

# [Public service in mauritius construction essay](https://assignbuster.com/public-service-in-mauritius-construction-essay/)

## Abstract

This study has been carried with the objectives of assessing and evaluating the general perception of the concept of PPP among top administrators in the public service in Mauritius, by identifying the perceived risks of embarking on such type of projects and identifying the perceived benefits and cost of embarking on PPP projects. A PPP is a contractual agreement between a public entity and a private entity, whereby the private entity performs part of a government organization’s service delivery functions, and assumes the associated risks for a significant period of time. PPP offers both strategic and operational choices to government. Strategically, the use of PPP fosters economic growth by developing new commercial opportunities and increasing competition in the provision of public services, thus encouraging crowding-in of private and foreign investment. Mauritius has opened its economy to the world and many foreign businesses have taken the opportunities offered by the country. PPP could be one of them. A literature review was carried out so as to obtain a firm understanding of the concepts of PPP, and specialist in the fields were contacted to learn of its application in the Mauritian context. The research has been carried using a standard methodology for a case study. As part of the research design, the sample size was determined using sampling theory. In addition, the questionnaire was designed and validated by specialist in the field. After administrating the survey instruments, data obtained was coded and was analysed using Excel software. This has provided the basis of making inferences as an initial step toward making feasible recommendationsOn the basis of the findings, it can be concluded that there is still some apprehension among top administrators for adopting PPP projects in the public service of Mauritius. With regard to the cost and benefits, no conclusive findings have been found. Mauritius is still lacking with respect of marketing of PPP concept to foreign investors. Overall, PPP projects are considered to be a high risk ventures. The study shows that PPP projects are more likely to take longer to implement and by its nature it will be subjected to a lot of debate among politicians and the public in general

## Chapter 2: Literature Review

## 2. 1 Introduction

Conventional procurement typically involves the procurement of distinct elements of a particular project through an input-based specification, for example the construction of a school. The State then becomes the owner and operator of the school, and only discrete elements of risks such as design risks and portions of construction risks are passed on to the private sector. Procuring a public-private partnership (PPP) agreement is quite different from typical government procurement of a service or commodity. The key difference between the PPP and conventional procurement is the use of an output specification by the State to describe the outputs that the private sector must provide as part of the service agreement. In a PPP, the emphasis falls on the procurement of a complete service. The State may remain the sponsor of the project but very often the private sector provides the financing of the project. Substantial risks, such as project management, design and implementation responsibilities are then passed to the private sector; ideally, the State retains the risks that it is best able to manage. A PPP approach has certain advantages over an input-based approach. Often the input-based approach leads to delays in construction, significant cost overruns and maintenance costs that become steadily less affordable. An output based approach which focuses on what is required rather than how it is to be delivered, transfers the risks of cost and time overruns from the State to the private sector contractor, who is paid only when the output is deliveredAccording to the literature review , under the PPP approach, the contract goes beyond the provision of the asset, for example a school building. By transferring responsibility and risk for the ongoing management, maintenance and operation of the asset to the private sector contractor, it gives the contractor the incentive to develop design solutions that take into account the costs of managing the asset over its entire life. This ensures that the contractor does not design an asset that is cheap to build but unaffordable expensive to manage and maintain over the rest of its life - as has often been the case in the past. The PPP approach offers important advantages to Government, not only more efficient risk allocation and access to private sector expertise but also the delivery of new assets without pressure on Government resources. Revenues can be generated by charging directly the users of the service (ex. toll roads) or Government may pay directly the private partner (ex. Government accommodation). There is also the possibility of combining the user charges and Government subvention, in order to make the cost affordable to the public. A project which does not have any profitability potential should therefore not be considered if the Ministry does not have the needed funding to compensate the private sector and if user charging is not a possible option. In a nut shell, the key features of the output-based approach of PPP are: 1. Specification of the outputs required, not the method of delivery2. Procurement of a service, not the underlying asset3. Allocation of risks to the party best able to manage them4. Value for money as the overriding objective5. Value for money assessed over the whole life of the asset6. Payment for service as received, not as asset delivered.

## 2. 2 Benefits of PPP

This section will delve on the benefits of PPP projects to all the parties involved i. e the Government, the contractors the public and other stakeholders

## 2. 2. 1 Value for Money

Value for money as defined by Grimsey and Lewis (2004) is the optimum combination of whole lifecycle costs, risks, completion time and quality in order to meet public requirements – isDo not put el al . list all the authorsanother important consideration, especially for the public sector (Chan et al., 2006) Innovation is another important advantage that the private sector can bring to public services. Generally speaking, the public sector may not be as innovative as the private sector. According to Chan et. al( 2006), the private sector, on the other hand, is continuously searching for new products and services to increase its competitive edge and to save costs.

## 2. 2. 2 Risk Management

According to Corbett and Smith (2006), risk transfer is one of the main reasons for adopting the PPP approach. The private sector is in general more efficient in asset procurement and service delivery and as a result it is to the government's advantage to share the associated risks with the private sector in line with widely accepted principles, For example, the contractor would take up the construction risk, the designer would take up the design risk, and the government would take up environmental approval risks, land acquisition risks, etc. He went on to add that cost savings refer to the reduction in price as a result of delivering a project by PPP instead of traditional methods.

## 2. 2. 3 Business Opportunities

According to United Nations Economic Commission for Europe, 2004; business opportunities are also created due to the large scope of works and these will benefit different sectors of the economy . To the private sector participants, PPP provides access to public sector markets. If projects are priced accurately and costs are managed effectively, projects can provide reasonable profits and investment returns on a long-term basis. Also, these projects tend to be large, and therefore expertise from many areas is required. Hence, co-operation among different collaborating parties is encouraged

## 2. 2. 4 Reduction in Public Sector Borrowing Requirements (PSBR)

Jeffries and Mc Georges (2009) found out that early PPP projects in the UK and Australia were mostly initiated because they offered the opportunity to invest in infrastructure ‘ off balance-sheet’ – borrowing for infrastructure investment was replaced by paying a tariff to the private sector for infrastructure use. This shift of public sector borrowing requirement into operational expenditure alleviated budgetary constraints for infrastructure development

## 2. 2. 5 Management of cash flows

To the government, PPP frees up fiscal funds for other areas of public service and improves cash flow management, as high upfront capital expenditure is replaced by periodic service payments. PPP also provides cost certainty in place of uncertain calls for asset maintenance and replacement. Public sector projects delivered via the private sector normally involve private sector funding. On these aspects Li, Akintoye, Edwards and Hardcastle, ( 2005)are of the view that the public funding required for public services can be reduced and redirected to support sectors of higher priority, for example education, healthcare, community services, etc;

## 2. 2. 6 Acceleration of infrastructure provision

Askar and Gab-Allah (2002) pointed out that PPP strategies allow the public sector to proceed with the provision of public facilities without providing funding upfront. Instead, the payment depends on the availability of services delivered by the private sector. According to Li, et al.(2005), PPP enables the government to bring forward infrastructure in demand, when lacking of public funding or under limits on public spending imposed by budgetary constraints PPP this provide government opportunities to advance priority infrastructure projects for economic development

## 2. 2. 7 Better risk allocation

Under PPP arrangements, risks related to financing, designing, building and operating the public assets and services can be partly or wholly transferred to the private sector (Chan, et al., 2009; Li, et al., 2005b). The private sector is generally seen as better at managing risks than the public sector. Achieving better risk allocation has been identified as a significant driver for PPP adoption in a wide range of practical PPP guidance materials and academic publications (Cheung, et al., 2009; Efficiency Unit, 2008; European Commission, 2003; United Nations Economic Commission for Europe, 2004).

## 2. 2. 8 Whole of life cost savings

Chan, et al(2009) are of the view that the private sector has been historically involved in design, build, maintenance and operation phases of public services and as such they can optimise costs associated with these elements of service provision . Cheung, et al.( 2009) also shared this view and argued that under a PPP scheme, in which the long term maintainability of built infrastructure will accrue benefits to the private sector operator through reduced operational costs, the PPP contractor can increase design specifications and standards to reduce maintenance costs. Locking in such operational economies and innovations is hard to achieve using traditional procurement models (Dixon, et al.), This is primarily so in view that there is no direct incentives to construction contractors to do so. In a PPP contract in which the contractor not only constructs but thereafter manages service provision from the asset, the contractor is more likely to directly benefits from any innovations through the reduction of maintenance and operation costs. Grimsey and Lewis, (2004) have also supported these views and they have opined that in a PPP project, the consortium is also responsible for the long-term maintenance of the facility/service. The concession period may range from a few years to decades. Therefore the consortium is keen to design and construct the service/facility to ensure better maintainability at least within the concession period if not beyond. In addition to the above , proponents of PPP have argued that cost certainty is more easily achieved in PPP projects as financial terms are identified and included within the contract. Since the private consortia will normally be responsible for financing, designing, constructing and operating the facility over an extended period, any cost saving can naturally result in a better chance of securing profit. Hence they are keen to control their spending tightlyThe saving could be a result of the private sector's innovation and efficiency which the public sector may not achieve The private sector generally achieves higher operational efficiency in asset procurement and service delivery by applying their expertise, experience, innovative ideas/technology (e. g. using durable materials to reduce future maintenance costs) and continuous improvements. Overall cost savings to the project can be achieved by striving for the lowest possible total life cycle costs while maximising profits

## 2. 2. 9 Improved quality of services

Grimsey and Lewis, (2004) pointed out that PPP contracts leave more space for the private sector to innovate throughout the project lifecycle. With the aid of innovative techniques and managerial skills, end users are more likely to receive better public services In addition , under PPP arrangements, the private sector is required to ensure that services delivered satisfy pre-agreed benchmarks; otherwise the government will not make payments. In some cases, the private sector may be motivated by rewards due to high quality of services provided (Li, et al., 2005b).

## 2. 2. 10 Timely delivery of projects

One argument in favour of PPP projects is that public sector projects delivered by the PPP model can often be completed on time and even with time savings because the consortium would start receiving revenue once the facilities/services are up and running. Therefore, the project team is keen to complete design and construction as quickly as possible. Once it starts to accrue revenue it can begin to pay off the initial costs and build up profits, whereas in a traditionally procured project there are no extra financial incentives for public servants to deliver projects faster. As a result, projects can proceeded as scheduled (Akintoye. Hardcastle, Beck, Chinyio, and Asenova (2003)Boussabaine,(2007) went on to support PPP projects based on the argument that time certainty is found to be more easily achieved in PPP projects. The consortium is often paid according to milestones of the project schedule, and any delay might be subject to liquidated damages. Therefore the consortium is often motivated to reach these milestones on time, if not earlier. This is a common behaviour observed in the private sector, but may not be the case in the public sector

## 2. 2. 11 Likely to access additional revenue sources

Under a PPP, there are incentives for the private sector to seek additional revenue sources to meet the overall cost of the project. For instance, additional revenues may be generated through the use of spare capacity of public facilities (European Commission, 2003).

## 2. 2. 12 Benefits for local economic and social development

The Efficiency Unit( 2008) is of the view that building, upgrading and maintaining public facilities create more job opportunities, thus alleviating social pressure caused by unemployment, especially under the current world-wide economic recession . PPP allow the private sector to participate in the provision of public facilities and services. The innovations achieved from private sector expertise might help to facilitate technology transfer to the local market.

## 2. 2. 13 Improved project scrutiny

AustraliaThe Public Sector Comparator (PSC) is commonly used by the government entities to benchmark expenses incurred by procuring infrastructure through standard procurement mechanisms with the costs accrued by the adoption of PPP. This comparator is used to justify the selection of a procurement methodology for a governmental project

## 2. 3 Inhibitors of PPP projects

This section of the literature review deals with the costs and constraints in implementing PPP projects

## 2. 3. 1 Political, social, and legal risks

Carrillo, et al. (2008) has found out that one significant reason for PPP failure is the political risk contingent on any project. This is inclusive of public opposition and legislative restrictions on involving the private sector in the provision of infrastructure projects, and the perception of apparently easy terms by which, corporate entities secure long and lucrative concessionary contracts at public expenseAccording to some authors , politicians may not be aware of the dynamics of risk transfer which are the distinguishing characteristics of PPP. PPP tend to be misunderstood by the public as a form of privatisation This, in turn, may create difficulties in persuading the various stakeholders in a project to agree with using PPP strategies. Mahaligam (2010) divide stakeholders into two political groups . Quite simply depending on the side of the political spectrum that a stakeholder resides will indicate whether a PPP solution is perceived as a positive or negative in the evaluation of a project procurement framework. Right of centre/conservative stakeholders tends to support PPP, however left of centre/socialist stakeholders tend to view PPP as a removal of public assets into private hands. Algarni et al.(2007) are of the view that legislation in some countries concerning public sector procurement imposes strict constraints on how the public sector engages in procurement of private sector services and these seems to hinder PPP

## 2. 3. 2 Unfavorable economic and commercial conditions

Zhang, (2005), in his research, found out that in some countries, poor prospects for economic growth adversely affect the confidence of the private sector to enter into the local market. In some other cases, the project fundamentals cannot justify the private investment. Sometimes lacking a strong capital market makes it impossible to achieve private financing

## 2. 3. 3 High transaction costs and lengthy lead time

According to Carrillo, et al. (2008); PPP have been criticised among international practitioners and researchers for the high transaction cost and lengthy lead time of bringing infrastructure into serviceDixon, et al (2005) and Kwak, et al.( 2009) who studied PPP international practices found out that PPP are not always successful as they feature high transaction cost, long bidding and negotiation duration, and complex contractual and financial arrangements

## 2. 3. 4 Problems related to the public sector

Governmental decision makers lack a clear understanding on why PPP approaches can be used and what are the obstacles for PPP adoption A common problem hampering the use of PPPs is that the public authorities are not experienced in selecting and structuring PPP projects (Li, et al., 2005). The relevant public authorities might not be clear about their roles throughout the procurement process. They either become too involved, which undermines the innovations achieved by the private sector or do no

## 2. 3. 5 Risk Sharing

According to the PPP newsletter of the PPP Unit ( Ministry of Finance , 2003) risk management means transferring risks to the partner who is best able to manage it. If a risk is better managed, the cost linked to its occurrence will decrease, lowering the total cost and thus generating value-for-money. The objective is not to transfer all risk to the private sector, as it will either not take it or charge a premium for something it cannot control. A project without clearly identified risks that the private sector will be willing to take should not be considered as a suitable candidate to provide commitment and support which prolongs the bidding duration (Zhang, 2005 ).

## 2. 3. 6 Problems related to the private sector

PPP projects are likely to result in failure, if the private sector is not able to deliver the projects in accordance with the output specification. The private sector’s failure might be due to insufficient techniques and financial capability in building and operating the public assets (Chan, et al., 2010 )

## 2. 4 The Public Sector Comparator (PSC)

Along with the development of PPP projects , public agencies have developed a new technique for evaluating PPP projects i. e The Public Sector Comparator (PSC) , The PSC provide detailed quantitative methods on deciding whether to proceed with PPP projects and this technique has been used in Australia and the UK (HM Treasury, 2006; Partnerships Victoria, 2001)In fact , the financial costs and benefit are worked and these became the benchmarks against which bids from private contractors are assessed. It is prepared using cash flows basis so that investment appraisal could be done using the discounted cash flow method. The analysis also include transaction costs (costs of professional expertise), inflation, the residual value of the investment etcHowever, PSC is commonly criticised for not being able to precisely reflect the non-quantifiable factors of the proposed project (Ozdoganm and Birgonul, 2000; Salman, et al., 2007). According to Head (2003), the PSC is never seriously considered. Although the U. K Treasury has claimed that the PSC has been designed so that there is no preference for any particular model of financing projects , these claimed are undercuts by the statements of Ministers and otherpolitical actors that projects will proceeds as long as it can secure private financing and approval under the Public Financial Initiative program

## 2. 5 Conclusion

The next chapter deals with the methodology. This chapter have given an overview of the risks, benefits and constraints in adopting PPP.

## Chapter 3: Research Methodology

## 3. 1 Introduction

Research is a systematic way of collecting and interpreting of information in order to meet research objectives. According Saunders et al (2003). a research has the following characteristicsdata are collected and interpreted systematically and there is a clear purpose to find out things

## 3. 2 Strategy for the Research

A research process requires developing the most efficient plan for gathering the needed information. Designing the research plan calls for decisions on the research design, data sources, research approaches, research instruments, sampling plan and contact methods. The research design is the plan to be followed to answer the research objectives. The research design sets out the logic of the inquiry. For any research or investigations, selection of an appropriate research design is fundamental to help arrive at valid findings; comparisons and conclusions. It is also important to look at two main types of research; exploratory and descriptive research. Exploratory research is used to gather preliminary data to shed light on the nature of the study that is, getting to know the organisations where the study will be carried out, previous articles and findings on the subject area. Once the type of research to be undertaken, has been identified , it is important to decide upon the appropriate method or methods to collect data. For the purpose of this project, both primary and secondary data have been gathered. Secondary data are facts and figures that are already available while primary data are data collected for a specific purpose or for a specific research project. Primary data was collected through questionnaires while secondary data were collected from magazines, government publications (PPP newsletter, Budget Speech etc) and books,

## 3. 3 Sampling Strategy

There are 25 Ministries in the public sector of Mauritius For this study, 3 ministries which are closely related with PPP have been chosen. They are respectively Ministry of Public Infrastructure, Ministry of Public Utilities and the Ministry of Finance. The respondents were chosen among officers holding top management and middle management positions in the 3 Ministries as well as staff in the technical cadre. This information is available in the National Budget and the staff list of these Ministries. The staffing position of the 3 Ministries as well as the potential respondents (size of population) for this survey and the sample size are given in the table below.

## Table1: Sampling Strategy

## Staffing Position

## Sample Size

## Percentage

Ministry of Finance and Economic Empowerment62345Ministry of Public Infrastructure130638Ministry of Public Utilities43626TOTAL2365109

## 3. 4 Data Collection instruments

The main instrument that has been used to collect the primary data is questionnaires. In fact this is the most common form of collecting data due to its relative flexibility and cost. The questionnaire consists of a set of questions presented to respondents for their answers. The questionnaires consist of mainly multiple choices, scaling and dichotomous questions. The Likert scale has been used as it is a model, which assumes that item scores are related linearly to the views and opinion of the respondents. The questionnaire is divided in 4 parts and these are as follows:(a) Part A Relevance of PPP in Mauritius(b) Part B Cost and Benefit of PPP(c) Part C Risk in PPP project(d) Part DBio data of respondents

## 3. 5 Pilot Testing

Before the questionnaires were administered, they have been pre-tested under field conditions. 6 respondents were called to answer the questionnaires. The pre-testing was done to identify weaknesses, ambiguities and omissions before the questionnaires were finalised for the survey. The pilot stage, in fact, is very important in ensuring that the questionnaire is adequate for collecting the required data. As a result, minor changes were made to some of the questions.