does beg the question then, whose interest was the driver behind the decisions taken? That answer lies outside the purview of this paper but contrary to Ward's (2007) proposal, the mere separation of buyer and seller of Government services does not rid one of the agency problem it merely sets up the same threat but between different players.



▲ **Figure 46** Summary of underlying PPP Theory  
Source: Author, 2009

## 5.2 RECOMMENDATIONS

There are many debates surrounding PPPs, primary amongst them being the definition of the concept itself. But larger than that the debate in Jamaica needs to evolve to one surrounding its application and the extent to whether this is a credible development strategy for Jamaica or just a turn of phrase/play on words that allows government to foot the bills for private development enterprise. In Jamaica's recently completed National Development Plan - Vision 2030, the address of the Prime Minister of Jamaica speaks of his commitment to lead the transformation process whose *"victory and success hinge on sustained public-private partnership and dialogue"*. If the words of our chief policy maker is anything to go by, and it should be, then we can anticipate that there will be many such initiatives to come. It therefore becomes imperative to better our understanding of PPP pitfalls and what can be done to improve the success of future initiatives. Some recommendations are provided below which are based on some of the difficulties identified in the Soapberry experience and the successes achieved from the Harnaschpolder Project and other PPPs around the world.

### 5.2.1 POLICY

- i. An infrastructure needs assessment on all sectors need to be done to provide a barometer of number of projects that could possibly be placed in a PPP pipeline. In a recent visit to the Office of the Prime Minister the World Bank suggested the possibility of a regional PPP unit. If

- this assessment should indicate an absence of projects of a sufficient scale and suitability the Government of Jamaica could make representation at CARICOM<sup>57</sup> for the establishing of that regional unit to respond to the technical and financial need for expert guidance in assessment, planning, formulation and negotiation of public private partnerships.
- ii. It will not be possible to sufficiently increase the capacity of public sector agents in each Ministry or agency prior to commencing PPP projects, having this capacity concentrated in the PPP unit will for a number of years be the best alternative. The Dutch PPP Knowledge Centre is now officially defunct and offers limited assistance as since its establishment in 1979 it has sought to transfer its knowledge based to the various Ministries to facilitate their own operations in-house.
  - iii. The separation of the contracting firm from the operating and maintenance firm is cause for concern. WOMC, the O&M Company was registered by the Ashtrom Jamaica Ltd who is also the parent company for the Contractors, Ashtrom Building System Ltd. This separation is viewed by the writer as a way of limiting the parent company and the construction firm. This effectively removes much of the incentives that theoretically will ensure that the contractor and operator take decisions in the interest of the project. Short of requiring the parent company or the construction firm to take on both (which would reduce investor interest) I would recommend that the parent company provide a guarantee which based on accounting principles would not hurt the parent company's balance sheet but hold them accountable.

### 5.2.2 PLANNING & GOVERNANCE

- i. Public private partnership projects ought to be subject to publicly available value-for-money assessments at three critical stages: 1) at the point of selecting an appropriate procurement methodology; 2) at the point of assessing P3 bids; and 3) at junctures during the contract should performance indicators deem it necessary. In light of what was gleaned from case studies and the literature, Jamaica should consider the use of cost benefit analysis over the PSC. This is based on two reasons. One being that though both are subject to manipulation it appears that the latter is more vulnerable to marginal errors in calculations that might unwittingly obfuscate the real costs. Second, that the cost benefit analysis is inherently designed to consider not only financial but socio- economic benefits and externalities. Considering that many PPPs are executed to deliver essential services and is central to poverty reduction, the State has to be cognizant of its impact on coverage and accessibility for all.
- ii. Disclosure must become a standard feature of future PPPs. Parliamentary approval which is not currently required by law ought to be in light of the huge costs involved and off-budget liabilities. Disclosure standards must include, at the very least 1) comparisons of the cost and non-cost advantages and disadvantages of the relevant alternatives with the use of appropriate comparators, 2) the request for proposals, 3) the terms of the contract, if awarded, 4) the monitoring and audit regime if the project proceeds, and 5) ongoing access to and audit of the relevant performance and financial information of the private-sector partners.
- iii. The Office of Contractor General has lobbied for amendments that have impeded its ability to monitor the award and implementation of government contracts. In light of absence of

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<sup>57</sup> *An organization of 15 Caribbean nations and dependencies established in 1973 with the main purposes being to promote economic integration and cooperation among its members, to ensure that the benefits of integration are equitably shared.*

NCC approval for the award of the Soapberry contract, all efforts must be made by this new political administration to honour the OCG's request for a revised definition of "*Government Contract*", to explicitly include (a) contracts for the public acquisition of lands and (b) contracts for the divestment of publicly owned assets, inclusive of lands. The lands divested under Soapberry were owned by the Ministry of Housing. No evidence was available to suggest that the Ministry has or will be remunerated for its input. Despite being informed that it was, (on the basis of its contribution of almost 300 acres of land) Ministry was not named as an equity shareholder<sup>58</sup>. This amendment to the OCG Act can assist in a repeat of such anomalies.

- iv. Notwithstanding the conflicting responses on project initiation, the NHT did indicate that Soapberry was in fact initiated by the private sector party, Ashtrom Jamaica Ltd. Again as it relates to the OCG, this office has to develop a guide for the basis on which unsolicited proposals will be treated without discouraging private initiative and entrepreneurship but at the same time ensuring that there is no impropriety and imbalance in the assessment and award of contract.
- v. Finally, I think it highly advisable that in the future the public agency that is in charge of planning, awarding and future administering and monitoring of the PPP contract should not be involved in the assessment of the works. The likelihood of bias is much greater and a possible conflict of interest one way or the other. Either to promote benefits based on direct Ministerial influence or reduce because the private sector involvement is seen as a threat to individual jobs or the agency's revenue. This exercise should be done by an external and independent review panel of experts. More specifically the Auditor General's Office whose mandate is to "*promote transparency, accountability and best practices, conduct independent audits to improve use of public resources...and avoid fraud, waste and extravagance*" MUST be integrally involved in BOTH the pre-award assessment exercise and post-award audits of the projects financial status.

### 5.2.3 FINANCE

- i. Project studies must include a fiscal analysis for at least the next ten years and in an effort to reinforce fiscal prudence in our decision-making, Jamaica should debate the need to limit the commitment of the Consolidated Fund<sup>59</sup> by law to a percentage of the net current revenue of the government. In the case of Brazil it is 1% of the federal budget. To further reign in spending, additional control can be enforced by requiring that affordability is demonstrated by reference to the comprehensive ministerial programme and not merely the individual annual budgets of agencies and ministries. In the case of France affordability is subjected to a pluri-annual budgeting exercise.
- ii. Based on interview with the Ministry of Finance, there is definitely insufficient involvement on the part of the Ministry. Notwithstanding their lack of familiarity with PPPs (which does need to be addressed as a matter of priority) there are general financial innovations that can be brought to the table to assist PPP projects in reducing financial and market risks. One recommended approach could be the use of interest and currency swaps. For example, if a project is financed based on a floating rate, as are many long-term financings, but the revenues

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<sup>58</sup> *If public authority owns the lands needed for construction, then the SPV may use it freely as a form of subsidy - or in exchange for rent but it must be expressly stated and agreed in a transparent manner.*

<sup>59</sup> *Fund into which all Government revenue is placed.*



- are based on a fixed revenue stream the project, or SPV, is exposed to interest rate volatility. The SPV can enter into an interest rate swap, where it pays a fixed payment rate to a financial institution and in exchange receives a payment based on a floating rate. Since the company's debt service on its floating-rate loan is matched by the floating-rate cash flow received from financial institution under the swap, the company is left with a fixed-rate obligation. As a result, the interest rate swap has enabled the SPV to eliminate the risk caused by any interest rate volatility and effectively achieved fixed-rate funding for the project. Currency swaps, like interest rate swaps, allow two parties to exchange payments on specific dates at predetermined rates. However, instead of fixed and floating interest rate payments currency swaps involve the exchange of different currencies. A currency swap will enable the SPV to swap its local currency revenues for foreign denominated revenues, and like the interest rate swap, the cash flows can be structured to exactly match the loan amounts. As a result future volatility in income resulting from the currency mismatch on this particular loan is eliminated.
- iii. Though discussions are underway and have been for some time, under this new administration needs to expedite the shift from cash accounting to full accrual budgeting as it will assist with developing a public sector that accounts for the full cost of service delivery and incorporate what is known as a "whole of government approach" The main advantage of accrual measures (as opposed to cash) is that they provide a more comprehensive indication of the total activity of Government and the long-term effects of current policy.
  - iv. As debt financing is cheaper and Governments tend to bailout the debt holders more than the equity holder SPV tend to become more highly leveraged thus increasing risk. The Government of Jamaica can take a policy decision through the Ministry of Finance to set minimum equity levels in PPPs. This might increase the cost of capital while reducing the risk to the State as such it is an option worth the consideration.

#### **5.2.4 REGULATIONS**

- i. Asking or expecting the same public servants who are performing poorly under public services characterized by corruption or incompetence to be able to take a leading role in monitoring and disciplining the private providers is highly improbable. Until sufficient governance reform takes place the onus will have to be on the regulatory agencies. Priority has to be given to the amendments to the FTC law as outlined in Chapter 5, Section 3.8.3.
- ii. As the Office of the Prime Minister continues to roll out on the Public Sector Modernization Programme which includes the devolution of greater responsibility to the Local government by 2010, opportunities should be sought to initiate small-scale PPP projects that will begin to customize the mindset of these public servant for sharing the responsibilities, developing new skill set for procuring these partners and working with them. Devolution has its advantages but can have drawbacks for PPPs that require a certain level of proficiency. In interviews with the Project Manager of the Rural Water Supply Programme in the Ministry of Water and Housing, we see budding examples of communities forming Benevolent Societies and seeking licences from the OUR for provision of water and in turn engages the services of a private sector contractor that would normally be provided by the Government via the NWC or Parish Council.
- iii. These recommendations are borne out of recognition that whilst many countries have reported failure, others have also reported success in their implementation of PPPs. They

have voiced different justification and reason for using this model and as such, I conclude with the emphasis that there is no one-size-fits-all best practice remedy. Each country and each project within a country will require meticulous scrutiny of the existing domestic and sector profile/analysis, country's/sector's needs, limitations etc. and from such forge a design that will address those situation-specific challenges. Jamaica is unique and will require us moving beyond a mere photocopy of the model and in so doing put in place our own interpretation of what public private partnerships mean for the complexities and challenges of Jamaican urban infrastructure service delivery.

- iv. The use of a concept called "trigger point resets" could be useful in reducing the operator's risk. This is a contractual provision that allows tariffs to be reviewed if Soapberry's usage falls below a certain usage level. This should also be complemented by the profit sharing concept where if profits exceed a certain specified amount customers are given a rebate. This reduces investor risk and reduces political problems from consumer's ire over utility company super profits as well as it acts as an automatic mechanism that can stave off the need for bailouts.

In a 1996 paper written to assess the maturing of relations between the Jamaican public and private sector, the author concluded with a quotation from a then senior government official who had said *"a continuous dialogue has begun [between public and private sector] but what Jamaica needs is to get a momentum going about reaching consensus, by finding mechanisms where the partnership concept can be worked out"*. This study done some 12 years later is now suggesting that the constraints of crippling debt coupled with a growing unmet demand for adequate infrastructure is creating the desired *"momentum"*. This is reflected in the deepening interest in and growing use of public-private partnerships. Where we have failed however and need to first focus our energy is on *"reaching that consensus"* on defining this partnerships concept and how it will be effectively operationalised in the Jamaican context.

At the time of writing this paper Jamaica is facing the challenge of the fallout from the anticipated Stand By Agreement from the IMF which is being finalized. This arrangement will force us to do what has been long overdue, commit to a credible programme for correcting the deficit position in our country's current account. One apparent consequence will be the need for contraction of expenditure by the reduction of the public wage bill and the divestment of loss making assets - chief of sinners being the national airline - (a previous public-private enterprise gone sour).

The question being raised now in the context of the many pages spent exploring the PPP model is - is this a possible alternative for such a time as this? Can incentives provided by the government stimulate such partnership projects that can 'sop up' the job losses in the public sector? With agencies being compelled to reduce their dependence on the Central Government's coffers and the resulting greater dependence on direct user fees with less Government subsidy where appropriate, will not these services now take on a greater appeal for greater private sector involvement? The author is encouraged as she is of the opinion as every crisis bring with opportunity providing that the stakeholders are willing to see it and capitalize on it. The review of the various body of work on PPP implementation indicates that often the game changer is the ineffectual management of the change process. The attendant price increases, potential cutbacks in staffing or the takeover of state enterprises by foreign multinationals face strong resistance from the general public and the Opposition etc. These preconditions of the IMP might permit the government an easier path to exploring the PPP path with less opposition than before. With the eye of an international body ensuring that only fiscally prudent decisions are taken, I think the perhaps the offerings of public private partnerships have come ***"for such a time as this"***.

## Future Research

With the emergence of a the Caribbean Single Market Economy Agreement which will allow for the opening of borders between the islands in the Caribbean Community there will be a free exchange of goods and services, as well as the movements of Caribbean nationals. As the migratory patterns begin shifting towards the more “competitive” cities the urban resources will in time come under pressure to support this unanticipated growth in population and in demand (urbanization).

For future research it would be very instructive to see the role that Public Private Partnerships across member states can play in the financing and provision of upgraded infrastructure that will undoubtedly be a necessity. This might put in place the kind of PPP project pipeline that could support a regional PPP unit and make a way for the economic growth and development of these small island states which in the first place is the primary objective of the Caribbean Single Market Economy.



“ Mind takes form in the city;  
and in turn, urban forms condition mind.  
— Lewis Mumford (1895-1990) ”

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## APPENDICES

### APPENDIX A

#### List of Respondents

- **Office of the Prime Minister**  
Dr. Dana Morris – Dir. Development Policy Planning & Strategy
- **Ministry of Water and Housing**  
Dr Horace Chang – Minister of Water & Housing  
Mr. Ian Gage – Project Manager Rural Water Supply Programme
- **Office Of Utility Regulations**  
Mr. Maurice Charvis – Deputy Director General
- **Development Bank of Jamaica**  
Mr. Douglas Levermore – Privatisation Manager
- **National Water Commission**  
Mr. Vernon Barrett – Vice President, Corporate & Strategic Planning
- **National Housing Trust**  
Mr. Donald Moore - Senior General Manager, Construction and Development
- **Wastewater Operation & Maintenance Company Ltd**  
Mr. Christopher Bruce – Operations & Maintenance Manager
- **Ashtrom Building Systems Ltd & Ashtrom Jamaica Ltd**  
Mr. Moshe Saldinger - General Manager
- **Ministry of Finance**  
Ms. Veronica Warmington - Acting Deputy Financial Secretary  
Mr. Trevor Anderson - Fiscal Policy & Monitoring Unit
- **National Road Operating & Constructing Company Ltd** (BOT Toll Road Manager)  
Mr. Ivan Anderson – Managing Director
- **Sangster’s International Airport** (Management PPP)  
**Ms. Elizabeth Scotton-Brown** – Chief Commercial Officer
- **Can Cara Environment Limited** (Private Sewage Treatment Provider)  
Mr. Junior Lincoln – Managing Director
- **Dynamic Environment Management Limited**  
Mr. Carl Tucker – Director ((Private Sewage Treatment Provider)

### NATIONAL WATER COMMISSION

#### GENERAL QUESTIONS

1. Considering that the NWC has contracted out via competitive tender for the construction of waste water treatment plants not very dissimilar from the Soapberry project, what prompted the use of PPPs as a procurement option in this instance?
2. Were any other PPP models considered? If so which and why was this model utilized?
3. Was this the first project done by the NWC using the PPP model?
4. Were any changes to the NWC Act necessary in order to facilitate the project?
5. What were the levels of clearance needed before execution of contract? Parliament, Cabinet etc?
6. Were there any technological advantages to engaging this partner?
7. Was the project completed on time? If yes, by how much?
8. Did the project experience any project overruns?

**PROCUREMENT**

9. What were the technical, financial and social objectives of providing the STP?
10. How many responsive bids were received for assessment?
11. What was the criterion used for the assessment of the contractor?
12. What was the criterion used for the assessment of the plant operator?
13. What was the type of analytical or feasibility tools used to determine if the country was to receive value for money from the potential partners?
14. Who was responsible for the bid assessment and recommendation?
15. Did the Government dictate project specifications or was the RFP done on an output/ outcome basis?
16. Is the private sector partner using any new technology that saved on cost or maintenance or increased effluent quality?

**FINANCE**

1. In your assessment to what extent has risk been transferred to the private sector?
2. Who collateralized the commercial loan and what was used?
3. Who was responsible for setting tariffs?
4. How was a tariff determined?
5. Were any multi-lateral agencies approached for financial assistance and if so what type of assistance was granted?

**CONTRACT STRUCTURE**

6. When was the contract signed?
7. On what basis is payment being made to the private partner? Usage or availability?
8. What in the contract ensures that construction risk has been transferred effectively?
9. Was the project afforded any tax waivers?
10. What happens to the assets at the end of the contract period?
11. Does the government pay a residual value for the facility?
12. What happens if it is not at market value?
13. What are the remedies available to the parties governing dispute resolutions?
14. Are you able to identify any risks that have been transferred to the private partner?
15. What happens if the private sector defaults in any way?
16. The Government recently granted the CWTC a guarantee. Why was that necessary?
17. How smoothly is the administrative support from this tri-partite relationship between the three Government agencies that make up the SPV working?
18. What has caused the delay in payments to the SPV?

**MONITOR AND EVALUTION**

19. How long has the plant been in operation?
20. Are there any performance penalties embedded in the Agreement?
21. Are there any performance incentives embedded in the Agreement?
22. Has the project been meeting its technical objectives? Effluent quality etc
23. Has the project been meeting its financial objectives?

**GOVERNANCE AND ACCOUNTABILITY**

24. You listed the people of the KSA and Portmore as stakeholders. How were they brought into that process?
25. What were their main concerns if any? How were these mitigated?
26. As it relates to transparency do you know of any requirement legislative or other that requires the NWC or any of the other government agencies to publish any reports on the progress of the plant?
27. Who does the SPV board report to?

## OFFICE OF THE PRIME MINISTER

### POLICY PERSPECTIVE

1. How many PPPs has Jamaica engaged in over the last 10 years?
2. Which projects were those and who were the partners?
3. Is the GOJ's PPP programme framed within a broader reform programme or strategy, for example, say within the Public Sector Reform Programme?
4. Of all the reasons provided, rank beginning with "most important" which of these reasons best explain the GOJ's reason to engage PPPs?
  - a. Overcome fiscal rules controlling debt
  - b. Public rejection of privatization
  - c. Reduce financial drain of providing services.
  - d. Improvements in service delivery.
  - e. Introduce new technologies and promote innovation
  - f. Encourage private enterprise and expand private sector
  - g. Shift in philosophy from asset acquisition to service delivery
  - h. Reduce the size and scope of public sector
  - i. Increase of government's approval rating and likelihood of a return to power.
  - j. Reduce opportunity for corruption or misuse of public property
5. What are the general objectives of the Government PPP programme?
6. Are those objectives being met?
7. Have any project audits been done to assess success or "lessons learnt" scenarios?
8. Has the OPM identified any inherent "built in" challenges within the process?
9. What are the overriding concerns if any that the MOF/OPM has for present and/or future contracts?
10. Have any of our PPPs resulted in significant layoffs in the public sector?

### REGULATORY & GOVERNANCE

11. How has the public response been in general to the growing shift towards private sector delivery of public goods?
12. To what extent has it impacted on the successful delivery of the projects?

### LEGAL

1. Do or have investors faced any constitutional or legal conflicts in the execution of PPPs?
2. Did Jamaica have to make any legislative reform to accommodate projects?
3. Does Jamaica have a legal framework in place to address issues of compliance and enforcement of contract?
4. Are there any limitations on the Government's discretion for the execution of PPPs? Is parliamentary approval required?

### FINANCIAL

1. Does your government require that government departments and entities demonstrate the affordability of PPP projects?
2. Is there a policy decision regarding what is considered an adequate tool for feasibility analysis?
3. As it relates to guarantees, are there any policies in place that determine or limit or define what can be accepted in a PPP agreement.
4. Are there any policy requirements regarding the span required of fiscal studies being done to determine feasibility of a PPP?

Interviews were also undertaken with two fully private sewage treatment plant providers in

order to compare their experiences with the public and public/private situation. Interviews were also done with two other PPPs (Highway 2000 BOT) considered to be no very successful and the Sangsters International Airport considered to be a successful contract. This was done to better appreciate where Jamaica needs general reinforcement.

## **DEVELOPMENT BANK OF JAMAICA**

### **POLICY PERSPECTIVE**

1. What is the mandate of the DBJ as it relates to the Privatization or PPP process?
2. Can you take me thru the process of what is to be expected from a project has been identified thru to approval and execution? With and without the input of the DBJ.
3. Is there a distinction in process if the project is over a certain contract sums?
4. How many PPPs has the GOJ engaged in over the last 10 years?
5. Which projects are those and who were the partners?
6. Has the DBJ identified any inherent “built in” challenges within the process?
7. What are the overriding concerns if any that the DBJ has for present and/or future agreements?
8. What role did the DBJ play in the planning of the CWTC?

### **OFFICE OF UTILITY REGULATIONS**

1. What are the responsibilities of the OUR?
2. What authority does the OUR have and what is the source of that authority?
3. What is in place to afford the OUR independence from political influence or private sector capture?
4. What formulae is used by the OUR to determine tariff structure?
5. What is the status of the application for tariff determination for the plant?
6. What concerns does the OUR have if any for Government’s involvement in public private partnerships?
7. Has the OUR experienced any challenges unique to this project to date?
8. Are consultations with the public or persons to be affected facilitated before OUR decisions are made? Are there any instances when the response of the public impacted the decision of the OUR? What measures have been put in place to ensure that the consultations are not perceived as mere “going through the motions”?
9. What is embedded in the OUR Act that would give an investor confidence that with change of political administration he can expect continuity.
10. What measures have been put in place, if any, to facilitate independence of the OUR in the carrying out of their mandate?
11. If a licensee is deemed to be not compliant with the standards of the licence granted how is the OUR empowered to rectify the delinquency?
12. Are there any distinctions made in the regulation of public versus private sector infra structure?
13. How does the OUR finance its operations?

### **CENTRAL WASTE WATER TREATMENT COMPANY**

#### **Implementation & Monitoring**

1. Who does the CWTC report to?
2. Who are the representatives on the CWTC board?
3. Who owned the land? Was it paid for or is it equity?
4. What kinds of incentives were put in place to facilitate CWTC?



5. What types of assessment were done to assure CWTC that they were receiving value for money from WOMC?
6. Were any tax waivers granted to the private partner?
7. Were there any guarantees given by the govt to facilitate the loan?
8. Were there any difficulties involved in the construction period?
9. Was there any budget or time overruns?
10. What has been put up as collateral for the NCB loan?
11. When payment is made to you from the NWC how are those funds allocated?
12. On what basis is payment being made to WOMC?
13. What in the contract ensures that construction risk has been transferred effectively to the private sector?
14. Were any contractual stipulations in place to incentivise timely completion of plant and within budget?
15. Were there any overruns in the construction budget or time?
16. If yes, were these overrun costs absorbed by the private sector or the government?
17. Were the people of KSA and Portmore, as stakeholders brought into the process and how?
18. What explains the absence of an approval from the OUR for a licence?
19. What explains the delay in refinancing the construction loan as was intended in the plan?
20. What benchmarks have been put in place for the monitoring of the plant?

#### NATIONAL ENVIRONMENTAL PLANNING AGENCY

1. Has the monitoring unit at NEPA been visiting the site?
2. Has the company been meeting the standards as set out in the licence and permit?
3. Is NEPA receiving the quarterly reports required as per Clause #5 of licence?
4. Has the licensee (CWTC) submitted any reports of malfunction since operations began?
5. Does the Agency have any concerns regarding the performance of the plant?

#### WASTEWATER OPERATION & MANAGEMENT CO LTD.

1. What has been the greatest challenge in taking on this project?
2. Were there any government policies that made the process more difficult than you had anticipated?
3. What has the experience of working with the various agencies been like in terms of their responsiveness, competence, etc
4. How would you describe WOMC's relationship with CWTC and NWC?
5. What has been your greatest constraint in the operation and maintenance of the plant?
6. Are you clear on what the benchmarks are for monitoring the plant?
7. Has the company been meeting the standards as set out in the licence and permit?
8. Has the monitoring unit at NEPA been visiting the site?
9. In the absence of a competitive tender Would you agree that people of Jamaica have received value for money. If yes. How would you determine that?
10. How has this delay in receiving payment from CWTC affected operations?
11. What is the reason you have been given for the absence of payment?
12. Is there redress to be found in the contract regarding payments?
13. If the payments fail to come in after the tariffs have been set, what is the company's plan of action?

## APPENDIX B Permutations of PPPs

Source: European Commission (2003)

PPP TYPE	MAIN FEATURES	APPLICATION	STRENGTHS	WEAKNESSES
CONTRACTING	<ul style="list-style-type: none"> <li>Contract with private party to design &amp; build public facility</li> <li>Facility is financed &amp; owned by public sector</li> <li>Key driver is the transfer of design and construction risk.</li> </ul>	<ul style="list-style-type: none"> <li>Suited to capital projects with small operating requirement</li> <li>Suited to capital projects where the public sector wishes to retain operating responsibility.</li> </ul>	<ul style="list-style-type: none"> <li>Transfer of design and construction risk.</li> <li>Potential to accelerate construction programme.</li> </ul>	<ul style="list-style-type: none"> <li>Possible conflict between planning and environmental considerations.</li> <li>May increase operational risk.</li> <li>Commissioning stage is critical.</li> <li>Limited incentive for whole life costing approach to design.</li> <li>Does not attract private finance.</li> </ul>
	<p><b>BUILD OWN OPERATE</b></p> <ul style="list-style-type: none"> <li>Contract with a private sector contractor to design, build and operate a public facility for a defined period, after which the facility is handed back to the public sector.</li> <li>The facility is financed by the public sector and remains in public ownership throughout the contract.</li> <li>Key driver is the transfer of operating risk in addition to design and construction risk.</li> </ul>	<ul style="list-style-type: none"> <li>Suited to projects that involve a significant operating content.</li> <li>Particularly suited to water and waste projects.</li> </ul>	<ul style="list-style-type: none"> <li>Transfer of design, construction and operating risk</li> <li>Risk transfer provides incentive for adoption of whole life costing approach</li> <li>Promotes private sector innovation &amp; improved value for money.</li> <li>Improved quality of operation and maintenance.</li> <li>Contracts can be holistic.</li> <li>Government able to concentrate on the on core issues.</li> </ul>	<ul style="list-style-type: none"> <li>Possible conflict between planning and environmental considerations.</li> <li>Contracts are more complex and tendering process can take longer</li> <li>Contract management and performance monitoring systems required.</li> <li>Cost of re-entering the business if operator proves unsatisfactory.</li> <li>Does not attract private finance and commits public sector to providing long term finance.</li> </ul>
DESIGN BUILD FINANCE OPERATE	<ul style="list-style-type: none"> <li>Contract with a private party to design, build, operate and finance a facility for defined period, after which the facility reverts to the public sector.</li> <li>The facility is owned by the private sector for the contract period and it recovers costs through public subvention.</li> <li>Key driver is the utilisation of private finance and transfer of design, construction &amp; operating risk.</li> <li>Variant forms involve different combinations of the principal responsibilities</li> </ul>	<ul style="list-style-type: none"> <li>Suited to projects that involve a significant operating content.</li> <li>Particularly suited to roads, water and waste projects.</li> </ul>	<p>As for BOT plus:</p> <ul style="list-style-type: none"> <li>Attracts private sector finance;</li> <li>Attracts debt finance discipline;</li> <li>Delivers more predictable and consistent cost profile;</li> <li>Greater potential for accelerated construction programme; and</li> <li>Increased risk transfer provides greater incentive for private sector contractor to adopt a whole life costing approach to design.</li> </ul>	<ul style="list-style-type: none"> <li>Possible conflict between planning and environmental considerations.</li> <li>Contracts can be more complex and tendering process can take longer than for BOT.</li> <li>Contract management and performance monitoring systems required.</li> <li>Cost of re-entering the business if operator proves unsatisfactory.</li> <li>Funding guarantees may be required.</li> <li>Change management system required.</li> </ul>
	<p><b>CONCESSION</b></p> <ul style="list-style-type: none"> <li>As for DBFO except private party recovers costs from user charges.</li> <li>Key driver is the Polluter Pays Principle and utilising private finance and transferring design, construction and operating risk.</li> </ul>	<ul style="list-style-type: none"> <li>Suited to projects that provide an opportunity for the introduction of user charging.</li> <li>Particularly suited to roads, water (nondomestic) and waste projects.</li> </ul>	<p>As for DBFO plus:</p> <ul style="list-style-type: none"> <li>Facilitates implementation of the Polluter Pays Principle;</li> <li>Increases level of demand risk transfer and encourages generation of third party revenue.</li> </ul>	<p>As for DBFO plus:</p> <ul style="list-style-type: none"> <li>May not be politically acceptable</li> <li>Requires effective management of alternatives / substitutes, egalitarian transport routes; alternative waste disposal options)</li> </ul>

**APPENDIX C Hypothetical Risk Allocation Table**

Source: UNESCAP (2007)

Risk	Contractor	Operator	Equity	Lenders	Government	Insurance	Unallocated
Construction overrun & delays	■						
Change in legal regimes					■		
Land Acquisition					■		
Approval/licences and permits	■				■		■
Variations	■				■		
Taxation	■		■	■	■		
Tariffs & Charges		■	■		■		
Revenue/Traffic Demand			■	■	■		
Operation		■					
Maintenance		■					
Defects Liability		■					
Natural Disaster						■	
Industrial Action		■	■		■		
Environmental			■		■		
Civil Disobedience		■			■		
Insurance						■	
Force Majeure							
Confiscation					■		
Interest Rate Risk			■	■			■

**APPENDIX D VGF Project Application Criteria** Source: *Asian Development Bank (2006)*

Eligibility criteria. To avoid shortcomings in project proposal and thereby avoid delays in the approval process, the VGF has the following criteria:

1. Government should make the proposal and not the private party. The key to making PPPs acceptable is to create an environment where PPPs are seen to be a way of attracting private money into public projects, not putting public resources into private projects.
2. The proposal should be made to the PPP cell of the DEA in prescribed proforma.
3. The project needs to be implemented, i.e. developed, financed, constructed, maintained, and operated for the project term (concession period) by the private sector company.
4. The private sector company is to be selected by government or a statutory entity through a transparent and competitive bidding process; which means that the project has to be identified by the state as desirable and then bid out.
5. The project should provide service against a predetermined tariff or user charge.
6. The government/statutory entity concerned should certify within reason that (1) the tariff/user charge would not be increased to eliminate or reduce the viability gap; (2) the project term will not be increased to reduce the viability gap; (3) the capital costs are reasonable and based on standards and specifications usually applicable to such projects; and (4) the capital costs will not be further restricted to reduce the viability gap.

**APPENDIX E Integrity Pact Operations**

Source: UN Habitat website

The Integrity Pact is a binding agreement between the agency and bidders for specific contracts in which the agency promises that it will not accept bribes during the procurement process and bidders promise that they will not offer bribes. Under the IP, the bidders for specific services or contracts agree with the procurement agency or office to carry out the procurement in a specified manner. The essential elements of the IP are enumerated below:(53)

- a pact (contract) among a government office inviting public tenders for a supply, construction, consultancy or other service contract, or for the sale of government assets, or for a government license or concession (the Authority or the “principal”) and those companies submitting a tender for this specific activity (the “bidders”);
- an undertaking by the principal that its officials will not demand or accept any bribes, gifts, etc., with appropriate disciplinary or criminal sanctions in case of violation;
- a statement by each bidder that it has not paid, and will not pay, any bribes;
- an undertaking by each bidder to disclose all payments made in connection with the contract in question to anybody (including agents and other middlemen as well as family members, etc., of officials); the disclosure would be made either at time of tender submission or upon demand of the principal, especially when a suspicion of a violation by that bidder emerges;
- the explicit acceptance by each bidder that the no-bribery commitment and the disclosure obligation as well as the attendant sanctions remain in force for the winning bidder until the contract has been fully executed;
- undertakings on behalf of a bidding company will be made “in the name and on behalf of the company’s Chief Executive Officer”;
- a pre-announced set of sanctions for any violation by a bidder of its commitments or undertakings, including (some or all):
  - denial or loss of contract;
  - forfeiture of the bid security and performance bond;
  - liability for damages to the principal and the competing bidders, and
  - debarment of the violator by the principal for an appropriate period of time.

Bidders are also advised to have a company Code of Conduct (clearly rejecting the use of bribes and other unethical behaviour) and a Compliance Program for the implementation of the Code of Conduct throughout the company.

**APPENDIX F Ease of Doing Business Jamaica**

Source: UN Habitat website

EASE OF.....	2010 RANK	2009 RANK	CHANGE IN RANK
<b>Doing Business</b>	<b>75</b>	<b>67</b>	<b>-8</b>
Starting a Business	19	12	-7
Dealing with Construction Permits	49	48	-1
Employing Workers	39	37	-2
Registering Property	122	129	+7
Getting Credit	87	84	-3
Protecting Investors	73	70	-3
Paying Taxes	174	175	+1
Trading Across Borders	104	102	-2
Enforcing Contracts	128	126	-2
Closing a Business	23	23	0

**APPENDIX G Ministry Paper # 34 Privatisation Procedure**

Source: OPM, 1991

1. Gathering financial and other information about the targeted enterprise/activity/asset.
2. Identifying practical means to overcome barriers to completing a transaction.
3. Valuing the enterprise and/or asset
4. Proposing an appropriate modality for consideration of the Cabinet
5. Inviting bides from the general public through media advertisement
6. Screening prospective investors
7. Conducting negotiations with selected applicants
8. Recommending offers for the approval of Cabinet.

**APPENDIX H Risk Category Checklist**

Source: ADB (2007)

**Site risk** is the risk that the project land will be unavailable or unable to be used at the required time, in the manner or at the cost anticipated, or that the site will generate unanticipated liabilities. This may result in the contracted service delivery and/or projected revenues being adversely affected. Examples may include contamination, discovery of artefacts, delays in achieving planning approvals, native title, etc.

**Design, construction and commissioning risk** is the risk that the design, construction or commissioning of the facility or certain elements of each of these processes, are carried out in a way which results in adverse cost and/or project delivery consequences. The consequences if the risk materialises may include delays and/or cost increases in the design, construction and commissioning phases, or design or construction flaws which may render the infrastructure inadequate for effective service delivery, either immediately or over time.

**Sponsor risk** is the risk:

- a) Where the Special Purpose Vehicle (SPV) and/or its sub-contractors are unable to fulfil their contractual obligations to government, government will be unable to enforce those obligations against the sponsors or recover some form of compensation or remedy from the sponsors for any loss sustained by it as a result of the SPV's breach. This may also have an adverse impact upon the government's reputation; or
- b) That the sponsor(s) is, for security or other probity reasons, inappropriate or unsuitable to be involved in, or (through the contractor) connected with, the project, and in so being may harm the project or bring it into disrepute. This could apply when there is a change in contractor ownership during the project's life cycle. Government should provide guidance on the types of parties acceptable as transferees (in terms of credit ratings and proven expertise) and ensure government consent is required to any ownership change.

**Financial risk** refers to a number of risks including the following:

- a) The risk that the financiers (debt and equity) will not provide or continue to provide funding to the project (risk of financial uncertainty);
- b) The risk that financial parameters (e.g. market conditions) will change prior to the contractor fully committing to the project, potentially adversely affecting price (financial parameter risk); and
- c) The risk that the financial structure is not sufficiently robust to provide fair returns to debt and equity over the life of the project (and hence calls into question the continuing viability of the project).

**Operating risk** is the risk that the process for delivering the contracted services – or an element of that process (including the inputs used within or as part of that process) – will be affected in a way which prevents the contractor from delivering the contracted services according to the agreed specifications and/or within the projected costs.

**Market risk** is the risk that:

- a) Demand for a service will vary from that initially projected; or
- b) Price for a service will vary from that initially projected, so that the total revenue derived from the project over the project term varies from initial expectations.

**Network risk** is the risk that the government-controlled network(s) needed for the contractor to deliver the agreed services will be removed, not adequately maintained or otherwise changed. This includes the project scope being extended to include additional infrastructure or services not originally foreseen or anticipated at the date of the contract. This may prevent or frustrate the delivery of the contracted services, affect the quality of the specified outputs or affect the viability (value for money) of the project.

**Interface risk** is the risk that the method or standard of delivery of the contracted services will prevent or in some way frustrate the delivery of the public sector delivered services or vice versa.

**Industrial relations risk** is the risk of any form of industrial action – including strikes, lockouts, work bans, work-to-rules, blockades, picketing, go-slow action and stoppages – occurring in a way which, directly or indirectly, adversely affects commissioning, service delivery or the viability of the project.

**Legislative and government policy risk** is a large category of risks, including the risk of a change in legislation, regulation or policy such as to disadvantage the project.

**Force majeure risk** is the risk that a specified event entirely outside the control of either party will occur and will result in a delay or default by the contractor in the performance of its contractual obligations. An example is floods, terrorist attacks etc.

**Asset ownership risk** is the risk that events such as loss events (e.g. contract loss, force majeure), technological change, construction of competing facilities or premature obsolescence will occur, with the result that the economic value of the asset may vary, either during or at the end of the contract term, from the value upon which the financial structure of the project is based.

## APPENDIX H Summary of PPP Good Governance Parameters

KEY ISSUES	GOOD PRACTICES	BAD PRACTICES
<b>WILLINGNESS TO INVEST</b>		
<b>Creating prospects for return on investments</b>	<ul style="list-style-type: none"> <li>Balancing return on investment and sustainability in setting user charges</li> <li>Using private know-how to identify projects with cash flow potential</li> </ul>	<ul style="list-style-type: none"> <li>Too little attention to affordability problems and efficient use of resources, resulting in unequal access to public services or underinvestments and inefficient use of scarce resources</li> </ul>
<b>Managing scope of project and externalities</b>	<ul style="list-style-type: none"> <li>Cross-subsidizing of profitable and unprofitable project parts</li> <li>Internalizing positive externalities and package deals</li> </ul>	<ul style="list-style-type: none"> <li>Missing opportunities for reconciling business opportunities and sustainability by lack of scope management</li> <li>No attention to preventing cherry picking</li> </ul>
<b>Managing risks perceived by private parties</b>	<ul style="list-style-type: none"> <li>Involving reliable and professional parties committed to sustainability</li> <li>Preventing transfer of commercial risks to government</li> <li>Guarding a minimal level of competition</li> </ul>	<ul style="list-style-type: none"> <li>No clear vision of reliable partners</li> <li>Private parties shift risks and costs to government, taxpayers, and users</li> <li>Creation of private monopolies</li> </ul>
<b>Reducing political uncertainty</b>	<ul style="list-style-type: none"> <li>Regulator at arm length of politics</li> <li>Public – public coordination</li> <li>Clear and coordinated institutional framework</li> </ul>	<ul style="list-style-type: none"> <li>Lack of measures to coordinate governmental activities</li> <li>Absence of stable and coordinated policies and legal and institutional framework</li> </ul>
<b>DESIGN OF CONTRACT</b>		
<b>Form of the contract</b>	<ul style="list-style-type: none"> <li>Contract fits specific technological, strategic and institutional setting</li> </ul>	<ul style="list-style-type: none"> <li>One size fits all</li> </ul>
<b>Getting the incentives right</b>	<ul style="list-style-type: none"> <li>Price regulation, service quality, standards, coverage targets</li> <li>Incentives for efficient use of resources and reduction of negative externalities</li> <li>Integration of informal institutions for service provision</li> <li>Provisions for modifying tariffs, service levels, technologies, and renegotiation during operation</li> </ul>	<ul style="list-style-type: none"> <li>Adoption of monopolistic arrangements that lead to market failures</li> <li>Lack of incentives for efficient use of resources, and reduction of negative environmental and health impacts</li> <li>No integration of informal institutions</li> <li>Rigid contracts; practice of unanticipated ex post renegotiation of contract conditions and hold-up</li> </ul>
<b>Financial capacity building</b>	<ul style="list-style-type: none"> <li>Benefit sharing agreements</li> </ul>	<ul style="list-style-type: none"> <li>Failure to prevent excessive private profits</li> <li>No provisions for financial capacity building</li> </ul>

KEY ISSUES	GOOD PRACTICES	BAD PRACTICES
<b>Affordability problems</b>	<ul style="list-style-type: none"> <li>• Income measures and credit facilities</li> <li>• Differentiation of tariffs, services, and management solutions</li> </ul>	<ul style="list-style-type: none"> <li>• Failure to prevent realization of expensive, overengineered infrastructures resulting in central, standardized service delivery, unequal access; limited coverage; affordability problems and political instability</li> </ul>
<b>Process of contract design</b>	<ul style="list-style-type: none"> <li>• Competitive bidding or competitive negotiation</li> <li>• Early private involvement; design space</li> <li>• Involvement of local organizations, users and stakeholders</li> </ul>	<ul style="list-style-type: none"> <li>• Single bid concessions</li> <li>• No early private involvement</li> <li>• Lack of mechanisms to articulate local interests and sustainability targets</li> </ul>
<b>PREVENTION OF REGULATION FAILURE</b>		
<b>Preventing regulatory capture</b>	<ul style="list-style-type: none"> <li>• Build regulatory capacity get the right mix of expertise</li> <li>• Provide resources, guidelines training programs, indicators and standards, knowledge exchange facilities</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of regulatory capacity</li> <li>• Inappropriate mix of skills and expertise in regulator's office</li> <li>• Lack of in-house expertise and of mechanisms for developing knowledge and expertise</li> </ul>
<b>Preventing regulatory rent seeking</b>	<ul style="list-style-type: none"> <li>• Enhance transparency and accountability mechanism</li> <li>• Design codes of conducts; create training programs; develop strong corporate spirit; reduce asymmetries in salaries</li> </ul>	<ul style="list-style-type: none"> <li>• Regulator and staff pursue their own personal goals because of close relationships with private providers</li> <li>• Lack of transparency, accountability structures, and asymmetries in salaries</li> </ul>
<b>Making sustainability part of the regulators' agenda</b>	<ul style="list-style-type: none"> <li>• Create incentive structure that rewards sustainable performance</li> <li>• Agree on sustainability targets and indicators and procedures to assess them</li> </ul>	<ul style="list-style-type: none"> <li>• Underdeveloped and uncoordinated economic and sustainability regulatory regime</li> <li>• Lack of instruments to assess sustainability performance</li> </ul>

Source: *Koppenjan, J. F. M. & Enserink, B. (2009)*