

**Critical Success & Failure Factors for Public  
Private Partnership Projects in the UAE**

**A DISSERTATION**

**Submitted to the British University in Dubai for the Degree of**

**MSc in PROJECT MANAGEMENT**

**BUID Faculty of Business**

**By**

**Mohamed Yaqoob Alhashemi**

**ID# 20050011**

**2008**

## **Table of Contents**

<b>Section</b>	<b>Page Number</b>
Executive Summary .....	6
1.0 Introduction .....	8
1.1 Back Ground .....	8
1.2 Aim of the Research .....	8
1.3 The Objectives .....	9
1.4 Methodology .....	10
2.0 Literature Review .....	12
2.1 Introduction .....	12
2.2 The Evolvement of Public Private Partnership (PPP) .....	12
2.2.1 History of PPP .....	14
2.2.2 Types of PPP .....	16
2.2.3 Example of Typical PPP .....	19
2.2.4 Life Cycle of PPP Project .....	20
2.2.5 Area in which PPP is used at .....	21
2.3 Critical Success Factors for PPP Project .....	23
2.3.1 Appropriate Risk Allocation and Risk Sharing .....	23
2.3.2 Saving and Need for Finance .....	26
2.3.3 Favourable Legal Framework .....	29
2.3.4 Political Support .....	32
2.3.5 Strong Private Consortium .....	34
2.3.6 Available Financial Market .....	36
2.3.7 Stable Economy .....	37
2.3.8 Transparent and Competitive Procurement Process .....	38
2.3.9 Technology Transfer .....	39
2.3.10 Thorough Feasibility and Assessment Study .....	41
2.3.11 Innovation .....	42
2.4 Failure Factors for PPP Projects .....	45

2.4.1	Lack of Appropriate Skills	45
2.4.2	High Participation Cost	46
2.4.3	High Project Value	47
2.4.4	High Risk	48
2.4.5	Lack of Credibility and Contacts	49
2.4.6	Demands on Management Time	50
2.4.7	Poor Communication between Private Partners	50
2.4.8	Long Procurement and Negotiation Process	51
2.5	Conclusion	52
3.0	Research Methodology	53
3.1	Introduction	53
3.2	Qualitative Research	53
3.3	Steps in Collecting Data	53
3.4	Advantages and Disadvantages of the Interviews	55
4.0	Data Collection on Case Studies	56
4.1	Introduction	56
4.2	Case Study 1: Water and Electricity Distribution Centres	56
4.2.1	Project Description	56
4.2.2	The Public Partner	56
4.2.3	The Private Partner	57
4.2.4	The Tender Process	57
4.2.5	Details on Data Collection	58
4.3	Case Study 2: Theme Park	58
4.3.1	Project Description	58
4.3.2	The Public Partner	58
4.3.3	The Private Partner	59
4.3.4	The Tender Process	59
4.3.5	Details on Data Collection	60
4.4	Case Study 3: Industrial Zone	60
4.4.1	Project Description	60

4.4.2	The Public Partner	61
4.4.3	The Private Partner	61
4.4.4	The Tender Process	61
4.4.5	Details on Data Collection	61
4.5	Case Study 4: PPP Schools	62
4.5.1	Project Description	62
4.5.2	The Public Partner	62
4.5.3	The Private Partner	63
4.5.4	The Tender Process	63
4.5.5	Monitoring Agency	63
4.5.6	Details on Data Collection	64
4.6	Case Study 5: Waste Recycling Facility	64
4.6.1	Project Description	64
4.6.2	The Public Partner	65
4.6.3	The Private Partner	65
4.6.4	The Tender Process	66
4.6.5	Details on Data Collection	66
5.0	Data Analysis	67
5.1	Case Study 1	67
5.1.1	Success Factors	67
5.1.2	Failure Factors	71
5.1.3	Conclusion	73
5.2	Case Study 2	74
5.2.1	Success Factors	74
5.2.2	Failure Factors	77
5.2.3	Conclusion	78
5.3	Case Study 3	79
5.3.1	Success Factors	79
5.3.2	Failure Factors	81
5.3.3	Conclusion	82

5.4	Case Study 4	.....	83
	5.4.1 Success Factors	.....	83
	5.4.2 Failure Factors	.....	85
	5.4.3 Conclusion	.....	86
5.5	Case Study 5	.....	87
	5.5.1 Success Factors	.....	87
	5.5.2 Failure Factors	.....	89
	5.5.3 Conclusion	.....	91
5.6	Importance of the Success and Failure Factors	.....	91
6.0	Discussions and Conclusion	.....	95
6.1	Case Study 1	.....	95
6.2	Case Study 2	.....	96
6.3	Case Study 3	.....	97
6.4	Case Study 4	.....	98
6.5	Case Study 5	.....	99
6.6	Conclusion	.....	100
6.7	Recommendations for further Research	.....	103
6.8	Limitations of the Dissertation	.....	103
7.0	References & Bibliography	.....	104
	Appendix	.....	110
	Appendix 1	.....	110
	Appendix 2	.....	114
	Appendix 3	.....	118
	Appendix 4	.....	121
	Appendix 5	.....	125

## **Executive Summary:**

This report is part of the requirements of the Master program of Projects Management in the British University in Dubai. The purpose of this report is to identify and examine the critical success and failure factors for Public Private Partnership projects (PPP) in the UAE. The report provides a brief description of PPP and the area in which it is adopted internationally as well as the types of PPP. The success and the failure factors available in PPP projects will be described and identified. Eleven success factors and eight failure factors were identified from the literature.

The method used in the research was to carry out case studies on available PPP projects in the UAE. There were few PPP projects identified in the UAE, but the number is increasing. Most of them are under development phase and only two were completed and under operation. There is no national data available on PPP projects that can be used for this research, therefore face-to-face interviews with senior staff in each PPP project were carried out and notes were taken and summarised in the appendix section. Several telephonic enquiries were carried out as well as search in the web for data regarding the case studies.

The major findings indicate that two types of PPP were adopted in the UAE, and they are Build, Operate and Transfer (BOT), and PPP based on management service contracts. The findings show that tender process were carried out for management service contracts, while BOT projects procurement process were carried out through initiatives of either the public partner or the private partner followed by further discussions and negotiations.

Each case study had its own circumstances and conditions that it developed in, therefore it perceived success and failure factors in a different way from other case studies, and each success factor and failure factor had different level of importance in each PPP project. In general, political support was the most important success factor for PPP projects followed by a strong private consortium, while the most important failure factor was the lack of appropriate skills. These findings show that the Government support is

critical for PPP projects to success. It is a new concept in the country, and it needs solid base in order to develop on. Strong private consortium is essential to the success of the PPP project as it is the consortium that will take care of the technical aspects of the PPP project and it will carry out the project. If the consortium lacks essential skills and experience, the project will fail. Another major finding appeared in this report is the attitude of the banks and the financial institutions towards PPP projects. They hesitated to finance some of the PPP projects in the UAE and preferred to watch how things are going on with PPP. Banks are always conservative regarding new things and in the same time suspicious about the success of new ideas, and as no sufficient security could be provided to the banks, the private partner did not own the land and the assets, the bank refused to finance the project.

The report provided several recommendations for better improvement of PPP projects in the UAE. The main recommendation was to create a regulator authority for PPP projects in the UAE, which will monitor the performance of the private partner in the project in order to make sure that the objectives for the PPP are achieved, to regulate the relationship between the public and the private partner, to be the final authority that gives final decision regarding any dispute that may raise in PPP projects in the UAE. The Government should issue PPP Law in order to provide sufficient legal status for the project and for the private partner, and to provide legal security for the financial institutions and banks that are interested to finance the project.

## **Chapter One**

### **1.0 Introduction:**

#### **1.1 Background:**

Public Private Partnership (PPP) or Private Finance Initiative, PFI, as called in some countries, is a type of procurement method that is increasing in popularity in countries like the UK, the USA, Canada, and Australia...etc. On the other hand, it is a new concept in the UAE, where traditional procurement methods are used by which the government is responsible for all public services like roads, schools, hospitals and other public services. PPP constructs, operates and maintains such public services. The private sector in the UAE does not play a major role in providing public services and there are few partnerships and joint ventures between the public sector and the private sector in providing public services. Recently some attempts from both sectors to change this situation are being carried out, in which PPP is used as the tool to execute this change. The main concept of PPP is to allow the private sector to carry some of the burden from the government, but at the same time it will consider the basic need of the private sector to make a profit in such projects. This research will attempt to evaluate the opportunities for PPP projects in the UAE and to determine the reasons why it was not used previously. The research will study the existing PPP projects in the UAE. The research will identify the critical success factors of those projects as well as the failure factors, and what future they will have in the UAE.

#### **1.2 Aim of the research:**

The aim of this research is to carry out a study and evaluate the success and failure factors for PPP projects in the UAE. It will first define PPP and how it works in other countries like the UK the USA and other countries, and how successful such projects were in those countries as well as which kind of criticism was considered before, through and after the execution of the PPP projects. It will identify what are the critical success



factors for any PPP project in general and how they affect PPP projects in the UAE. Similarly it will identify the failure factors for any PPP project in general and how they affect PPP projects in the UAE. The research will examine PPP projects in other countries; it will take into consideration the different circumstances in the countries where the PPP projects were carried out. By using the outcomes and the findings of this research, a comparison with the PPP projects in the UAE will be carried out. This will help in establishing the basic aspects to consider when deciding to adopt a PPP project, including political, legal, environmental, technical, and economical aspects. As PPP is a new idea in the UAE it will be very helpful to compare the ongoing PPP projects in the UAE with those in other countries in order to decide the most suitable PPP projects for the UAE and avoid failure, especially for the first PPP projects in the UAE. The research will study several PPP projects in the UAE. The research will establish the basic requirements from the private sector partner in order to be able to participate in a PPP project and success in it. The research will also determine the requirements from both the public and the private sectors to make their partnership successful.

### **1.3 The objectives:**

By achieving the aim and the objectives of the research, it will be clearly identifiable at the conclusion part of the research how good are the opportunities for PPP projects in the U.A.E. and how it should be handled by both the public and the private sectors, and a proper recommendation about that will be established. The objectives of the research are:

- To provide a review on PPP concept and how it has evolved in practice.
- To analyze the different aspects included in the concept of PPP.
- To describe the success and failure factors of PPP projects in general.
- To investigate the application of those factors on PPP projects in other countries.
- To apply the same factors to PPP projects in the UAE and compare them with PPP projects in other countries.
- To provide a thorough recommendation on how to deal and set up a PPP project in the U.A.E.

#### **1.4 Methodology:**

The proposed methodology for this research is the action research, which is carrying out case studies and interviews. The action research methodology was selected because the circumstances require some flexibility. The precise research question is somehow difficult to frame; it requires a lot of comparison works with other situations. PPP projects in other countries should be compared with the works done so far in the UAE. This methodology allows going through works that already have been carried out and identify what works need to be done; it allows reviewing the situation and then identifying the critical success factors and the failure factors. A definition to action research methodology can be given as follow:

"Action research...aims to contribute both to the practical concerns of people in an immediate problematic situation and to further the goals of social science simultaneously. Thus, there is a dual commitment in action research to study a system and concurrently to collaborate with members of the system in changing it in what is together regarded as a desirable direction. Accomplishing this twin goal requires the active collaboration of researcher and client, and thus it stresses the importance of co-learning as a primary aspect of the research process." (Gilmore, et al, 1986).

Interview was selected as it provides direct face-to-face communication with people who have experience in the field of research. Structured interviews are adopted, as certain questions will be asked, e.g. why PPP was selected. How long is the concession period? Interviews are useful in this situation, as little has been done about PPP in the UAE and few people are involved in it. Interviews can be defined as face to face contact with respondents, which involve asking them several questions that would not be suitable to ask through other communication way like fax or emails. Those questions are related to the research that is being carried out in order to note their experience in the concerned issue and explain the questions adequately to the respondents.

Case studies on available PPP projects in the UAE will be conducted. The case studies will describe the background of the PPP projects identifying the involved parties, the scope of work, the type of PPP adopted and the procurement process. Critical success factors and failure factors available in the projects will be analysed.

The literature review is used in order to identify the success and the failure factors in PPP projects, and then to incorporate them into the design of the interviews.

## **Chapter Two**

### **2.0 Literature Review:**

#### **2.1 Introduction:**

This chapter surveys the literature carried out regarding PPP by researchers. It presents a brief description of PPP in the world. It presents the history of PPP, different types of PPP, areas in which PPP is commonly adopted and the phases of a typical PPP. After that, it will describe the success and failure factors for PPP projects. The described success and failure factors will be used later in order to identify the success and failure factors in the case studies.

#### **2.2 The Evolvement of Public Private Partnership (PPP)**

Public Private Partnership (P.P.P.) is a term that covers a number of different cooperation forms with different characters between the public and the private sections. Those cooperation forms that create the term Public Private Partnership or it exist within its circle will be presented in this report in a way that shows clearly the border between Public Private Partnership and other forms of cooperation between the public and the private sections, like joint venture arrangement.

Public Private Partnership contains a mutual interest and benefit between two or more parties, in which at least one of them is from the public sector and the other is from the private sector, in a long cooperation, which its result contributes to the public services. Both partners have chosen this cooperation based on their own competence, like the strength of its technical team and the experience available within its structure, and the financial strength of its organization to carry out the PPP project. A contract or an association form that regulate sharing of risks characterizes such cooperation. The objective of the partnership includes a form of innovation, development or investment. Such partnership includes long relationships between the parties.

The bases for PPP are that all parties shall cooperate with mutual and long interest; this includes the wish to improve, develop or create new solutions in a cost or quality effective ways. That does not mean that there is no interest for profit behind the cooperation, but it means that the long cooperation should include goals and legal binding conditions that could stretch over several decades. It often includes a mutual binding contract that distributes the risks between the parties.

The goals are to establish something that has not been existed before, or to develop something to a new form or facility. The definition may include both profit driven and non-profit driven operations. With public services we mean services that are located within the frame of services that the government provides.

A PPP is an approach to delivering public services that involves the private sector, but one that provides for a more direct control relationship between the public and private sector than would be achieved by a simple (legally-protected) market-based and arms-length purchase (Broadbent & Laughlin, 2003). Jamali (2004) defined PPP as an institutionalized form of cooperation of public and private actors, which, on the basis of their own indigenous objectives, work together towards a joint target.

Others emphasized on the accountability and tried to give a broader definition to PPP; such definition was provided by Pongsiri (2002) “A public –private partnership can be seen as 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”.

Although the term public private partnership may be interpreted in different contexts from country to country, it is essentially a form of collaboration between the public and private sectors (Ahadzi and Bowles, 2004). Definitions tend to depend on a commentator’s own particular perspective ranging from the very general to the quite particular (Jefferies, etal, 2006). The last two decades have seen the evolution of Public

Private Partnerships (PPP) as an alternative procurement method to traditional methods of delivering public infrastructure (Jefferies, et al, 2006).

In a partnership model a lot of weight lays on the preparation process and innovative solutions. Throughout the project lifecycle both partners should go through a dialogue based workshops in order to improve the method of solving problems in a way that is acceptable to each partner.

In a partnership deal it should make sure that a proper follow up of the quality of the services, the follow-up process should be a tool based on dialogue. In partnerships the risk analysis should identify the economic risk and how much should each partner carry and which partner that can best handle different risks. This will initiate the process of cooperation to minimize and deal with those risks.

In certain partnerships it is possible that the cooperation form includes a way to share any potential profit that eventually rises from the improvement or innovation of services of processes.

### **2.2.1 History of PPP:**

PPP has grown up after the inspiration and ideas from the U.S.A. and the U.K., and mainly in building and facility areas. Through historical perspective, it was the building branch that first came up with a formalization term of partnership in form of partnering concept. The inspiration was brought from the public initiative in Great Britain in form of Public Private Partnership, PPP, and Private Finance Initiative, PFI. The U.K.'s attempts to engage the private sector in the public service sector led to the launch of PFI in 1992.

It was mainly the experiences from conventional procurement and contracts that led to the development of partnership. Purchase can be in many cases a good way to get an effective drift of activity, which cannot be driven by the government. This is mainly

when the actual service is uncomplicated and the range of services is relatively standardized. In case the need for new thinking, innovation, shared risk handling and long relationships, the normal public procurement method will not be sufficient.

The development of PPPs across the world has been less than uniform or unitary in nature (Olson, 1998). In the U.K., New Zealand and Australia particularly, as well as in other nations around the world, large parts of the public sector were subject to aggressive privatization in the 1970s and 1980s (Broadbent & Laughlin, 2003). In order to provide public services, the government had to have some kind of ownership or control over the privatized services, especially in pricing the rate; this led to the adoption of PPP method.

The mentioned aggressive privatization led to the delay of launching PPP in New Zealand as most of public sector was privatized. Even though, the government established and designed the rules and regulations for PPP project and waited until the political climate was right to promote and launch PPP projects.

Different types of projects can use PPP as a procurement method, it all depends on the nature of the project that the government wants to procure using PPP method, and that will depend on the situation of the country. For example the post civil war Lebanese government had a poor telecommunication system. In view of the deteriorated state of the fixed line network in the wake of the war, the Lebanese Government initiated in 1994 a PPP in the mobile segment by awarding two Global System for Mobile (GSM) communication concessions to private companies (Jamali, 2004).

In China, PPP has been existed there in different forms since the late 1970s upon the reforms known as “Open door” introduced by Deng Xiaoping in 1978. At the beginning of October 2004, 54 infrastructure projects involving 9.6 billion USD were bid for by the private companies the process being organized through the Ministry of Finance, using the definition of PPP in other countries (Adams, et al, 2006). The Chinese government has been investigating and promoting PPPs in the provision of public services to meet the needs of public facilities and improve quality, service delivery and efficiency (Adams, et

al, 2006). Private companies are given subsidies by government or are paid fees under the concession depending on the balance of profits between the private company and the public sector (Adams, et al, 2006). PPP is classified into three types in China, and they are outsourcing, concession and divestiture.

In South Africa and after the end of the apartheid regime, PPP was an effective tool for the government to promote new tourist projects (National Treasury PPP Unit, 2005). One of the aims of those PPP projects was to create new jobs for the black community in remote areas that were not developed for long time.

In Brazil and after several economic crisis and political instabilities, the government decided to carry out reforms in the political and the economical life. It established a regulatory system that supervises PPP projects, and kept far from short-term political influences. By this way it attracted investors to participate in PPP projects, especially in infrastructure PPP projects.

### **2.2.2 Types of PPP:**

Different types of PPP are available to be adopted by the public sector. Each one has its own characteristics in form of the contract period, roles of the public sector and the private sector as well as the relationship between them. In certain types the full responsibility of carrying out the project, including financial, design, construction and operational responsibilities, is been taken care by the private partner, while in other types, the public partner bears some of the responsibilities. It all depends on how much risk the public sector wants to retain and how much risk it wants to transfer to the private partner.

Those types of PPP are different from each other mainly in ownership right and finance. In certain situations the project will never be owned by the public sector, but it will be rented out to it during a long period of time. The rent will make the compensation for the private partners. In other PPP variations the Private partner will pay rent to the public partner, who will remain the owner of the building, for example in concession.



- 1- **BOT:** Build, Operate and Transfer, this can be considered the most widespread form of PPP concept in the world. BOT is used when it is handling about constructing buildings, different structures or infrastructures like highways and railways. The concept can be described as follow, a project company, which is established for the project, takes the responsibility to construct, operate and by the time the contract period expires transfers the object to the government. The government may participate in financing the project. The government may provide the design. The project company is owned of different organizations from different sectors as well as finance institutions and banks. Normally the project will be considered as public property throughout the project lifecycle, but the project company may be considered as an owner. When it matters about financing the project, it totally or partially the responsibility of the private partner. How the project will be carried out is important, as it will identify the work of the private partner. An example of a BOT project a university campus, in which the government provides the design and participate in financing the project, while the private partner will finance the balance amount; it will build the campus and take care of the maintenance and provide facility management, and after the concession period is over it will transfer the campus to the government. The private partner does not own the assets in this type.
  
- 2- **DBFO:** Design, Build, Finance, Operate model means that the private partner is given the task to design, build, finance, manage and transfer the concerned project, for example a building. The ownership of the building will not be for the private partner, but the public partner will be the owner all the time. For example a sewage network and treatment facility in a remote area may be awarded to a private company to design the project, build it, operate it and collect fees from the end users, and after the concession period is over it will be transferred to the public partner. The private partner may sell the rights of the remaining concession period to other private companies, but still it does not own the assets.

- 3- **PFI:** Private Finance Initiative. The term PFI is considered as a synonym for PPP. PFI is a term that is used in U.K. for the program, which the British government started, that regulates the finance of production of public services. This program is considered to be in different aspects the model for the Public and the Private sectors cooperation in partnerships in different countries of the world. The difference between PFI and PPP is that PPP does not include finance. The real difference in the two forms of procurement lies in overall control of the service provision. “There are various aspects to this. First, with PFI, the building is technically not owned by the public sector-although who has the “asset” of the building is a major disagreement in PFI. Second, the design of this building, along with the accompanying services, is the responsibility of the private sector. The public sector should not be actively involved in this specification-all it specifies is the outputs it requires in terms of services. Third, the public sector is locked into a long-term relationship, specified as best as possible through a legal contract, with a private sector supplier who might have different values and interest” (Broadbent & Laughlin, 2003). An example of a PFI project is the Channel Tunnel in the UK.
  
- 4- **Contract Partnership with Incentive Construction:** The model is based on the Principle that the private partner is given the responsibility of the completed building. The thought here, like BOT, is to create an incentive for the private partner to build as well and cost effective as possible. The idea is that before starting the project, to create a situation where all partners agree on common goals and values in order to avoid occurrence of unnecessary twists in the building phase. The private partner does not own the assets in this type. As incentive the operation period may be extended for some additional time, taking a bit from the transfer phase, in order to allow the private partner to make more profit.
  
- 5- **Service Contract:** The private sector is awarded a contract of providing services like maintaining equipments or cleaning services, services that are normally provided by the public sector, and payment for these services will accord the

contract. The life of such contracts will be around 1 to 3 years. The private partner does not own the assets in this type.

- 6- **Management Contract:** The public sector will award the private sector contracts to manage some services like the waste management for 3 to 5 years or for managing public schools or jails. The private partner does not own the assets in this type.

It is noticed from the above-mentioned list that a traditional building contract includes a follow up drift and maintenance of the building. The purpose of such arrangement is to create stimulation for the builder to build with high quality and so effective as possible. Within the building sector BOT model is often considered as a further development of purchase of function. The Public Partner thinks in terms of the functions that a building or a structure shall fill, in contrast to the normal method of procurement in which detailed instructions will role the building interpretation. The other essential difference from the traditional purchase of function is that the project will be financed by the private function.

### **2.2.3 Example of a Typical PPP:**

A PPP is normally driven in a project form, which can include that a building is constructed with a follow up drift and maintenance through long time. Every PPP project is basically unique, with different surrounding conditions and motifs.

Set up consists of several partners and has the purpose of providing the requested service or object. The project company is often a consortium of companies that represent different activities and competencies. The reason behind that different companies are gathered together to a project company is that normally there is no single company has the capacity, or the willingness to carry out by itself the project management, the construction and the operation of the building. The project company involves several companies working in different branches like entrepreneurs, contractors and suppliers.

They are called sponsors and they participate in project finance and provide the project company's own capital. That means that the companies have double roles in the project, both as operator/entrepreneur and as shareholder/partners in the project company. This creates incentive for the companies to carry out the project economically and qualitatively.

The sponsors' own capital will stand for a minor part of the project's finance. The main part of the capital will be contributed by commercial loan givers, which they are often international banks or financial institutions specialized in such form of finance systems.

#### **2.2.4 Life Cycle of PPP Project:**

A typical PPP project consists of 6 phases, which are inception and pre-feasibility, feasibility, procurement, development, operations and exit phases. Each phase has several stages within itself. Each phase has its own characteristics and functions and it is divided into several stages and steps. The first three phases are considered to be within the preparatory period in the PPP project life cycle, while the other three phases are considered to be within the execution period. Any country adopting PPP procurement method has its own PPP model that suites its requirements and the macro-economic environment in the country.

All PPP models share the basic issues and aspects that need to be considered for any potential PPP project. For example legal assessment, institution's need and evaluation or the institution's rights are one of the first aspects to be discussed by the three PPP models, followed by general assessment of the macro-economic aspects. A thorough assessment is very critical for the success of the PPP projects. Another critical assessment that the PPP models emphasise in is the risk assessment including allocation and mitigation procedures in order to have an appropriate risk sharing and allocation for the project and to avoid the consequences of high risk. Another similarity is the expression of interest and identification and analysis of stakeholders and value for money are a common aspect between the three models; in the European model it is named as the

expectations of a PPP. It is important to have a clear picture of the financial benefits and value for money targets that the PPP project may provide.

Selection of PPP type and evaluating advantages and disadvantages of each type is a common aspect as well as the bidding evaluation and negotiation process. The bidding and negotiation process should not take long time as it can lead to the increase of the project cost. Contract management is another common aspect described in all three models through the development and operation phases.

A lot of time, plans and studies are allocated to the inception, pre-feasibility, feasibility and procurement phases in all three examples of PPP process. They should be well defined and the works should be described carefully. In contrast to that, development, operations and exit phases were less described, although they consume approximately 90 % of the PPP project's life circle. The reason behind it is that the first 3 phases need to be designed properly so that the other phases will succeed. It is important to prepare for the execution phases properly, and cover all aspects regarding the project so that less confusion and disputes will occur later. The execution phases need to be described and planned well in the advance so that the private party and the public party will know their duties and obligations, and the works will be carried out smoothly and effectively.

#### **2.2.5 Areas in which PPP is used at:**

PPP-solutions are mainly useful for capital demanding investments in infrastructures, establishments and buildings. The finance from the private sector has allowed big projects to be able to start earlier than if normal public tools were used. PPP has been proven useful in building section. PPP can be used in the sport business very efficiently; many sport organizations have adopted PPP to build stadiums and sport arenas. The government with help of sport clubs was able to construct multifunctional halls that can be used for matches and to carry out different ceremonies and occasions. By this way the government got access to a hall equipped with modern technology, where sport activities can develop. At the same time the sport clubs could establish a share holding multi-

millions company with modern hall that matches can be promoted at, that leads to success in selling tickets and advertisements.

Another area that got a lot of attention is the school building, because school buildings need huge investments that causes burden to the government, especially in renovating old buildings; therefore the government considers PPP solutions as a great relief.

Even in the health care sector, PPP-concept for hospitals has become an international alternative for the traditional method of procurement. In the U.K. the government has allowed the private sector to build, finance and transform hospital buildings during the past years.

Baker (2002) states that, because there has never been a period of time in US history when the government owned or operated a significant portion of the productive capital of the country, the concept of a PPP in America is found among the web of contracts, tax incentives and favourable laws passed by federal, state and local governments regarding functions like transportation of the mails (by horse, boat, rail or airplane), street lighting (by whale oil, gas or electricity), canals and toll roads, transcontinental railroads, surface and underground railways, seaports and airports, and armaments of all types; these contractual arrangements have tended to favour a particular private sector interest to the detriment of others, or even the general public. PPP can be very effectively for port IT projects like Pusan Port in South Korea. Many other ports in developing countries are often plagued with low efficiencies, bureaucratic disregard for user needs and excessive work force levels (Bagchi and Paik 2001). IN UK PPP, PFI, are used in the health care services. Private Finance initiatives (PFI) in the UK is one of the key ways through which public sector services have been, and are being, developed in the UK and yet it has never been far from controversy, particularly in relation to its operation in the National Health Services (NHS) (Broadbent and Gill, 2003).

Infrastructure like roads, Water and Electricity stations and Sewage and Waste Disposal systems are main targets for PPP projects. The private section will design, construct and

operate the facility for normal concession period of 30 years, and the users of these facilities will be charged according to an agreed tariff with the government whenever they are using it.

### **2.3 Critical Success Factors for PPP Projects:**

The aim of this chapter is to present the critical success factors that affect the PPP project. In addition to normal success factors to any normal project like proper design, experienced team, sufficient time given for implementation, etc, PPP projects are affected by other success factors that contribute only to such type of projects. As PPP is a special and unique method of procurements, it will have different environment than traditional procurement methods, different knowledge and experience are required, and more parties and stakeholders are involved in the PPP project. Due to these reasons the critical success factors should be assessed carefully before entering into a PPP agreement.

Eleven critical success factors have been identified in this chapter and they are described as follow.

#### **2.3.1 Appropriate Risk Allocation and Risk Sharing:**

To transfer risk from public sector to the private sector is one of the advantages in PPP projects. The majority of the cost savings in PPP projects are mainly attributable to risks transferred from the public to the private sector in those projects. The planned transfer of risks from the public sector to the private parties is a major part of the forecast benefits from the private funding of public infrastructure (Hodge, 2004). It is clearly obvious that a premium is paid to the sector bearing risks, and if the risks are higher, this will attract higher returns. The private sector evaluates the risks associated with the project and prices them accordingly. High risks will lead to high project cost, so the public sector will accept such high risk, share the risk with the private sector or retain the risk within the public sector. Therefore, it is very important to identify clearly different risks and the degree of risks to be served by different parties. Allocation of risks is very important, so that each party will know their responsibility very clearly. The principle of risk allocation

is to allocate the risk to the party who most can handle it, control it or manage it, so that the overall risks will be minimized in traditional contracts, risks are borne mainly by the Contractors, the private sector, except certain site risks. The public sector pays the private sector for taking the risks; in fact this should reduce the cost on the public sector, as PPP will provide access for public sector to the private sector technology, which will push the private sector to adopt an effective technology to reduce the risks and invest in Human Resources and Research and Innovation, so the public sector will not have to invest money in such areas. Risk transfer and relieving the public sectors from paying huge amounts for the projects are the main benefits from adopting PPP projects, which were mentioned by Akintoye, et al, (2005), those benefits, were mentioned in their article as follow:

- Transfers risk to the private partner
- Caps the final service costs
- Reduces public sector administration costs
- Reduces public money tied in capital investment
- Solves the problem of public sector budget restraint
- Non-resource or limited resource public funding
- Reduces the total project cost
- Improves build ability
- Accelerates project development
- Saves time in delivering the project
- Improves maintainability
- Benefits local economic development
- Transfers technology to local enterprises
- Facilitates creative and innovative approaches
- Enhances government integrated solution capacity

Risks cover mainly five areas, which are: Design and Development, Construction, Finance, Operation and Ownership as described by (Hodge, 2004).



### Design and Development

The Private sector carries risk related with delivery of design, design suitability, testing issues, development problems and design variations such risks are normally shared between the public and the private sector in a traditional contract, led in PPP contract it is totally the responsibility of the private sector.

### Construction Sites

Risks like delivering the project on a fixed time with a fixed cost, planning approvals, site preparations, environmental issues, variations in design and construction such risks are mostly borne by the private sector in traditional projects, while it is shared in PPP projects.

### Finance Risks

Finance risks are mostly borne by the public sector in traditional contracts. Such risks are for example, interest rate and tax amendments, security finance, tax ruling, price escalation and changes to loan conditions.

### Operation Risks

Risks like staff training, changes in demand, third party revenues, security, asset/service performance and availability, maintenance cost variation and defects in existing assets are normally shared in traditional contracts, while in PPP contracts are in the private sector responsibility.

### Ownership Risks

Ownership risks are mostly carried by the public sector in traditional contracts; they are risks like force majeure, uninsurable, loss or damage to the assets, changes in regulations, public/third party liabilities.

Another way of classifying risks is to look at them as Macro risks (Political, Economic, social, cultural, ecological, legal and natural environment), Project Engineering or soft risks (micro levels). Most of those risks will be borne by the private sector except the

political risk, like political opposition, government stability, nationalization and poor political decision-making process, which will be borne by the public sector.

Another type of risk is the tariff risks. Those are risks associated with tariff or fees collected from the users of the products or services. The private sector will not be allowed to set the tariffs based on market condition or supply and demand theory. Instead, the tariff will be strictly regulated or determined by the government. Each risk is associated with the tariff adjustments and trigger and the method of economic regulation like the rate of return.

We can notice that PPP transfers effectively the risk to the private sectors. Risk allocation should be clearly identified and described in the concession agreement, shareholder agreement, design and contract agreement, loan agreement, supply agreement, operation agreement, etc.

Analyzing the risks is very important especially in the inception phase of the contract. The financiers to ensure that all risks associated with the PPP are not left unchecked normally carry this out. They will analyze the risks and their consequences and likelihood of occurrence. Most financiers are risk averse and which aim to ensure all benefits of a project are carefully balanced with the management of risks. Therefore, risks management by financial institution assumed very high, importance in PPP risks (Currnow, et al, 2005).

### **2.3.2 Saving and Need for Finance**

There are different success factors behind the Public and Private Partnerships. The biggest success factor behind Government's interest to cooperate with the private sector is the pressed economical situation in the country.

As structural changes and increase in costs that the Government has to stand for, additional requirements are demanded for more effective and quality based solutions has

increased. This will lead in its turn to bigger challenges for the Government to find solutions to the finance and execution process.

The public sector will not spend huge amount as initial payment for carrying out the project, this will release the constrained budget and provide the government the flexibility and opportunity to spend the money on areas essential areas.

In case of awarding as existing service, product or building to a private sector to operate, the private sector will release the staff according to the needs of the business, some staff will be released from their duties, such decision is very difficult for the government to take due to political reasons while it is far. Alternative staff can be secured from the market as per market price. The operation will be improved and unnecessary expenditures will be cut down directly. On the other hand, any necessary funding or expenditures required to improve the operation can be arranged quickly, in contrast to the long procedures and formalities of the government. The private sector will be responsible for any operational error, so they will manage the project in a way that minimizes the errors and provide innovative and quality solutions. The public sector has been always criticized for their high operational cost despite the fact that initial project cost could be cheaper if it is directly funded by the Government, due to low interest rate availed by the Government, around 3-5 % per annum, while it is 7-11 % per annum for private companies. It is the way that the private sector manages the project and the control on expenditures and costs, which leads to minimum operational costs to be achieved.

Effectiveness and savings are important for the public private partnerships, but there are other aspects to be considered. The demand does not come only from cutting down the budget or decrease in resources, but sometimes it takes forms of changes in demographical conditions or increased international competition. New technology and new methods put extra demands on competence and resources. All these things interpret that the cooperation between the public and private sector will have to change and increase in order to meet those challenges.

Especially in design and build projects, the contractor will produce innovative designs and construction methods in order to reduce the cost of the company and get benefits out of it, the public sector will provide output criteria and define the shape of service, product or buildings they want and let the private sector to workout the rest of the job in an effective way.

The public sector will make savings from the warranties provided from the private sector on damage products; the contractor will bear the responsibility of repairing or replacing any defective products. This will protect the end user from inferior workmanship. This will push the contractor to provide a quality product in order to cut down on the repair cost. Warranties might increase the initial cost of the project, but this will be compromised with higher quality products.

PPP stimulates the competition between the bidders to provide innovative solutions and proposals in order to win the contract. PPP speeds up the project, which is in contrast to public projects that take long time for approvals and arranging funds. As time is saved then automatically money is saved, but to save time the government should have a clear description and definition of the project. A standardized documentation should be used that clearly defines the project, so no confusion will appear and consequently less time will take for negotiating different proposals that will lead to reduced time for procurement. A clear criterion for the bidder should be identified. The government should have a realistic affordability expectation for the project.

PPP should allow incentives for the private sector in case of cost reduction due to adopting innovative design and methods. Cost efficiency is the core of the PPP proposal. This can come from the greater ability of the service provides to manage costs, to find new ways of delivering the service of providing better service, or from the existence of third party revenue that spread out the overhead costs (Lam, 2005) PPP gives the government a tool to provide services without increasing taxes or borrowing.

Some countries have established a public sector comparator unit, for example in UK; this unit will carry out comparison study for project procured through PPP model against project procured in a traditional methods. The results were found that cost savings were reduced between 10-20 %. Governments in many countries now use PPP's to deliver large public projects whilst meeting targets for reduced public borrowing, by avoiding financing the large capital costs directly (Histor, 2005).

Over the life of the project, the funding cost will be higher for a PPP than for public procurement because (most) governments can borrow more cheaply than the private sector. PPP's are only economic if there are extra charges, and client side management costs are offset by higher controls over specification and the competitive pressures on the private sector that PPP's enforce.

### **2.3.3 Favourable Legal Framework**

As the role of the government is a public – private partnership is not only to provide services, but also to monitor the market place, a well-defined regulation framework is essential. A sound regulatory framework will increase benefits to the government by ensuring that essential partnerships operate efficiently and optimize the resources available to them in line with broader policy objectives, ranging from social policy to environmental protection. In turn, it provides assurance to the private sector that the regulatory system includes protection from expropriation arbitration of commercial disputes, respect for contract agreements and legitimate recovery of costs and profit proportional to the risks undertaken. (Pongsiri, 2002).

A PPP will normally raise a series of questions of legal nature. It primarily handles about three issues:

1. Government rights
2. Rules and Regulations about Public Procurement and Concessions
3. Competition Law

The government taxation and self support principle is to forbid profit driven facilities, except for some facilities like electricity production and distribution and investment units.

This includes some organizations, which are commonly owned by the public and private sector. That makes public private partnerships less attractive to the private sector. In order to attract the private sector to participate in a PPP project, a favourable legal framework should be developed. It should not include any legal restriction on the private sector involvement. Such legal framework will guarantee the legal status for project implementation.

A PPP agency should be established within the Government authorities in order to support and handle PPP projects. The reason to have a separate PPP agency is that the staff involved in it should have a wide range of experience and knowledge about PPP and understand the fundamental bases of a typical Public Private Partnership Project. This agency should be the regulatory body for all PPP projects and it is technically competent and independent of political pressures.

The PPP law should identify the profits and losses that could be shared between the public and the private partners and the mechanism of distributing them. It should describe the process for resolving any dispute between the partners, especially in the role of arbitration as a dispute resolution mechanism. A guarantee fund should be established, which will secure payments to concessionaires. The PPP regulatory agency should coordinate operational activities and provide technical support throughout the implementation phase of the project. A special procurement procedure should be adopted by PPP projects. A contract format should be adopted for all PPP projects in which provides a clear description of the roles of different parties involved, finance methods and compensation methods as well as mechanisms for reviewing the tariff and compensations to the private sector. The legal framework will provide judicial security to investors; such need for a legal framework is due to the lack of flexibility in the contracts. The legal system in the country, the courts should be aware of such legal framework.

Regulation is very important for PPP in order to assure that a balance between the public and the private interests is reached through proper arrangements and to protect collective

welfare. The regulation should make sure that open competition is achieved and promote the advantages of the private sector discipline without enforcing unnecessary controls. It is argued that, in partnerships, the private sector needs to create the appropriate legal and regulatory structures, as well as democratic and participating process in decision - making (Pongsiri, 2002).

Without having a second legal and regulatory framework, disputes are likely to occur, which may lead to delay of the project or even to its termination. Such legal framework will reduce the opportunistic behaviour between the partners, which has a negative influence of the project. This will provide protection from commercial arbitration. It will define the rules for financial performance and provide practical experience to the staff involved in the PPP project and will provide protection to the private investor's interest by preventing expropriation of investment capital that may appear due to political interference. The private sector needs to have assurances and protection from unforeseeable changes of poorly designed, drafted and negotiated agreements that might jeopardize the entire PPP program.

The PPP regulatory system may develop a unique auditing and accounting system that is suitable to PPP projects. Any strategies within the private sector will first evaluate and analyze the legal situation for any potential PPP project in order to safeguard the private sector's right. The more the regulatory system is clear, transparent, fair and consistent and limited the more attractive is for private investors. The regulatory system should not be over regulated and over controlled as that will cause an expensive monitoring system and prevent innovation.

So PPP legal framework has to build confidence and integrity in PPP market, build PPP capacity, provide accurate and up to date information on PPP projects, develop policies, manuals and standards and provide recommendations to the government to improve the PPP market.

### **2.3.4 Political Support**

Politics has a close relationship with the development and implementation of public policy. A positive political attitude towards the private sector involved in an infrastructure project would support the growth of PPP/PFI. On the other hand, inadequate political support would pose a great risk to PPP/PFI project (Akinotye, et al, 2005).

A partnership will only succeed if there is a true commitment for the political leadership. They should support PPPs and understand that it can offer the public excellent services with excellent quality. They should be actively involved in promoting such collaboration and take a leadership role in developing active environment for PPP investors from the private market. The public sector should transfer some of its responsibility to the private sector, and understand that its role has changed to become an active partner. On other hand, the Government will still bear its traditional responsibilities in areas like education and healthcare and in case PPP project in those areas failed, the Government will still have to find solutions to make it successful even if it leads to the termination of PPP projects. PPPs offer the public sector a special benefit by helping the government to address sensitive political and labour issues (Wang, 2006). A PPP can be a solution to carryout sensitive projects without causing serious controversy to the political leaders. Issues like downsizing, regionalization, and implementation of difficult policies, operation with cross border relationships and coordination of political entities can be handled easily by the private sector due to its flexibility and efficiency.

Therefore, the political environment is very critical to the success of PPP projects. Private sector will hesitate to invest in countries where the local authorities are well known for their poor credit quality, corruption and where contracts are not easily enforceable and where risks like expropriation and nationalization scares the private sector. Government is always in better position and has more resources to create a favourable political environment for investors by giving guarantees against risks like changes in law, foreign



currency convertibility, corruptions, delay in approvals of various permits and certain force majeure risks.

The government should develop institutional framework and create regulatory agencies for PPP projects and they should not be influenced by political changes in the country. Such agencies should be insulated from political pressures in order to offer long-term protection for long-term investors.

PPPs do raise a host of political issues and questions. These include questions concerning the capacity, structure and residual core of the state, a commitment to collectivized the healthcare, the democratic legitimating of new forms of governance; and the unintended consequences of such developments (Flinders, 2005). So the politicians should be able to answer such question and present the advantages of PPP for the public sector. PPP can be prosecuted as a way of improving performance, tackling social problems and responding to political pressures.

The existence of PPP leads to political challenge for establishing a legal framework for PPPs in the country. Such challenge is not easy to win, especially when it faces radical opinions that do not like private sector to have influence in public politics and opinions that consider PPPs as an expensive procurement method that will cause the public to more money. Another criticism that PPPs face is interfering in projects that concerns the national safety and security, such example was the criticism that the British government faced when it wanted to enter into PPPs in relation to the Forensic Science Service, British Nuclear Fuels and Defence Evaluation and Research Agency.

We can notice the importance of the political support on the success of PPPs and the new role of the government in such projects, and the conditions of transparency, openness and accountability that the government should provide to make PPPs successful. Despite the facts that the government has to transfer some of its responsibilities to the private sector, it should still create a regulatory agency from which it will control and manage PPPs project so that the benefits of PPPs will be achieved.

### **2.3.5 Strong Private Consortium:**

Private companies wishing to participate in PPP/PFI markets should explore other participants strength and weaknesses and where appropriate, join together to form consortia capable of energizing and exploiting their individual strengths (Akintoye, et al, 2005).

It is true that the Government can established an appropriate environment for PPP projects, but on the other hand a huge task is given to the private sector to carry out the work, therefore the private sector should be capable both technically and financially to achieve their duties. The private partner can be a gathering of different organizations working in different fields creating a consortium that will bid for the project.

The main aspects that the private consortium should analyze and assess before participating in the tender are their strength, knowledge, experience and capabilities that exist within the consortium. The main aspects to be considered are as follows:

1. The consortium should have a strong and capable project team. The team should have sufficient experience and knowledge in the field for the PPP project. Different teams must be required for different stages of the project like tendering, design execution and operation. A variety of experience is required in order to motivate innovation technical methods and solutions, which will add value to the project.
2. The consortium should have and maintain good relationship with government authorities, this will speed up approvals and permits required for the projects and it will open a dialogue channels with the government for discussion and clarifying issues quickly a prevent delays to the project.
3. Effective project organization structure would be very useful for effective communication and order to carryout the work efficiently. Different types of organizations structures maybe used during different phases of the project. For example, a project organization structure maybe used during design and construction phases, as those phases require an independent team on the site to handle different

issues; while a functional organization structure would be useful for the operation phase, as the work will be typical and repeats itself.

4. Cost- effective technical solution based on a sound technical solution. Experience and knowledge will contribute to such solution; will lead to the award of the contract to the consortium, innovative solutions can lead to cost effective and sound technical solution, and can impress the public sector leading to the award of the contract to the consortium.
5. The consortium should consider environmental issues and provide a solution or a proposal that has a low environmental impact. By this way, the consortium will avoid clashes with environmental organization that can influence the designs about the PPP project leading to its termination or delay. Public safety and health is critical aspect of the consortium should consider carefully in order avoiding conflicts with the public.
6. The consortium should have rich experience in interaction public private partnership project management. Such experience will help in selecting the best management style for the project.
7. The participant should have disciplinary attitude and behaviour and committed to the work, and leading role a key participant should be available. Such role is important to push things forward and coordinate between participants.
8. The consortium should have a solid financial background and capable to arrange sufficient funds to finance the project.
9. Sound financial skills including financial analysis, preparing sensible payment schedule for investment, abilities to deal with currency rate and interest rate fluctuations, ability to provide appropriate payment structure and ability to deal with different financial situations like financial crisis, and should be well informed about the risks in the partnership.

A high profile and reputed consortium will consider all above aspects and will make a reliable partner to the public sector and it will enrich the public sector with its knowledge, experience and flexibility.

### **2.3.6 Available Financial Market:**

The PPP infrastructure projects are often financed on a non-recourse or limited recourse basis. A number of financial instruments may be used in project finance such as debt, equity, mezzanine finance, contractor, supplier and purchaser credit or sureties. Sound revenue stream of the project is the basis of project finance as lenders and investors have recourse to no funds other than this revenue stream and assets of the project major may not have any residual value (Xueging, 2005).

The government has a strong role in establishing an attractive financial market through its agency like central bank and ministry of finance and economy. An attractive financial market will encourage the private sector to face risk and participate in PPP projects. The financial market including banks, finance institutions and lenders should create sources and structure of main loans and overdraft facilities that are attractive for the private sectors and saturate their needs in the financial part of the project. That should include low financial charges and interest rate. The repayments schedule should be flexible and takes into consideration of the expected revenue generated from the project without adding extra burden on the operation team, so that quality and standard of the project will be maintained. If the private sector faces financial difficulties, they will try to save money through cutting down budget, using substandard materials leading to production of lower quality, in order to cover the financial problem. The finance parties in PPP project should understand that PPP project has a public obligation and its aim is to serve the public, and they should deal with such project in one flexible way.

Stable currencies of debts and equity finance are very important, especially to attract foreign private companies to come and invest in the local market. Stable currencies will reduce the risk of procuring materials from the international market; any risk reduction will lead automatically to cost reduction of the project giving the chance to spend the savings on quality issues and improvement methods.

The financial market should be strong to deal with international crisis and changes as well as dealing with political instabilities that might rise nationally or in the region nearby.

### **2.3.7 Stable Economy:**

The economic environment plays an important role in the success of PPP projects. A sound economic policy and a stable macro-economic environment will promote PPP projects and attract investors to participate in them.

The government can help to create and maintain a stable environment by manipulating economic policy levels to ensure stable prices and by maintaining a balanced budget. Good macro-economic policy affects the credibility of a price regime and trust in the convertibility of the currency, which is essential for foreign investors (Akintoye, et al, 2005).

A long-term demand for the products / services offered by the project is essential for the private sector to participate in PPP projects. This is a basic business concept for any new project to succeed and to be profitable. The PPP project should be unique and the competition from similar projects should be limited. The government can ensure this condition, as normally only the government delivers the public services or products. The types of private organizations that can provide such services in products are limited and require specific capabilities. The project should provide sufficient profitability to the private investor. The private sector will always look at the profitability when making decisions about participating in new projects. Long-term cash flow should be attractive to the lenders. This will ensure the repayments to the lenders as well as it will satisfy their requirements of making profit and engaging their capital in reliable projects. Another issue that has to be considered within the economy is the long-term availability of suppliers needed for the normal operation process of the project as well as the availability of subcontractors. This is important to be assessed before entering the project as lack of

such supplier and subcontractor will lead to the failure of the project or adding extra cost to it and makes it very expensive.

### **2.3.8 Transparent and Competitive Procurement Process:**

Transparency in tender processes, or negotiation lies with the public client, private contractor and their advisers, which further suggests that three features are important for transparency, good communication between the public and private contractors and their advisers, the private sector openly consulting with the public sector and its adviser, while keeping responsibility for all decisions, and the private sector establishing a clear basis for making decisions (Qiao, et al, 2001).

Efficient approval process will assist the success of the project, especially if the consent is given at the same time of signing the agreement. Transparency will increase the trust in the government and reduce concerns about corruptions. The procurement process should be clear and identifiable for bidder. Each step should be described briefly and inputs from the private sector should be clear so that no confusion. The procurement process should be competitive in the sense that minimum expenditure from private bidders will be spent during the procurement process to the public sector.

The role of Contract Administrator will be very useful for the transparency for the procurement process. The contract administrator will maintain the contract file and the level of contract administration identified during the formation of the contract. The contract administrator will establish and maintain contract reporting system and contract monitoring system. The contract administrator (CA) will review the performance reports and conduct occasional inspection of the facilities. Chairing the progress meeting will be one of his duties as well as writing records of the minutes of meetings, decision and other activities. The CA will approve variations and deal with inquiries from different involved parties. The CA should act fairly and ensure that the contract is being complied with and resolve disputes arising from the contract or from misinterpretation of the contract, and in such case the CA should continually interpret the contract to ensure stability.

To maintain transparency some government advertise in public journals about PPP projects as a sort of communication with the public. The procuring authority in the UK does that. Then it briefs the bidders about the required outcomes. It publishes the bidding results in the newspapers and debriefs unsuccessful bidder. The government will conduct public consultation before commencement of PPP procurement process. The consultation will be inform of public notices and will obtain community inputs through public hearings.

### **2.3.9 Technology Transfer:**

A significant trend in PPP projects has been the requirement for transfer of advanced technology through a concessionaire from a more developed country to the local participants in projects in less developed countries. Technology transfer increasingly has been focused on management techniques, distinct operating methods and ultimate project production technology. Effective technology transfer during the transfer phase has a positive effect on the performance for PPP projects (Qiao, et al, 2001).

Successful technology transfer by private companies has frequently not occurred under artificial condition of subsidies and grants, but instead requires long –term and reliable cost recovery (Forsyth, 2005). New technology is expensive and private sector spouts a lot of money in resources in research and experiments, therefore it won't sell it easily through normal procurement methods and will require guarantees for its intellectual rights. Here comes the advantage of carrying out a PPP project, in which the private sector will supply the technology against a long-term payment plan, 20 to 30 years, that will cover the cost and make the desired profit and at the same time the intellectual right will be granted for the same period.

Another condition for the success of transfer of technology that it should consider the local attitude for new technology, it should create mechanism to allow new technologies to be supported and understood locally. The new technology should be easy to understand by the public, easy to be used and appreciated by the local people. Many historic attempts

at technology transfer have failed because intended users have not understood or have even opposed new technologies, or because planners have failed to appreciate the impacts of technological change on the prices and availabilities of local resources (Forsyth, 2005). The new technology should be cheap for the end –used and available in the market. That requires more interactions between the private investor and end-users.

The technology transfer should be defined clearly and the compensation for the private sector should be attractive as technology is privately owned, and the private sector will not share it without proper profit. The local people should be trained to use the new technology and maintain it. The training should consider the hardware and software training methods that allow new technologies to be adopted on long-term basis acceptable to both investors and users. Partnership with local companies and citizens is required to supply materials; labour and gain understanding of the product.

The government should consider the available domestic technology, as it might be appropriate than the imported technology. A new level of management and intervention may be required in order to establish new accounting and financial bodies to collect payment.

Technology transfer may take two paths: Vertical technology transfer by simply granting the intellectual property and the production right to one investor or by selling the finished product to consumers in a new location.

Horizontal technology transfer involves the long term sharing of intellectual property usually via a joint venture or cooperation between a foreign direct investor and a domestic company in the host country (Forsyth, 2005).

The technology transfer consists of five stages and these are assessment, agreement, implementation, evaluation and adjustment and replication (diffusion) of both technological hardware and software.



Localized, public – private partnerships have already been used as means of reducing problems with international investments in climate friendly technologies. Collaboration with local citizens may reduce the costs of technology transfer by them to participate in the shaping of technologies implemented, or identifying the local needs (Forsyth, 2005). The government role to make technology transfer successful is by reducing the transaction costs and increasing the assurance mechanisms. Transaction costs of interactions such as financial costs, time in negotiations, while assurance mechanisms can be defined as contracts, laws or expectations that ensure partnerships will provide each party with their desired result. The other thing that the government should do is to maximize trust and accountability, because trust and accountability are the image of the extent which participants, especially communities, perceive partnerships as acceptable.

### **2.3.10 Thorough Feasibility and Assessment Study:**

This is an important factor to win the tender of PPP project. The feasibility study should assess both cost/benefit assessment and technical feasibility of the project.

The technical feasibility should provide a clear submission and responses to queries by different parties. The feasibility should outline the technical proposal and provide a sound technical guarantee and assurance that the private sector can manage such project efficiently and has sufficient technical experience and knowledge to carry the project. Innovative technical solutions should be described in the proposal presenting the techniques to be used to accomplish the project and how quality will be controlled and assured for the public sector. The technical proposal should identify milestones of the projects and proper time schedule for delivering different parts of the project on specific dates. The technical proposal should be clear for the public sector in order to establish control measures and it should be clear for the private sector in order to establish control measures, and it should be clear for the private sector in order to distribute the work on the staff properly and for the staff to understand their duties and expected outcomes from the project inputs from the staff. It should identify the standard references used in the design and construction phases. A clear statement of the evaluation criteria should be

described as well as the levels of preparatory works and the projects parameters. The technical proposal should make use of standard bidding documents. The financial proposal should describe the level of tariff or tolls proposed for the projects and the payment mechanism. The funding or the guarantees required for the consortium from the government. The financial risks should be identified and mitigation procedures should be outlined for each risk and the level of financial guarantees provided by the consortium should be identified. The above mentioned where the attributes from the private sector. From the public sector side they should clarify in the feasibility study their capabilities to pay the proposed toll or tariff, and identify their ability to receive financial support or guarantees from the central bank. They should describe their ability of offering tax concession or flexible tax for the PPP project. The method-raising fund should be clarified, for example through bonds.

Regarding the technical side of the feasibility study, the government should use standard bidding documents. They should clearly describe the desired outcomes and make use of their in house expertise in the field of PPP projects. They should describe the expected quality level and standard of the service of the product. They should describe the procurement process clearly and it should be understandable to the bidder. A clear technical and financial study well in advance will help both the private and the public sector in evaluating the success rate of the PPP project and their chances to win the contract.

### **2.3.11 Innovation:**

Under PPP the public sector provides an output specification wherein they specify the requirements for the service to be provided. This allows competing bidders the scope to create innovative solution that may offer better value for money (Hurst and Reeves, 2004). Innovations are a nebulous concept that involves a challenge to the assumptions behind previous action and acting differently or adopting different products (Chinyio and Boyd, 2003).

One of the main argument topics that are raised up by the speakers of PPP is the wish for innovation and creativity. Such debate is due to conservative situation of work process in the public sector that misses the initiative to change (Hurst and Reeves, 2004). The main condition to create innovative solutions will depend on the trust between both partners as well as the capability of both partners to deal with each other and share their knowledge, experience and competence. In such ideal situation, innovation will create new models to solve a problem, which in its turn can be one of the duties that both partners agreed on.

Flexibility in the partnership and cooperation can provide both partners the possibility and the space to test new ideas to solve problem without being bound to detailed contract. This will demand again trust in the partnership and will require a continuous dialogue between the partners about the goals and objectives of the project.

Those conditions for innovation and improved quality that occur within the partnership structure do not mean that the establishments of PPP will automatically result in innovation. In fact it requires a practical and open cooperation between the partner and a practical incitement structure.

The main innovation through PPP is the combining of usually separated competences: client, architect, construction firm, facilities manager and users. This combining of competence's revolutionary in an industry where design and build have been for a long time separated from facilities management and use. This combining competences innovation is just beginning through a quite long learning by doing process (Curraus, 2005).

Innovation can be used in all phases of the PPP projects like cycle but innovation most noticed that solves problems and produced in a short time will cut down the costs during design phase. Innovative methods and techniques in the execution phase can be reducing the time and consequently the cost of the project, and produce a high quality product that will be easier to maintain and operate.

It is observed that transfer of risks; savings, appropriate legal framework and strong consortium are the most important success factors for any PPP project. The availability of appropriate legal framework and strong consortium will attract the private sector to participate in the PPP project, while the transfer of risks and savings will attract the public sector to consider PPP as an alternative method of procurement. Other success factors play an important role in the progress and success of the PPP project, but it may be considered as part of the environment that the PPP exists in.

<b>Success Factor</b>	<b>Source</b>
Appropriate Risk Allocation	Akintoye, et al, (2005) Qiao, et al, (2001) Hodge, (2004) Curnow, et al, (2005)
Savings	Lam, (2005) Histor, (2005)
Favourable Legal Framework	Akintoye, et al, (2005) Pongsiri, (2002) Payne, (1997)
Political Support	Akintoye, et al, (2005) Qiao, et al, (2001) Wang, (2006) Flinders, (2005)
Strong Private Consortium	Akintoye, et al, (2005) Jefferies, et al, (2002)
Available Financial Market	Akintoye, et al, (2005) Xueging, (2005) Qiao, et al, (2001) Jefferies, et al, (2002)
Stable Economy	Akintoye, et al, (2005) Qiao, et al, (2001)
Transparent Procurement Process	Akintoye, et al, (2005)

	Qiao, et al, (2001) Jefferies, et al, (2002)
Technology Transfer	Akintoye, et al, (2005) Qiao, et al, (2001) Forsyth, (2005)
Thorough Assessment	Akintoye, et al, (2005) Qiao, et al, (2001)
Innovation	Hurst & Reeves, (2004) Chinyio & Boyd, (2003) Currasus, (2005)

Table 1: List of sources for respective success factor

## **2.4 Failure Factors for PPP Projects:**

This chapter will present the failure factors that may have negative impacts on a PPP project leading to its failure, termination or delay. Eight factors have been identified and described. Similar to the previous chapter, PPP projects will face normal failure factors for any normal project, but as PPP is a new term in procurement methodologies, it has its own barriers that should be carefully dealt with.

### **2.4.1 Lack of Appropriate Skills:**

In traditional procurement process, the private sector will price a project for the public sector considering the cost of design, execution and handing over. There is no cost for operation or long-term maintenance; while in PPP projects the private sector should price for maintenance and operation throughout the concession life cycle, 20 to 30 years. If the private sector does not have the skills required for such process, then the price quoted will be wrong and the project will fail.

Pricing for PPP project is not a normal process for the consortium, which has different organizations in to with different cultures and motivations to participate the PPP project.

It is difficult to coordinate between them and assess the cost occurring from the consortium. A PPP project will require an organization that has sufficient skills in design, construction, handing over, maintenance, operations, risk assessment and allocation, business relationship, project management and skill to run a business. Normally contractors lack such skills that one outside their normal activities and their scope of work. The concept of PPP is comparatively less well understood in countries with a strong public welfare policy, and even more so in terms of operational service delivery (Akintoye, et al, 2005).

Few contractors have enough skills to enter a PPP project, and they want to expand their activities and consider their existing skills and experience as an advantage for them. Therefore, small companies cannot handle PPP projects. This will require the evolvement of new types of companies and new type of industry called owner operator industry. This will require intensive training and involvement from the public sector to make it successful.

#### **2.4.2 High Participation Cost:**

As mentioned above the consortium will have to deal with all 'phases of PPP project from design to operation, and as the consortium lacks the skills and specialty to deal with different aspects of the PPP, especial external advisers will be employed to provide the consortium with different advises regarding different aspects of the PPP project. The cost of employing such advisers like legal and financial advisers will add extra cost of the bidding cost. It is estimated that it costs 1 – 1.5% of the project. This is a high percentage compared to the bidding cost of traditional procurement methods around 0.1-0.15%. For this reason contractors prefer to spend such bidding cost of PPP project on 10 bidding cost of traditional procurement method with higher chances to win. In addition to the advisory cost assembling and setting up costs of the consortium are enormous in PPP projects as well as the costs of investing equity in the new business. Such costs will be taken from the company's balance sheet or from another source. In all cases it will require a huge investment from a joint venture or from the support of a hand or a

financial organization. For example, construction companies work on a low profit margin, but their business is a cash generative business and it is that cash, which is reinvested in order to make profit. So if they want to participate in a PPP project, they should have huge supplies cash. It is only large contractors who can do that, but they will have to squeeze their budget and sometimes even if they do that they will not have a strong balance sheet that can sustain a long-term commitment or to participate in a second bid. PPP does not allow the contractor to sell on their equity investment after construction, so the contractor will have his cash tied up for long time.

Due to such situation the project selection become important and the private companies will only participate in projects that they are confident about and match their internal project selection criteria.

### **2.4.3 High Project Value:**

It is not only the high participation cost that scare the private sector from participating in PPP projects, but it is also the high value of PPP project that create a barrier between the private sector and the PPP project. Small and medium contractors find it difficult to allocate something around 30-40% of their total turn over on one project. On the other hand, it is much easier for large constructors to do so. This is the cause behind having a short list of contracting participating in PPP tenders. Large Contractors are normally confident about their participation in PPP projects.

The only solution in all contractors will have to do is to form a proper consortia between themselves in order to win a bid and make the project affordable. “PPP, should only be pursued where it delivers VFM, affordability is also a vital consideration. It is essential for resource budgeting purposes and it may also influence option selection. For example, it may not be possible to pursue all the projects that offer VFM because they are not all affordable within current budgets” (Thomson, 2007). Anyhow, forming a consortium demands a lot of coordination, effort and understanding between the partners. The high cost of forming the consortia will lead automatically to the high cost of the project itself.

At the end, all of these costs will be transferred and changed to the end – user, who might find it very expensive and will seek for another alternative.

The high cost of the project value and the high participation cost will be lead to low competition as few contractors will participate in the render and consequently a lot of skills, knowledge and experience will not find its way to the right project, where it can help the public sector. Low competition will lead to a sort of monopoly in the PPP market, as few contractors will be able to draw the strategies of PPP project, with minimum interference, of the project, which lead to its termination or it can make it useless to the public sector and loses its benefits.

#### **2.4.4 High Risk:**

One of the main advantages of PPP to the public sector is the transfer of risk to the private sector. The private partner will have to manage all types of risks including design risks, execution risks, operation risks, financial risks, regulation risks and commissioning risks. This is in contrast to the traditional procurement methods, where the contractor bears the risk of design, construction and commissioning and probably minimum operational risks.

Risks are an important issue in PPP project and at the same time it is considered as a barrier for contractors, especially the small ones, to enter a PPP tender. Risks that are not related to the main activity of the private sector are considered most difficult to handle. So contractors prefer to participate in the traditional contract where risks are limited to the design and execution phases. But as the PPP market are expanding and the profit margin is much higher than the normal contracts, contractors are observing the market to see how it develops before making any commitment to it.

Contractors are able to take risks in design, execution and commissioning, but the contractor lacks the experience and the financial capacity to bear additional risks like operational and business works. Therefore, the contractor will require a sort of



partnership with of a financial institution that can provide financial support and partnership with other organizations that have the experience in operation and managing business. The idea of forming a consortium will suitable for such idea.

On the other hand, large contractors were influenced by risk in a different way. Risks were considered when selecting the type of project the large contractors wants to enter in. For example, the contractor will not participate in a PPP project that it is perceived to have high political or legal risks. Contractor will look at the chances of forming consortium in order to share risks and allocate the party who most can deal with them.

#### **2.4.5 Lack of Credibility and Contacts:**

A typical PPP project consists of several contractors from different fields. For example, in a school project the consortium may include a construction contractor, facility Management Company, reaching material supplier and a catering company. All of them are joined together in order to participate in the project. It is difficult to assemble those companies together especially if they are small companies, because none of them has enough bread external contracts necessary to form a consortium. On the other hand, large companies are in a better position of establishing a consortium.

To form a successful consortium, the partners have to act as a single unit especially in front of financial institutes like banks. This will provide them with sufficient credibility to get financial facilities from the banks. Bank will consider credibility when sanctioning loans. Unfortunately, as the consortium is a new entity, it lacks history record of credibility with the banks. The banks will be unfavourable to provide them with financial support and in case they do, the interest will be very high causing extra risk and cost to the project.

Large companies have better opportunities as they have a long record with the banks, a huge network of contacts with the financial institutions, which will care the process for them with low interest rates.

So the only way for small contractors to get into a PPP project is to be a subcontractor for a large main contractor, as they do not have sufficient financial back up and limited access to financial sources.

#### **2.4.6 Demands on Management Time:**

A lot of managerial time was spent on negotiating the terms and prices with the public sector as well as with the external advisers appointed for the project by the consortium. Such waste of time is translated at the end as cost and that leads to extra cost on the participation cost causing as a consequence a higher project cost and overhead cost. Much management time is spent on contract transaction (Akintoye, et al, 2005).

#### **2.4.7 Poor Communication between Private Partners:**

As the consortium consists of several organizations with different activities and motifs to participate in PPP projects, as well as each one has different organizational culture and structure. The communication between them might be difficult. Decisions in PPP projects are linked to various actions and networks, which cause an organizational problem in terms of management. Roles and regulations that govern the interactive, for example, providing information, access and orders are different in each organization. This will act as an inhibitor to cooperation between the private partners and it will enhance the complexity of decision making in the project. Each company will struggle to maintain their own roles and regulations and will be reluctant to adopt any new roles from outsiders.

Huge managerial efforts are required to overcome such problem and establish an effective communication channel between the partners.

#### **2.4.8 Long Procurement and Negotiation Process:**

The PPP procurement process is a long process and it takes long time to evaluate the proposals given to the public sector by the private sector. Such process requires special governmental bodies to be developed in order to evaluate the proposal and provide comprehensive appraisal for each one. This is important in order to make sure that the proposal is matching the required criteria in all aspects and minimize the possibility of unexpected risks. Of course the proposal will lack few things that need to be clarifying by the public sector leading to further negotiation process with each consortium. This is a time consuming process, which will contribute traditional cost to the overhead and participation, cost.

<b>Failure Factor</b>	<b>Source</b>
Lack of Appropriate Skills	Akintoye, et al, (2005) Papaioannou & Peleka, (2006) Nyachhyon, (2006) Omole, (2007)
High Participation Cost	Akintoye, et al, (2005)
High Project Value	Akintoye, et al, (2005) Thomson, (2007)
High Risk	Akintoye, et al, (2005) Omole, (2007) Thomson, (2007)
Lack of Credibility and Contacts	Akintoye, et al, (2005) Nyachhyon, (2006) Omole, (2007)
Demands on Management Time	Akintoye, et al, (2005)
Poor Communication between Private Partners	Akintoye, et al, (2005)
Long Procurement and Negotiations Process	Akintoye, et al, (2005) Omole, (2007)

Table 2: List of sources for respective failure factor

## **2.5 Conclusion:**

It is observed that transfer of risks; savings, appropriate legal framework and strong consortium are the most important success factors for any PPP project. The availability of appropriate legal framework and strong consortium will attract the private sector to participate in the PPP project, while the transfer of risks and savings will attract the public sector to consider PPP as an alternative method of procurement.

High risk and cost as well as lack of experience and skills are the main failure factors for developing PPP projects in any country. The government will have a huge responsibility to deal with them and to prepare a new environment and culture for such projects. Both the public and the private sectors should be educated about the benefits of the PPP in order to minimize the opposition for it and to eliminate the barriers in its way.

## **Chapter 3**

### **3.0 Research Methodology:**

#### **3.1 Introduction:**

This chapter explains the nature of information needed for this research and the method of which the data was collected in detail. The views of interviewees were very important in identifying the success and the failure factors in respective PPP project. This chapter will describe the steps in carrying out the case studies. It will also outline the advantages and disadvantages of this methodology as well as its limitations.

#### **3.2 Qualitative Research:**

Qualitative research method was selected for this research through carrying out semi-structured personal interviews with five persons possessing high positions in the PPP projects that were studied, and they were involved in the PPP project from the beginning. The reason behind selecting such method is that no previous studies were carried out before on PPP projects in the UAE. There is no comprehensive database of UAE organizations involved in PPP projects in order to be used for the analytical process part of the research. As mentioned before few PPP projects were carried out in the UAE, it new concept in the country, therefore it was difficult to contact people involved in those projects and as they possess high positions in their organizations, little time they have for interviews.

#### **3.3 Steps in collecting data:**

Six main steps were considered in the process of collecting data on the case studies and they are as follow:

1. **Defining the interview questions:** The questions covered four aspects of each PPP project. The first aspect was to get a description of the project, the parties

involved in it and the role of each party. In addition to that information about the cost of the project, the stage it reached so far and the procurement process was requested. The second aspect was discussing the success factors available in the project; a checklist was available in order to cover all success factors that were extracted from the literature review. Similar process was done for the third aspect, which is about failure factors. The fourth aspect was to request the interviewees to rank a pre-prepared list of success and failure factors according to their importance to the project. The ranking will help in comparing the success and the failure factors in each PPP project with the other four.

2. **Selecting the cases:** As the number of PPP projects in the UAE is very few, only eight PPP projects could be identified, it was important to select the cases the direct contact was available to the concerned person or the cases were positive attitude was received initially, when requesting for appointments. Five out of eight cases were cooperative and agreed to participate in the interviews.
3. **Initial data collection:** Preliminary search in magazines and web sites about the PPP projects in the UAE and the organizations involved in was carried out in order to have some information related to the PPP project and to avoid any questions that may be sensitive to the interviewee.
4. **Collection of data in field:** The interview took place in this step. It was informal meeting. Due to some restrictions from the interviewees, the interviews were not taped, but taking notes was allowed.
5. **Analysing the data:** The collected data was organized and analysed in comparison with the data available from the literature review, especially data regarding success and failure factors for PPP projects. The data was separated in two main categories. The first category was data related to general information about the case study like cost, duration and description of the PPP project. The second category included data about success and failure factors in the PPP project.
6. **Prepare the report:** The report was prepared in a way that first it described the data collection on the case studies including details about the interviewees, and

second a thorough analysis of the data was presented covering the success and the failure factors available in each case study.

### **3.4 Advantages and Disadvantages of the Interviews:**

#### **1. The Advantages:**

- The researcher will get full range and depth of information, things can be explained easier in an interview as well as it will help the interviewer to explain the objectives of the research.
- The researcher will develop relationship with the interviewee, which is helpful in case additional information may be required at later stage.
- It can be flexible with the interviewee in regard with selecting the place and the time of the interview.
- It is good for collecting facts.
- Questions may be adjusted according to the response of the interviewee.

#### **2. The Disadvantages:**

- It can take much time, which may not be available from the interviewees, especially in this case as the interviewees possess big positions in their organizations, so a second interview will take long time to be organized.
- It can be hard to analyze and compare as different people have different opinions and look at the same thing from different angles.
- It consumes a lot of time, especially in this case were interviews took place in several Emirates.
- The interviewer may bias or misunderstand the interviewee's responses.
- Interviews are limited to few key people, who were involved in the PPP project from the beginning.

## **Chapter 4**

### **4.0 Data Collection on Case Studies:**

#### **4.1 Introduction:**

This chapter intends to present the data collection process for the case studies. It will provide description of each PPP project and its role.

### **4.2 Case Study 1: Water and Electricity Distribution Centres:**

#### **4.2.1 Project Description:**

The project consists of operating, managing and servicing seven existing water and electricity distribution centres. Those distribution centres receive water and electricity from desalination stations and electricity stations and distribute them through its network to the customers. The distribution centres will deal with the customers related issues like water and electricity connections process, billing and collecting the tariffs from the customers, constructing substations, cabling works and water pipes in the Emirate. They also liaise with Mechanical, Electrical and Plumbing contractors (MEP) for new development projects in the Emirates and deals with No Objection Certificates (NOC) and inspection of MEP works. So the PPP project includes maintaining the existing network and building additional networks to serve the new areas under development. The PPP project in this case is based on a management service agreement for 20 years against fixed monthly fee paid to the private company.

#### **4.2.2 The Public Partner:**

The public organization in this PPP project is the water and electricity authority in the concerned Emirate represented by its privatization department. The organization is



currently managing those distribution centres. Its aims from adopting PPP procurement method are:

- To make financial savings and cut down in the operation budget.
- To provide better service quality, especially in the customer relationships.
- To create employment and training opportunities for UAE nationals.
- To promote private sector participation in providing public services.
- To ensure an efficient and effective supply of water and electricity to the customers.

It appointed four consultants to provide advices in legal, financial, water and electricity issues and to provide a proper feasibility study as well as to prepare a well explained tender documents and scope of work.

#### **4.2.3 The Private Partner:**

The private organization that submitted the lowest bid is a UK based consortium, which consists of two companies, one is specialized in water and the other one in electricity. The consortium worked together in similar PPP projects in other countries and they have good knowledge and experience to manage such projects.

#### **4.2.4 The Tender Process:**

A tender process was carried on; four international consortiums participated in the tender. All bids were expensive and above the planned budget for the authority. Further negotiations were carried out between the private consortiums and the public organization, in which the private consortiums expressed their concerns about two issues which are the outstanding water and electricity bills that have not been collected from UAE citizens, and the lack of the management fee review mechanism in the contract. The approximate value of the contract was 50 million AED per year, which will cover the operational costs like salaries, stationery, maintenance costs and the overhead cost. The management fee excludes the costs of new projects like construction of new network facility or upgrading the existing network. The contract is still not awarded.

#### **4.2.5 Details on Data Collection:**

For this case study one interview with a senior consultant in the consultancy firm that provided advises regarding water issue to the public organization was carried out. He has been involved in the project since the beginning and participated in preparing the feasibility study, tender documents, tender analysis and the negotiations. The interview lasted for one hour and at that day 14 months were passed since the project was initiated. The consultancy firm is an international well-known company that has been working in the UAE for the last 30years in infrastructure projects and it has good relationships with the government.

#### **4.3 Case Study 2: Theme Park:**

##### **4.3.1 Project Description:**

The project is part of a public park constructed by the Government. The Emirate is focusing on tourist industry to develop the local economy; therefore the Government decided to construct such park on an area of 52 hectare as an amusement facility for tourists and inhabitants. The Government wanted to provide a theme park. Such project required experience and big investment. The government does not have the experience in operating such facility and didn't want to spend a lot of money as initial investment. Therefore it offered the private sector an area of 260,000 square feet in the public park to develop as a PPP project. A local investment company won the contract on BOT basis with a concession period of 30 years. The project is consisted of rides, games, cinema and theatre, shopping mall and food court. It is focusing in providing education for visiting school groups through entertainment and to provide entertainment for families.

##### **4.3.2 The Public Partner:**

The public organisation in this PPP project is the government represented by the local municipality in the concerned Emirate. The municipality has the role of providing public

services like public parks, public libraries and it deals with city planning issues and waste management system.

#### **4.3.3 The Private Partner:**

The private organization is an investment company formed by several Saudi investors and another Arab investor. They appointed a local designer to carry out the design and supervision works, a local contractor to carry out the construction works, an international company that will supply the project with all leisure equipment and it will install the rides and the games, and finally the park visitors. This project is the first for the company, which lacks experience in entertainment field.

#### **4.3.4 The Tender Process:**

There was no tender process for this project. It was an initiative of the Arab investor in the private partner's company, who approached the municipality and presented the idea of building a space shape styled theme park, which they liked. In 2004 he formed the private organization by approaching Saudi investors, who liked the idea. A lease contract was signed with the municipality in which the private organization will pay annual lease fee to the municipality for 30 years; the fee will increase gradually during these 30 years. The Private Partner will transfer the Theme Park to the Municipality after 30 years, but the contract includes a clause that may renew the contract for another 30 years upon agreement of both parties.

The project is under construction at the moment and it will be completed by summer 2008; one-year delay in the project due to changes by the private organization and lack of labours in the market. The project value is around 300 million AED, which covers the design and construction costs.

#### **4.3.5 Details on Data Collection:**

For this case study one interview with the operations manager of the private organization was carried out. He has long experience in entertainment industry and was involved in operating a theme park in another Emirate for 10 years and participated in the construction and the operation of the biggest shopping centre in Thailand. He joined the project after that the contract was signed with the municipality. A preliminary feasibility study was carried out before he joined the project, which he had a lot of comments on. He made a revised one and made a lot of changes in the design in order to increase the business model efficiency. The interview lasted for one hour.

#### **4.4 Case study 3: Industrial Zone:**

##### **4.4.1 Project description:**

The project consists of designing, constructing, funding, operating and then the transferring of phase 2 of an industrial zone in one of the Emirates in the UAE. The PPP form in this project is BOT for 20 years. The government wanted to attract international companies to invest in the Emirate and relocate their headquarters of factories to the Emirate; this will create trust in the UAE economy. The government completed phase 1 and the plots were rented out. For phase 2 the government wanted to engage a famous international organization to carry out the project in order to use its contact network attract international companies. The project's cost is approximately 1 billion AED, which covers the design and construction costs. The infrastructure of phase 2 will be constructed, which includes roads, sewage, and water and electricity network. After completion of the construction phase, the private organization should arrange and approach international companies to rent plots and establish factories or headquarters in the area. It is a free zone area, so foreign companies can operate without the need for a local partner. The project was completed and it was so successful that the government decided to go for phase 3.

#### **4.4.2 The Public Partner:**

The public partner in this project was the government represented by an authority called the Higher Corporation for Specialized Economic Zones. This authority looks after the free zones in the concerned Emirate. It develops them, and issues licenses for the foreign companies to operate there. In general, it controls those zones.

#### **4.4.3 The Private Partner:**

It is a consortium of two banks, a local bank and an international bank. The foreign bank is famous for participating in PPP projects and funding such projects all over the world. It has a huge contact network with international companies. The companies have accounts in that bank, and long relationships were built between them. The bank has a branch in the U.A.E. The local bank is well known and has been operating in the U.A.E. for over 30 years, with wide connections in the local market.

#### **4.4.4 Tender process:**

There was no tender process; the government initiated the PPP project by approaching the local bank, which in its turn approached the foreign bank and formed a consortium to carry out the project. Negotiations with the government were carried out to clarify issues and to agree on different principles. The main financial aspect was that the government agreed to give the rentals received from phase 1 to finance phase 2, together with government contribution, this will finance 75% of the project, while the consortium will finance the 25% balance. The consortium will pay annual rent to the government.

#### **4.4.5 Details on data collection:**

One interview was carried out with the Head of Commercial Banking in the local bank. The interview lasted for one hour. The interviewee was involved in the project from the beginning and he headed a special committee that was established to run the project. He

worked closely with the Chairman of the Higher Corporation for Specialized Zones in order to set up the project. He negotiated with the foreign bank and established the consortium. He has been working in the banking sector for a long time.

#### **4.5 Case study 4: PPP schools:**

##### **4.5.1 Project description:**

The project involves managing 61 public schools in one of the UAE's Emirates for 3 years. The management companies will prepare new curriculum for English, Math and Science subjects in the English language; and Arabic, Islamic and Social Studies will remain in the Arabic language. The curriculum will be based on international standards in education. The management companies will monitor the performance of the schools and the standard of the teachers. The main aims of this PPP project are to improve the teaching delivery through better training, to improve student performance, to strengthen the national identity and culture and to increase parent and community involvement in public education.

##### **4.5.2 The Public partner:**

The public partner in this PPP project is the government represented by the Education Council. The government signed a memorandum of understanding with the Ministry of Education so that the Education Council will take over the responsibility of public schools in the Emirate. The Ministry of Education will still have to approve the new curriculum. The minister of education is a member in the board of the council. The council's chairman is the Emirate's crown prince. The government was not satisfied of the public education system in the Emirate; therefore it decided to outsource it by adopting the PPP procurement method.

#### **4.5.3 The private partner:**

Six companies were awarded the management contract; separate contract was signed with each company. Each company was given certain schools to manage. They are well known international companies that have huge experience in education and were involved in similar PPP projects in other countries. Two of them are from UK, another two from the USA, and one from New Zealand and one from Lebanon.

#### **4.5.4 Tender process:**

Open tender process was published in the official website of the Education Council. The process of the tender started by selecting the schools that will be involved in the PPP arrangement, Request for Proposals were released and twenty private educational companies participated. The RFP's were evaluated and six companies were awarded the contract. The companies were paid 50% of the start up costs upon signing the contract, and the remaining 50% will be paid upon completion of the start up works. That start up works includes hiring staff and establishing their offices in the UAE. The start payments will only be paid once. Thirty percent of the annual management fees will be paid when the schools are open for the academic year. The Government will pay for the infrastructure such as buildings, IT system and materials required for the schools. The duration of each contract is three years. The tender process took around 5 months.

#### **4.5.5 Monitoring agency:**

The education council hired a UK based educational consultancy in order to monitor the performance of the private companies and to get a third opinion regarding different issues. It will carry out formal visits and meetings with the private companies as well as regular inspections in order to make sure that the private companies are implementing the criteria and policies agreed on.

#### **4.5.6 Details on data collection:**

One interview was carried out with the manager – Public Private Partnerships and Monitoring Agency in the Education Council. The interview lasted for one hour. He has experience in PPP projects from Australia where he worked in. He manages the contracts with the private companies as well as the contract with the monitoring agency. He was involved in the project from the beginning.

#### **4.6 Case Study 5: Waste Recycling Facility:**

##### **4.6.1 Project Description:**

This project is the first of its type in the region. The project consists of constructing a waste recycle facility in one of the Emirates of the UAE and to provide recycle bins in the Emirate for the collection of waste materials. The concerned Emirate is suffering from the collection of huge waste materials in its landfills, around 1 million tons per year, of which 400,000 tons are recyclable. This led to a pollution problem in the Emirate. Due to the development projects going on in the project, huge volumes of construction waste materials and factory waste materials are dumped to the environment leading to a severe affect on it The Emirate is aiming to preserve the natural green areas, therefore the government decided to develop a waste recycling facility in the Emirate. Such project will require specific knowledge and big financial investment. The PPP type is service contract. The company will distribute hundreds of metal recycle bins in across the Emirate; each bin will be divided in three segments; one for paper products, one for drinks containers and one for all other waste. The bins will be labelled with images and texts in five languages. The containers will be emptied regularly and the waste materials will be collected by trucks and taken to a secured facility, where they will be sorted, audited, weighed and stored. The facility will provide scientific solutions for classifying and sorting waste of all its domestic, industrial, agricultural, medical and electronic types as well as building leftovers with the aim of recycling such waste as a basic step for putting an end to the problem of accumulated waste. The project will cost around 100



million USD, out of which 10 million USD will be spent on acquiring 5000 recycling bins, 25 million USD for the machinery 40 million USD for 11 buildings. The concession period is 30 years. The project will be carried out through several phases; the first phase is expected to complete in 2008. The development phase has already started; some trials that include fixing recycling bins in a commercial area and a pedestrian street were carried out in order to find out the public interest in such initiatives, the results were amazing and huge volumes of recyclable waste materials were collected.

The aims of the PPP project can be summarised as follow:

1. To reduce the waste materials dumped in the environment through recycling process.
2. To reduce the pollution in the environment.
3. To adopt high standards for recycling procedures and construct a waste recycling facility that can maximize the recycling of the collected waste materials.
4. To create a culture for using recycling bins by the people, through advertisements, briefings, visiting schools and teaching students and labour force.
5. To promote the habits and the atmosphere of using recycling bins at work places and public facilities.

#### **4.6.2 Public Partner:**

The public partner in this project is the Emirate's Municipality. The Municipality is looking after all environmental issue in the Emirate. It regulates the construction works in the Emirate, constructs roads and infrastructure projects.

#### **4.6.3 Private Partner:**

A consortium of a local investment company that is owned by the ruling company of the Emirate and a foreign company specialised in setting up new business companies and provides consultancy to the Government and the private companies was awarded the contract. There is a long relationship between both companies and they were involved in

several projects before, but not in PPP projects. The foreign company's role is to manage the project both financially and technically. It will arrange the sale of the machines and equipment and it will hire the technical staff required for the project. The local company will provide the logistic support for the company by using its local experience and knowledge in the local market.

#### **4.6.4 Tender Process:**

There was no tender process for this project. The local company approached the foreign company in order to form a waste recycling company and to present the idea to the Municipality. The consortium presented the idea to the Municipality and after further negotiations, the parties involved in the project agreed to form a company funded fully by the Municipality and owned by the local company, the foreign company and the Municipality. Each member will be presented in the new company's board of directors with seats equal their share.

#### **4.6.5 Details on Data Collection:**

One interview was carried out with the Managing Director of the company, and he is the CEO of the foreign private company. He is graduated from Canada and holds a Bachelor degree in toxicology and pharmacology. He has good experience in business administration and setting up new business, and he was involved in the project from the beginning. The interview lasted for approximately one hour. Further information about the project was collected from their official web site and from magazines.

## **Chapter 5**

### **5.0 Data Analysis:**

This chapter will present a detailed analysis of the five PPP case studies. It will examine each project in terms of identifying the success and failure factors available within the project. It will analyse the data collected from the previous chapter and provide a conclusion section for each project discussing the possibility for success or failure for each one.

### **5.1 Case Study 1: Water and Electricity Distribution Centres (Ref: Appendix 1)**

#### **5.1.1 Success Factors:**

**Appropriate risk allocation:** The risks in the project were clearly defined for all parties. The private parties that participated in the tender were capable to deal with most types of risks including design, construction, finance and operation risks, but there are two types of risks that are critical to the success of the project, which were not covered by the contract. The first risk is related to the tariff fee paid to the private party. There is no mechanism for reviewing the tariff fees. The private bidders were concerned about the increase in operation costs and as a consequent to that they would have to request the government for fee review and additional money to cover the cost. As the contract lacks any kind of fee review, some bidders had to propose some conditions in their offers to minimize the risks on them; others had to include such risk in their offer by proposing high monthly fee.

The second risk in this project is related with the collection of water and electricity bills from the customers. Most of UAE nationals receive those bills but they never pay, and the government used to absorb such loses and never took any legal actions against them. This situation is still going on and it is part of the government's policy. Such situation may cause confusion to the private party and the customers and it may lead to many legal

cases in the court. The government did not clarify what to be done regarding the huge and long pending bills due from the customers.

**Savings and value for money:** The PPP project was expected to provide a saving for the government in term of cutting down the expenditure and providing better quality and value for money, but unfortunately it appeared that extra cost was to be paid by the public sector. Such extra cost will be transferred to the customers by increasing the unit rate of the water and electricity, so the customer's bill will increase leading to dissatisfaction, as the Senior Consultant for the project said, *"Many employees have households, and water and electricity bills paid by their companies. So it is the low paid staffs that pay their bills that will be affected"*. As described above the bidders had to increase their monthly fees or propose some conditions in the contract that led their offers to be more expensive than it was expected initially by the government.

**Favourable Legal Framework:** There is no legal framework or law about PPP procurement method in the UAE legal system. It is a new term in the country and the only thing available is the Law for purchase and contracting. For this reason the private party had to include conditions in the contract for unclear issues to avoid disputes. The public sector observed such lack in the Law, so it made the contract as clear as possible in order to depend on it in case of dispute; it also identified dispute resolution method in form of arbitration in the contract. An arbitration committee of five members, two from the public sector, two from the private party side and one independent may be formed to resolve any dispute between the contracting parties.

Another positive thing that is available in the concerned Emirate is the availability of an independent regulatory authority for water, electricity and sewage called the Regulator and Supervision Bureau (RSB). RSB regulates and licenses all companies working in water and electricity supply in the Emirate; that includes issuing approvals, carrying out inspections and controlling the unit rate and tariffs for water and electricity invoiced to the customers. This authority may play a critical role in resolving disputes between the parties involved in the PPP project before reaching the court, but still their role in such

area is not clear and its decision is not enforceable or final to both parties. So a clear PPP contract is essential in this project in order to minimize the risks of having irresolvable disputes.

**Political Support:** The political support is missing in this PPP project. The government was concerned about the high proposals that will lead to increase the water and electricity bills to the customer. The government was concerned about the privileges that the UAE citizens have and wanted them to continue having them. The other customers that will be affected by this PPP project are staff of the public and the private sector that their employers pay for their water and electricity bills, this group of customers will not be affected by the PPP project and most of them occupy high positions within the organization they work at; while the other group of customers are the lower paid employees that have to pay the water and electricity bills. This group will be most affected and will feel the change in the water and electricity bills, which will be extra burden to them. Another issue here is related to the companies, factories and business shops that will be affected by the increase in water and electricity bills forcing them to increase the prices of their products and services. That may lead to more inflation in the country and increase in the prices, which will affect the inhabitants of the Emirate. For these reasons the government stopped the PPP project and withheld its support to it.

Another issue that was a concern to the government is the potential de-staffing plans that the private party may carry out. Many UAE nationals may lose their jobs if such actions will be taken. As mentioned earlier one of the Government's aims is to create more job opportunities for the locals. The private party may enforce such de-staffing plans in order to save money and increase its profitability, and as cost of operation may increase, the de-staffing plans and the fees are remained the same will be necessary for the private party to maintain its profit margin. The Government bears the obligation of providing jobs for UAE citizens for many decades, and any change in that may cause dissatisfaction of the people.

**Strong Private Consortium:** The two companies involved in the consortium are professional and have rich technical experience in such PPP projects. They acted as one unit in the negotiations represented by project team. The consortium has sound financial skills and abilities as well as disciplinary attitude and commitment to the project.

**Available Financial Market:** This factor was not so important in this PPP project, as initial investment required by the private party was not so big and could be financed easily by their own funds. The initial investment is mainly consists of payments for the tendering process, advisory requirements, salaries for staff and project team. It was agreed that the Government would fund any required construction project. In case additional funds were required the financial market in the UAE including banks and financial institutions can provide competitive financial packages with low interest charges.

**Stable Economy:** The economy of the UAE is growing rapidly and the demand for water and electricity is increasing. The materials and products required for the PPP project are available and can be supplied easily to the project; but unfortunately the inflation rate in the country is high, approximately 9.3% for 2006 according to the Ministry of Economic Planning in the UAE, and the fluctuations in prices are unpredictable. This has a negative influence on the PPP project, as the private party could not anticipate a fixed rate for fee increment for the PPP period, and they could not get firm prices as suppliers will always state that their prices will be valid for short period only, one to three months as maximum.

**Transparent and Competitive Procurement Process:** The procurement and tender process was clear enough to all involved parties. Individual and common briefings of the results were carried out between the public and the private parties in the presence of the advisors and consultants. The dead lines for each stage were clearly identified and the private parties did not face any problems in communicating with the public party for clarifications. The process was transparent and the results were announced officially to the participants.

**Technology Transfer:** This PPP project does not include any kind of advanced technology transfer like equipments or machines as it is a service contract and the private party has management role. A potential technology transfer in this project may be observed in for of IT software and programs that the private party may develop or introduce. Such technology is not difficult to learn by the staff as they already use similar ones. Additional trainings may be required for the staff in order to be familiar with the new IT system.

**Thorough Feasibility and Assessment Study:** The public sector obtained detailed feasibility studies and assessment that were carried out by four different advisors covering different aspects like legal, financial, water and electricity aspects, and describing the potential benefits of the PPP project. Unfortunately the results of the tender were not expected to be so high, as it was stated in the feasibility study. The study was carried out one year earlier and during that year the prices increased drastically in away that it was impossible to anticipate.

The other issues related to technical aspects and scope of work were explained and identified clearly in the feasibility study as well as the expected value for money targets in form of better quality, services and efficient management process.

**Innovation:** Private parties are capable in providing innovative solutions in designing and constructing new water and electricity network and sub-stations. They also have the ability to restructure the organization structure in the distribution centres making them more effective in handling the operation requirements. The Senior Consultant said, *“They can provide innovative solutions in designing and constructing new network as well as in restructuring the organization to be more effectively”*.

### **5.1.2 Failure Factors:**

**Lack of Appropriate Skills:** The private parties did not lack the appropriate skills, knowledge or the experience to carry out such project. They have long experience in

handling similar projects all over the world and if necessary they could recruit staff that can handle the project efficiently from the local market to train them, or from abroad if required.

**High Participation Cost:** The participation fees for the project were normal and as any other PPP project. It is more expensive than traditional procurement methods due to the hiring of different advisors by both the public and the private parties.

**High Project Value:** As mentioned before the project value was not high as the project consists of management role for the private party, other construction works will be funded directly by the government. The private parties could allocate part of its turnover to fund the project. Normally in such management projects, the Government will pay an advance payment to the Private Partner to cover set up costs. But the bids were higher than expected initially by the government that may lead to higher water and electricity bills to the customers.

**High Risk:** The risks involved in the project were high as described above. The risks are related to the tariff fees paid to the private part and lack of review mechanism in the contract, and risks related to collecting old pending bills from the UAE citizens, which in case it was requested by the government it will require many resources and efforts in the courts and as a consequence it will require more money to be paid for lawyers and staff. Therefore conditional offers were submitted to the public sector to minimize those risks as the Senior Consultant for the project said, *“That is why the bidders submitted conditioned offers in order to protect their interests, especially in cases like collections of old bills”*.

**Lack of Creditability and Contacts:** This factor is important to the project as the private parties do not have credit history or contact with the suppliers and concerned agencies in the UAE to avail discounted prices and good offers on the product. In fact it might have been useful for the private companies to involve local partner with sound reputation to



invest in the PPP project in order to avail better facilities from the local market through the local partner's network.

**Long Procurement and Negotiation Process:** The long time wasted in waiting for the award of contract is causing extra cost to the private parties as they are holding the project team and paying for their salaries. This wasted time in waiting is costing money and the companies are losing opportunity in form of investing this money in other projects. A normal tender process should take 4 to 6 months including stages for negotiations and awarding the contract. In this case, the contract is still not awarded and 6 months is already over.

**Demands on Management Time:** This process of waiting for decision is very demanding on the management time, as they have to spend time in following up the project and discussing it in the agendas of their meetings. This time is costing money, which will be transferred to the PPP project to absorb.

**Poor Communication between the Private Partners:** The communication between the private partners forming the consortium is good and as mentioned earlier they acted as one unit in the negotiations.

### **5.1.3 Conclusion:**

This PPP project is expected to be a failure as it lacks an essential success factor, which is political support. The government does not want to increase the water and electricity bills on the customers as it may lead to extra inflation in the country. The private parties failed to propose an offer that may reduce the cost on the government, but in fact their offers will increase the cost on the government in case it decides to continue to provide free water and electricity to the UAE citizens. The other factor that the private parties could not handle efficiently is the fluctuations in prices in the market; they could not obtain firm prices and commitment from the suppliers involved in the project. They lack experience on how the local market works and they do not have a good contact network

with the local suppliers. So the risks in this PPP project are quite high and the contract did not provide mechanisms to deal with such issues.

## **5.2 Case Study 2: Theme Park (Ref: Appendix 2)**

### **5.2.1 Success Factors:**

**Appropriate risk allocation:** The risks in this project are carried fully by the private partner. The Municipality has neither financial nor technical risks on its shoulder. The private partner will handle design, construction, financial and operation risks. The private partner has sufficient knowledge and experience within its structure to deal with the mentioned risks. But the main risk that concerns the private partner is not to have enough visitors to the Theme Park. To overcome such risk proper marketing plan has to be set up and the marketing team will have to focus and attract school students to visit the Theme Park. Discount proposals may be offered for school administration to arrange school visit for the students.

To minimize the risks on the Private Partner, an investment company was formed by the Private Partner to carry out the project as a Limited Liability Company (LLC). That means that in case of bankruptcy each partner will have to pay to creditors a maximum value equal to the amount invested in the paid up capital. For example if a company or a person invested one million AED as its share in the paid up capital of an LLC company, and then the company was announced bankrupted by a UAE court, the assets of the LLC company will be sold out to pay the creditors and then the court will collect money from the shareholders equal to the amount of money they contributed in the paid up capital and distribute it to the creditors.

**Savings and value for money:** The Municipality will not invest any money in this project, so it will save money from its capital investment budget. In fact it will provide a nice Theme Park for the public with good quality by entering in this PPP project. The

Municipality had no experience in operating such facility, so it was better to engage a private company to carry out the project.

**Favourable Legal Framework:** There is no PPP Law in the Emirate, so the contract between the Municipality and the Private Partner will govern the relationship between. The contract is a lease agreement, where the private partner rented the land for a period of time, 30 years, by paying annual rent to the Municipality. The Municipality will carry out regular inspections to make sure that the quality of works is good. The project should follow the health and safety regulations. Third party may be engaged to carry out inspections on the rides.

**Political Support:** There isn't a real political support for this project. The support that the project will receive from the Municipality will be in form of processing the approvals on urgent bases; the Municipality will support the project with other Government authorities to take approvals, for example for water and electricity connections and approvals. The Government is not promoting the project and it not included in their marketing agenda and plans. On the other hand, the project may take advantage of the overall promotion and support of the Government to the tourism industry and the facilities it provides to support tourism in the UAE in form of participating in exhibitions inside and outside the country.

**Strong Private Consortium:** The private partner in this PPP project consists of one company only. The owners of the company set up the management team and selected staff with good experience in entertainment industry. It is their first project and the company was formed specifically to carry out this PPP project. The owners of the company are well known Saudi businessmen with good experience in establishing and investing in new projects.

**Available Financial Market:** Despite of the availability of good financial market in the UAE, the Private partner could not enjoy the available financial offers by the banks because it lacks credit history in the market. It is a new-formed company and the project

it is carrying out is a BOT project, so the company does not own the land, and therefore it will not be considered as a security to the banks, as the Operation Manager in the Private Company said,” Banks drew back for financing BOT project as it is new and we don’t own the land. They prefer to watch and see what will happen”; and as the Government did not provide them with any financial support, the investors had to pay from their own pocket.

**Stable Economy:** The fluctuation in construction materials had a strong affect on the project. It led to the increase of one third of project’s cost compared with what it was expected in the beginning. The construct agreement with the contractor was signed as a re-measured contract; that means what ever the actual price of the materials will be charged directly to the client.

The strict roles implemented by the Ministry of Labour regarding hiring illegal labours had a huge effect on the project as one of the subcontractors was forced to release such labours from the project causing delay to the completion date.

Competition from the new leisure projects that the government is carrying out may affect the project negatively. On the other hand, those new projects will be carried out outside the city, while this project is located inside the city, where it can take advantage of the nearby residential and business area to promote the Theme Park.

**Transparent and Competitive Procurement Process:** As described before, there was no tender process for this project; it was an initiative from one of the owners of the private company. Negotiations and discussions were carried out with the Municipality before agreeing on the BOT arrangement. Presentations and ideas were exchanged as well as negotiations on the annual rent, which is considered to be minimal in this case.

**Technology Transfer:** There will be new rides and games for the visitors. There will be no advanced technology transfer that the public need to be aware about or educated to use.

**Thorough Feasibility and Assessment Study:** A feasibility study was carried out in the beginning, but people, who do not have experience in entertainment industry, did it. The feasibility study had to be revised by experienced staff employed after signing the contract with the Municipality. The changes in construction material prices affected the feasibility study, as the inflation was not expected to be so high.

**Innovation:** Innovative design was applied on the project in order to make it commercial and profitable as the Operation Manager in the Private Company said, " We had to change the design to make it commercial. For example the jogging track used to cover 25% of the total area but it contributed with only 1% to the revenue, we had to change this". Many changes to the original design was implemented, this had a negative effect causing the delay of the project.

### **5.2.2 Failure Factors:**

**Lack of Appropriate Skills:** The Private Partner employed experienced staff to carry out the technical works required for the project. Management and business skills are available within the company as the owners have god experience in the business field. On the other hand, they lack experience in the local market and how it works, and that appears in their selection of the construction contract that did not favour the company, and led to the increase of project's cost. The project lacks the support of a local partner that can negotiate better terms for the company and guide them in the selection of the best procurement methods to carry out the project.

**High Participation Cost:** there was no tender in the project as well as any participation fees. As mentioned above it was an initiative from the private partner. The idea was presented and the deal with the Municipality was concluded through direct negotiations.

**High Project Value:** The project value is quite high and it increased due to the increase in prices of construction materials; and as there is no financial support from the banks,

the owners of the company will have to pump more money from their own pocket in case it is required.

**High Risk:** The risks are fully carried by the private partner, so huge responsibilities will be laid on the project team to make the project successful.

**Lack of Creditability and Contacts:** The Company is new in the market and lacks credit history with the banks and with the financial institutions; therefore it could not arrange any financial support to the project.

**Demands on Management Time:** There were some demands on the management time in this PPP project, but it was normal demands. The demands were in form of negotiations with the Municipality. The Municipality did not take much time to decide, so the management did not waste so much time in waiting for a decision; this minimised the demands on management time.

**Poor Communication between the Private Partners:** There is one company as Private Partner in this PPP project, so the decision is been discussed and communicated internally. A project team was appointed to carry out the projects and they are empowered to take decisions on the behalf of the owners.

**Long Procurement and Negotiation Process:** As mentioned above the procurement and negotiation process did not take long time.

### **5.2.3 Conclusion:**

The project has good chances to be successful, although it lacks political support, which is very important in PPP projects. The project team will have to work hard to promote the Theme Park and to take advantage of the booming in tourism industry in the UAE. It is the first theme park in the city and it can attract many visitors and tourists in case it provides a unique leisure facility. It has to prove itself as a successful project in case

further expansion or new development will be carried out; this is very important in order to win the trust of the banks to finance new projects.

### **5.3 Case Study 3: Industrial Zone: (Ref: Appendix 3)**

#### **5.3.1 Success Factors:**

**Appropriate risk allocation:** The risks in this PPP project are distributed between the partners. The private partner will handle design, construction and operation risks, while the public partner is sharing the financial risks; the public partner is contributing with approximately 75% of the cost required to carry out the project, and it is guaranteeing to minimize the business risk for the Private Partner by paying the rents of all unrented plots of the project in case international companies were not convinced or attracted to invest in the Industrial Zone. Such arrangement is a huge support for the private partner, especially the foreign bank, and it will remove any hesitation from the private partner to enter into this PPP.

**Savings and value for money:** The Government will save in the initial capital investment as the Private Partner will contribute financially in the investment; but the main value for money that the Government was targeting is to create trust in the UAE market by attracting a leading international bank, like the foreign bank involved in the PPP project, to invest in the UAE economy. Such investment will attract other leading banks and international companies to shift their business to the UAE and invest in its economy.

**Favorable Legal Framework:** As mentioned before, UAE lacks any kind of PPP Law, and the concerned Emirate did not have any law for leasing lands and even trading in lands was very limited in the Emirate, and it was mainly between UAE nationals in that Emirate. Due to the desire of the Government to make this PPP project successful and to remove hesitations within the foreign bank, new Laws and Emiri Decrees were issued that allowed leasing lands to non-UAE nationals in certain areas. The Law was developed

at later stages to allow Gulf Council Countries' (GCC) nationals to own land in the Emirate and for non-GCC nationals to lease lands for long periods. Other Laws and Emiri Decrees were issued to allow foreigners and non-GCC nationals to have trading license in certain locations and areas of the Emirate, which will allow them to start and run their own business in the Emirate. Those Laws and Emiri Decrees were a step forward in attracting foreign investors to invest in the Emirate and it had a positive effect in the PPP project because it gave the Private Partner more tools that it can use to attract international companies.

**Political Support:** As shown from the above explanation the project had huge political support. It was the first PPP project in the Emirate and the Government wanted to make it successful. It was ready to support it in any way including pumping more money in the project. The Head of Commercial Banking in the Local Bank said, "*The project had to success, the Government was behind it and it was willing to inject money. That was not an issue. The Crown Prince and his brother used to follow up the progress every day*".

**Strong Private Consortium:** The consortium was strong. It had good knowledge and experience. The foreign bank carried out many PPP projects in different countries, and it has sound knowledge and experience in processing PPP projects. It has huge contacts with big companies through its banking network. The local bank did not participate in PPP projects before, but it has good experience and wide contacts in the local market and has been involved in many local development projects.

**Available Financial Market:** Both banks have sound knowledge and experience in financial market, as it is their core business. As explained above 75% of the project's cost will be funded by the Government through utilization of Phase 1 revenues, the Consortium will fund the balance 25%, 250 million AED. The Consortium can arrange this capital easily as it is a small amount compared to their turnover.

**Stable Economy:** The stable economy and the stable political environment of the UAE attracted the Private Partner to invest in this PPP project, as the Head of Commercial



Banking in the Local Bank said, "*It is very well-known that stable economy and stable politics is very important for any capital*".

**Transparent and Competitive Procurement Process:** No tender process was involved it was an initiative of the Government. Direct negotiations and discussions were carried out between the Public and the Private partners in order to clear up things and agree on the scope of work.

**Technology Transfer:** There was no technology transfer.

**Thorough Feasibility and Assessment Study:** A thorough feasibility study was carried out in association with a famous legal consultant office in the Emirate.

**Innovation:** The main innovation in this project is to propose innovative business model that will be accepted to the Government.

### **5.3.2 Failure Factors:**

**Lack of Appropriate Skills:** There was no lack of appropriate experience among the Consortium. As explained before, both banks complete each other; the local bank has good experience in the local market, which will help in making decisions like selecting the designers and the contractors; while the foreign bank has good experience in PPP projects.

**High Participation Cost:** There were no participation fees, but initial payments for advisors were needed, for example for legal advice. In general the participation cost was not high.

**High Project Value:** The project value is high, one billion AED, but the Consortium will participate with 25% of the cost and the balance will be funded by the Government, so

the amount of money the Consortium will invest in the project is reasonable and it can be handled by the Consortium.

**High Risk:** The risk in this project can be classified as medium and it is minimized due to the support and the guarantees provided by the Government.

**Lack of Creditability and Contacts:** The banks involved in the Consortium have good creditability and contacts both in local and international markets.

**Demands on Management Time:** Negotiations and discussions were carried out before signing the contract, which caused some demands in the management time but nothing huge that may had serious effects on the overall cost of the project. It took six months to close the deal.

**Poor Communication between the Private Partners:** The communication between the private partners in the consortium was good. They formed a committee to follow up the progress of work and to negotiate with the Government.

**Long Procurement and Negotiation Process:** The time taken in negotiations for such project was normal; it took less than 6 months to award the contract.

### **5.3.3 Conclusion:**

The project was a great success and it was the start for other PPP projects in the Emirate. It had all essential success factors like the huge political support, the sound knowledge and experience within the Consortium as well as the attractive financial arrangement and guarantee agreed with the Government.

## **5.4 Case study 4: PPP schools: (Ref: Appendix 4)**

### **5.4.1 Success Factors:**

**Appropriate risk allocation:** Two main risks are considered in this PPP project. The first risk is the possibility that the Private Companies do not follow the policies and the scope of work agreed on. To overcome such risk the Education Council employed a monitoring agency to carry out regular inspections and assessments on the performance of the Private Companies. It will also provide a second opinion to the Education Council about different issues involved in the PPP project.

The second risk that the Education Council was worried about was the reaction from parents, teachers and school administrations about using western companies in a conservative Arabic culture. People may think that the aim of this PPP project is to westernize the schools and the community, not to improve the education. To overcome such risk, more communication with the involved stakeholders in the PPP project should be carried out to show the advantages of the PPP project, and to explain to them that the Arabic, Islamic and social studies will remain in Arabic; the PPP project will focus on math, English and science subjects, which will provide new curriculum in English.

**Savings and Value for Money:** The PPP project is expensive, but as the Manager for PPP and Monitoring Agency in the Education Council said, “*Education is number 1 priority for the government and they are willing to spend money in order to get higher standard of education*”. The Government is aiming to provide a high standard education for UAE nationals and to improve the public schools.

**Favorable Legal Framework:** As no PPP Law is available in the UAE, the parties involved in the PPP project will have to depend on a clear contract that describes the duties, responsibilities and relationships between the parties. The contract in this PPP project is clear; a well-known legal firm prepared it. The Education Council appointed a well-known education consultancy office to monitor and assess the private companies, so

it will act as a regulatory agency and it will provide recommendations to the Education Council.

**Political Support:** Huge political support is provided to the PPP project and the Education Council. The Crown Prince of the Emirate is the Chairman of the Education Council, so the Education Council Management has a direct contact to the political leadership of the Emirate that takes decisions about education in the Emirate; so if the Education Council requires something they can directly ask it from His Highness the Crown Prince. The Crown Prince's brother is a member of the board as well as the Minister of Education. The political support is available as the Manager for PPP and Monitoring Agency in the Education Council said, "*There is political commitment and stable political climate*", "*The support of the political environment is tremendous, they visit the schools regularly*".

**Strong Private Consortium:** The Private Companies in the PPP project are well-known educational organizations that are involved in many PPP projects around the world, and they have good reputation and standards as the Manager for PPP and Monitoring Agency said, "**We selected the best companies**".

**Available Financial Market:** The availability of attractive financial market in the UAE may assist the Private Companies involved in this PPP project in their expansion plans; but it has no effect on this PPP project; as explained earlier the payment terms to the Private Companies are made in way that they will not require to take any loans; they are being well-paid in advance.

**Stable Economy:** The stable economy of the UAE attracts private companies to invest in the country. Although inflation rate is high during the past two year and prices were increasing, but this will not have huge effect on the Private Companies as the contract duration is for three years, it is a short time, and the management fees will be revised then.

**Transparent and Competitive Procurement Process:** The tender process was transparent, it was published in the official site of the Education Council; it was an open tender. Scope of work was clearly described. Milestones and stages were communicated clearly to the bidders, so that they will know how and when to prepare themselves.

**Technology Transfer:** There is no technology transfer.

**Thorough Feasibility and Assessment Study:** A proper feasibility study was carried out in the beginning; a well-known legal firm participated in preparing the study.

**Innovation:** *“The competition between the 6 companies will lead to innovative ideas and solutions”* said the Manager of PPP and Monitoring Agency in the Education Council. The private companies will bring innovative solutions and ideas and as they are being assessed, they should prove that they are adding value to the education system in the Emirate in order to win new contracts.

#### **5.4.2 Failure Factors:**

**Lack of Appropriate Skills:** The private companies are experienced companies with sound knowledge in preparing educational curriculums and managing schools.

**High Participation Cost:** There are no participation fees in the tender, and as described above the decisions and the award of contract will be taken in 4 to 5 months, which will reduce any associated costs on the private companies due to waiting for decisions.

**High Project Value:** The project value is low as it is management contract, and as described above the payments to the Private Companies are structured in a way that they will be paid in advance.

**High Risk:** The risks are manageable in this PPP project, but efforts will be required in order to improve communications with the community members and the teachers to explain the benefits of the project.

**Lack of Creditability and Contacts:** The Private Companies are well-known companies worldwide and they have the ability to recruit staff from outside the country.

**Demands on Management Time:** The demands in management time were normal during the tender process, but it may increase due the efforts required in communicating with the community members and teachers as well as for setting up the offices in the Emirate.

**Poor Communication between the Private Partners:** There are 6 separate contracts with 6 private companies, so each company will have to communicate separately with the Education Council and the involved schools. There are no consortiums involved, so this factor is not applicable in this case.

**Long Procurement and Negotiation Process:** The procurement and negotiation process were normal and did not take long time, less than 6 months to award the contract.

### **5.4.3 Conclusion:**

This PPP project is expected to be a success as it has huge political support, the Government wants to improve the education system in the Emirate and it is willing to pay. The tender process and the scope of work are clear as well as the milestones. The companies are well paid and have sufficient experience in education field. On the other hand they should be prepared to deal with a conservative community like the UAE community and to communicate with the people in order to show how they can improve the outcomes of public schools and the education system in the country.

## **5.5 Case Study 5: Waste Recycling Facility: (Ref: Appendix 5)**

### **5.5.1 Success Factors:**

**Appropriate risk allocation:** Two main risks were identified in the project. The first one is changes in the government that may lead to the withdrawal of the political support that the company enjoys. To minimize the effects of such risk the company is structured as a Limited Liability Company (LLC); as explained above that means that in case of bankruptcy each partner will have to pay to creditors a maximum value equal to the amount invested in the paid up capital.

The second risk that the project is exposed to be the changes in scope work that was originally agreed on. The government deals with the company as part of the government and demands many things to be carried out by the company. Therefore the company's management is trying to extract the business environment of the company from the government and explains to the government the importance of doing so in order to make profit and survive.

**Savings and value for money:** The main value for money in this project as stated by the Managing Director of the Waste Recycling Company," *The government pays a small amount of money to establish an organization that will address environmental issues and focuses on efficiency and minimizes the hierarchy. It increases public awareness; PPP forms a team outside the government to address those issues allowing the government to retain its structure*".

**Favourable Legal Framework:** No PPP law is available in the Emirate; therefore the UAE Commercial Law applies in this case. Anyhow the Municipality will regulate the company's performance, as it is a major shareholder in the company. An Emiri Decree from the Emirate's ruler, which provides them with an excellent legal status, established the company.

**Political Support:** As mentioned before the Municipality is a major shareholder in the company, which provides the company with good support from other public authorities. The ruling family that gives them additional political support owns the local partner company. The Chairman of the Waste Recycling Company is the Ruler's son; that provides them with a direct link to the ruler and as the Managing Director of the Waste Recycling Company said, *"If we need something, we will go directly to the ruler"*.

**Strong Private Consortium:** Both companies involved in the private consortium are professionals and have good experience in setting up new business. They were involved in several projects in the past, but none of them was a PPP project. This is their first PPP project. Despite they do not have technical experience in recycling; experienced technical staffs were hired to carry out the work.

**Available Financial Market:** The project was fully funded by the government, so there was no need to borrow from banks or financial institutions; but as the company has plans to expand later, the available financial market in the UAE and the support from the government will make it easier for the company to arrange sufficient funds for their expansion.

**Stable Economy:** Two main issues affect the project. The first issue is the increase in labour salaries. The recycling business is a labour intensive business, especially in waste collection. The company has a principle to pay its staff better salaries than the market in order to get their best efforts. This increase in salaries is an overall phenomenon in the UAE due to the increase in inflation rate. The second issue that affects the project is the decrease in value of the UAE currency. This led to the increase in cost of purchasing equipments and machines from abroad.

**Transparent and Competitive Procurement Process:** As explained earlier there was no tender process for this project. It was direct negotiations between the public and the private partners initiated by the local private partner.



**Technology Transfer:** Recycling technology will be introduced to the Emirate. The technology used in the recycling facility will be advanced and professional staff will handle it. The technology that the public will be exposed to is simple. It is mainly recycling bins having different labels for different materials to be dumped in it like glass, paper and aluminium. The labels are written in different languages and an education campaign will be launched to make people aware about the benefits of this project and how it will solve environmental issues. The bins are easy to use and will be distributed all over the Emirate. Trials were carried out in one of the main streets of the Emirate and in a commercial building. The feedback was good and the cooperation from the public was good.

**Thorough Feasibility and Assessment Study:** A detailed feasibility study was carried out before starting the project. Some changes happened due to the change in prices.

**Innovation:** Innovative technology and solutions will be provided to recycle the huge number of disposed tires in the Emirate. It will transfer them to materials that can be used for furniture industry, garden materials, and child friendly materials or as raw materials for different industries.

### **5.5.2 Failure Factors:**

**Lack of Appropriate Skills:** As mentioned above the private partner does not have the technical experience in waste recycling process, but they will hire experienced staff that can handle the technical issues involved in the project.

**High Participation Cost:** There was no participation fee, as no tender process took place. Some advisors were engaged to assist in preparing the feasibility study and provide technical support, but the cost was not high.

**High Project Value:** The project value is approximately 100 million USD, and it will be fully paid by the Municipality. The amount is not so high compared to the budgets

available for environmental issues in the Municipality. In fact it is small amount compared to the huge responsibilities and duties that the new-formed company will carry out.

**High Risk:** The risks involved in this project can be classified as medium risks; the private partner can handle them and as explained above the new-formed company is structured in way that it will minimize risks on the partners.

**Lack of Creditability and Contacts:** Both the public and the private partners have good creditability with the financial institutions and banks, although they do not require any loan or financial facility at the moment. The private partner has good contacts with domestic and international companies, so they can easily arrange materials, machines, equipments and staff required for the project.

**Demands on Management Time:** The process of establishing the company took quite long time, as explained above it took approximately one year until the Municipality paid the investment capital. That led to demands on the management time. Another demand on the management time was due to the time spent by the management to extract the business environment from the Municipality and to convince them to limit the scope of work to what it has been agreed earlier in order for the company to generate profit as the Managing Director of the Waste Recycling Company said, ” *The government wants to enforce their standards on the company. We spend time fighting this and convincing them not to do that*”.

**Poor Communication between the Private Partners:** The communication between the private partners in the consortium is good and they have long history in doing business together.

**Long Procurement and Negotiation Process:** As explained above there was no tender process, but it took long time, around one year, to negotiate and to set up the company. Anyhow this phase is over and the PPP project entered into the development phase.

#### **5.5.4 Conclusion:**

The project is expected to success due to several reasons. The most important one is the huge political support provided by the Government and The Ruling Family. The other reason is the demand for such project to solve the environmental impacts of the waste materials that has been collected and disposed for long time in the Emirate. Another success reason behind the project that it has sufficient financial fund supplied by the government to set up the company with no financial charges or interests to bank or financial institutions; this is a great help for any new formed company or business.

#### **5.6 Importance of the Success and Failure Factors:**

Tables 3 and 4 show the feedback received from the interviewees regarding success and failure factors in respective case study. The interviewees were given a list of success and failure factors, and they were requested to rank them according to their importance to the respective PPP project. Tables 2 and 3 combine the results in two tables, one for success factor and the other one for failure factors. The mean for each factor, which is the summation of the results received from each case studies divided on the number of case studies, which is 5, was calculated and then a general rank was given in the last column depending on the mean result.

Each interviewee had different opinion from other interviewees, and that appeared clearly in their ranking for the success and failure factors. A clear example on that is the ranking of appropriate risk allocation. It was ranked number one in case study 2, number 5 in case studies 1 and 3, while it was ranked number 9 in case study 5. It had low, medium and high ranks in the case studies. Therefore it was important to calculate the mean and re-rank the factors according to the mean results in order to get an idea about the importance of each factor in PPP projects in general.

The reason behind these differences is that each PPP project was developed in different conditions and circumstances. For example some of the PPP projects adopted tender process as procurement process, while others were initiated by public or private initiatives and contracts were awarded through direct negotiations and discussions.

In general, it was observed that political support, strong private consortium, stable economy and appropriate risk allocation were the most important success factors for all five case studies in general. As a new procurement method in the UAE, PPP will require political support to push it forward, and it will require stable economy to attract foreign companies to invest in the country forming strong private consortium able to carry out the project. On the other hand savings and value for money, technology transfer and available financial market came at the bottom of the list in their importance to the PPP projects in the UAE. The available financial market did not contribute to the success of the PPP projects for mainly two reasons. The first reason was that the PPP projects were funded by the Government or by the private partner's own fund, and the second reason was that banks and financial institutions did not participate in PPP projects before and they did not understand this concept clearly as well as that there was no PPP Law to refer to and there was confusion regarding the securities that could be given from PPP contracts, as the assets did not belong to the private partner. This attitude from the banks needs to be changed in order to promote PPP in the UAE and the Government should issue Laws that clarify PPP and the relationships between different parties; by this way the banks will feel more secured in financing PPP projects. Technology transfer had the same perception from the interviewees as the available financial market, although it should have been one of the main values for money targets to be achieved. The country needs advanced new technology to be transferred and educated to the UAE nationals. This is important for providing better services and quality of products as well as for the UAE's economy to be developed.

Similarly, failure factors showed different importance in each case study. In general, factors related to the private partner came first; for example lack of appropriate skills came in the top of the list, this was natural, as lack of skills and knowledge within the

private partner's organization means that the private partner will not be able to carry out the project; while poor communication between the private partner came in the second position. Factors related to the project itself, like high participation cost and high project value came after the previous mentioned failure factors. Those factors are associated with the overall cost of the project and they will attract the private companies to invest in PPP projects if they were low enough. Long procurement proves had a low rank, showing that it was an efficient and transparent procurement process. Lack of creditability and contacts came lowest in the list despite its importance in availing finance for the project from the bank as well as to be able to get good prices from suppliers and contractors through local contacts.

<b>Success Factor</b>	<b>Case Study 1</b>	<b>Case Study 2</b>	<b>Case Study 3</b>	<b>Case Study 4</b>	<b>Case Study 5</b>	<b>Mean</b>	<b>Rank</b>
<b>Appropriate Risk Allocation</b>	5	1	5	9	9	5.8	4
<b>Savings and Value for Money</b>	8	5	8	7	8	7.2	8
<b>Favourable Legal Framework</b>	4	10	4	11	2	6.2	5
<b>Political Support</b>	1	4	1	1	1	1.6	1
<b>Strong Private Consortium</b>	3	9	3	2	2	3.8	2
<b>Available Financial Market</b>	11	11	11	6	3	8.4	10
<b>Stable Economy</b>	2	2	2	5	11	4.4	3
<b>Transparent &amp; Competitive</b>	6	8	6	4	7	6.2	5

<b>Procurement Process</b>							
<b>Technology Transfer</b>	10	7	10	10	4	8.2	9
<b>Thorough Feasibility Study</b>	7	6	7	8	5	6.6	6
<b>Innovation</b>	9	3	9	3	10	6.8	7

Table 3: Success factors for PPP case studies ranked according to their importance

<b>Failure Factor</b>	<b>Case Study 1</b>	<b>Case Study 2</b>	<b>Case Study 3</b>	<b>Case Study 4</b>	<b>Case Study 5</b>	<b>Mean</b>	<b>Rank</b>
<b>Lack of Appropriate Skills</b>	2	1	1	2	4	2	1
<b>High Participation Cost</b>	4	2	3	8	8	5	4
<b>High Project Value</b>	5	3	4	3	3	3.6	3
<b>High Risk</b>	1	6	7	7	7	5.6	6
<b>Lack of Creditability and Contacts</b>	8	8	8	4	4	6.4	8
<b>Poor Communications between the Private Partners</b>	3	7	2	1	1	2.8	2
<b>Long Procurement Process</b>	7	4	6	6	6	5.8	7
<b>Demand on Management Time</b>	6	5	5	5	5	5.2	5

Table 4: Failure factors for PPP case studies ranked according to their importance

## **Chapter 6**

### **6.0 Discussions and Conclusion:**

This chapter presents the discussion on each case study with recommendations for better improvement. This chapter concludes the research from the overall perspective giving general comments on success and failure factors in the case studies and through describing general observations. Recommendations for further research and limitations of research have been given in the end.

#### **6.1 Case Study 1:**

As mentioned before, this PPP project was withheld and was expected to be a failure. There was lack of political support although the Government was initially enthusiastic to adopt PPP for this project, but it was the unexpected high offers received from the bidders that de-motivated the Government to go ahead with it. The fluctuations in prices and Government's unclear opinion about non-collected bills caused uncertainties with the bidders making them to submit conditional offers. Together with lack of management fee review mechanism the long concession period was a negative aspect in this PPP project leading to the increase of uncertainties within the bidders. So the savings and value for money targets were not achieved in this PPP project. This PPP project lacks any kind of significant innovation or technology transfer that provides huge value for the public sector in order to attract it to go ahead with the project.

Recommendations for better improvement:

- To cut down the concession period and make it maximum of three to five years.
- Adding management fee review mechanism to refer to in case economical factors in the market may cause increase in the operational costs.
- The Government should clarify the actions required from the private partner regarding non-collected bills.

- The bidders should include a well-known local private company in the consortium in order to provide the consortium with domestic support through its contact network. By this way the consortium will be able to get competitive prices from the market, which will in its turn reduce the cost of the project.
- The bidders should provide innovative solutions in their management method that may reduce the cost of the operation and consequently create savings for the public sector.

## **6.2 Case Study 2:**

As mentioned before this PPP project has good chances to success. Such project, Theme Park, is required for the tourism industry as there is lack of projects of similar nature in the Emirate at the moment. The project is located in the heart of the city surrounded by a beautiful public park and residential areas. The concession period is reasonable for the Private Partner to cover its initial investment and make profit, 30 years with possibility of renewal for another 30 years by the Municipality.

It was observed that the risks in this PPP project were allocated fully on the Private Partner. The Public Partner had little contribution to the project, which included processing approvals from public authorities. It did not provide any financial support; the Private Partner had to finance the project through its own funds. The Private Partner did not have sufficient experience in the local market and that appeared in the form of construction contract it selected, re-measured contract, which led to the increase in the project cost. In addition to that, they did not have experienced staff in the beginning of the project, so the feasibility study was done in a wrong way and many changes had to be done later.

Recommendations for better improvement:



- The Public Partner should provide financial support; it can arrange attractive financial packages with the banks by guaranteeing the project and providing security to the banks.
- The Private Partner targeting tourists and schools should carry out a thorough and attractive marketing plan.
- PPP Law should be issued to clarify the roles and the relationships between the PPP partners. For example, the Brazilian Government enacted a PPP Law in 2004, as PPP was widely adopted by the Government's departments and there was a need to standardise PPP projects. The PPP Law described the relationship between the parties involved in PPP projects. It described different terms that were used in PPPs, so no confusion about their meaning will appear in the future. It also described the tender process, PPP types and the areas in which PPP could be adopted like roads and infrastructure. Dispute resolution methods were described and how to proceed with it. The role of PPP regulatory authority was described and how to be formed. This Law helped PPP to move forward and it protected PPP projects from short term political changes in the country.
- A steering or a regulatory committee should be established in order to monitor the PPP project and make sure that it meets the value targets required by the Public Partner.
- A local private partner should have been included in the project in order to support the project domestically.

### **6.3 Case Study 3:**

This project was a major success and it was the spearhead for more PPP projects in the Emirate in various sectors. The huge political support that this PPP project enjoyed was the main success factor. The Private Partner had sufficient experience and knowledge in PPP projects as well as in the local market. The consortium partners completed each other; the foreign bank had experience in PPP and had good contacts with international companies, while the local partner had the experience and knowledge of the local market. The financial participation of the Private and the Public Partners in the project was

reasonable, so risks were distributed fairly in the project. The Government issued several Laws and Decrees that provided legal status for the foreign bank to invest in the Emirate.

Recommendations for better improvement:

- A regulatory committee should be established to monitor the roles of both the Public and the Private Partners in the project.
- The procurement process was carried out through initiative of the Public Partner, no tender took place, and as the project was success, a tender process that invites more organization might be useful for the third phase of industrial area in order to get better offers from private bidders. The Public Partner can allocate more risks to the Private Partner as the project was proved to be successful.

#### **6.4 Case Study 4:**

This was another successful project. The Emirate needed such project in order to improve the education system and the education outcomes in the Emirate. It had enormous political support and enormous financial support from the Government. The payment schedule to the Private Companies was made in a way that will support the financial status of the Private Companies in term of the initial set up of the Private Companies in the Emirate. The contract involved six private companies, which promotes competition among them in order to get the best results. The concession period was for three years, which was reasonable for management contracts; the Public Partner would be able to evaluate their performance and discontinue with companies that could not meet the targets. A monitoring agency was appointed to carry out regular inspections on the Private Companies and to give recommendations independent from the Private Companies to the Education Council; it acted as a regulatory agency in this PPP. The tender process was transparent and open, it was published in the official web site of the Education Council and the best educational companies in the world were invited to participate. The scope of work and the tender milestones were clearly described for the bidders.

Recommendations for better improvement:

- The community represented by parents and teachers should be involved in a steering committee that will set up the targets for this PPP project. This will reduce suspicious towards foreign companies and will give the opportunity to the parents and the teachers to be more involved in the project.
- The Education Council should carry out an awareness campaign to inform and to show the community the advantages of this PPP project, and to give them assurances that the Arabic and Islamic studies will not be affected by the project.
- The Private Companies should give proposals that will improve the standards of the Arabic and the Islamic studies, and they should give more attention to those subjects and should not only concentrate on English, Math and Science subjects.
- Local private education organizations should be included in this project as they have long experience in educational problems in the UAE.

### **6.5 Case Study 5:**

This project is expected to be successful. It is the first PPP project in the concerned Emirate and it has huge political support from the ruling family and from the Municipality. Technical experiences were recruited to carry out the project. The Emirate is in need for such project to solve its environmental problems caused by collected solid wastes. The financial structure of the project is sound and the Government is funding the project 100%. The cost of the project compared to the benefits the Emirate will get is relatively low; with such low cost to the Government many environmental problems will be taken care of.

Recommendations for better improvement:

- A PPP regulatory authority should be formed in order to monitor the PPP project and make sure that it is meeting its targets. Such authority will monitor the role of

each partner. This will be useful for the management of the new-formed company as the authority will not allow the company to work as per the agreement signed with the Government and to make profit. It will control the interference of the Public Partner in the project so that no extra tasks will be asked from the company. As mentioned before, the management spent a lot of time to explain for the Municipality that the company should have its own system and procedures separated from the Municipality in order to make profit and survive.

### **6.6 Conclusion:**

The case studies that were analyzed represented different segments of the UAE market. They included education, utilities, entertainment and industry. Two types of PPP were used, BOT or management contracts. Concession periods varied from project to project, but the majority of the projects had concession period of twenty years and above except the PPP schools that had a concession period of three years. Concession period of twenty years and above is suitable for PPP projects that involve huge initial investment by the private partner in order to cover the cost and make profit. Initial investment will always cover the cost of designing and constructing new facilities, which is normally very expensive, so it was most suitable for BOT case studies to have concession period of twenty years and above. On the other hand management contracts type of PPP had shorter concession period, three years. In fact one of the main failure reasons for case study number 1, Electricity and Water Distribution Centres, was the long concession period the Government wanted to impose on the Private bidders combined with the lack of management fee review mechanism. It led to conditional offers, as the bidders could not anticipate the costs of materials and cost of salaries for the staff for long periods, so the results were high conditional bids that the Government refused and the project was stopped. The other PPP management contract, PPP schools, was successful due to several reasons, but the short concession period, three years, was one of the main reasons. It allowed the private partner to offer competitive proposals knowing that prices and costs will not change drastically within three years. It also allows the Government to evaluate the performance of the private partner periodically, and in case of dissatisfaction the

Government may stop renewing the contract. Of course the Government may terminate the contract of BOT projects according to the agreement, but implication will occur due to the huge investment and money spent by the private partner in the BOT project and disputes on compensation value and process, while in PPP management contracts the initial investment of the private partner is much less than in BOT cases.

As mentioned above two types of PPP were mainly used, BOT and management contracts, while other types were not adopted, especially PFI. PFI is widely used in the UK, the USA and other countries but not in the UAE. A possible reason behind it is that PFI allows the private partner to sell the project with its remaining concession period to other private parties, the project as an asset will remain the ownership of the public partner, while BOT does not allow that. The private partner in BOT projects will remain in the project till its end and then it will be transferred to the public partner. It seems that the Government wants commitment from the private party to continue with its responsibilities and to continue providing the expected quality and performance from its organization. On the other hand PFI may be useful in the Emirates with less income and natural resources, Northern Emirates. All five PPP projects studied were carried out in the rich Emirates of the UAE. Only two PPP projects, which were sewage treatment plant and waste water treatment system, could be identified in Northern Emirates, but could not be studied due to lack of contacts. PFI may be adopted in Northern Emirates and it may be more attractive for the private companies to invest in PFIs as they can sell the project to other companies and make quick and big profit after setting up the project. PPP could be used in Northern Emirates, as still more development is required in infrastructure.

The other observation is that the public partners in all case studies were the local governments of the Emirates, the Federal Government did not participate in any PPP project and it had no role in any of the five PPP projects that were studied in this research. The Federal Government may adopt PPP in many projects; especially the projects that may take place in all seven Emirates like high ways or future train railway that will connect the seven Emirates. PPP can take away a lot of the financial burden from the Federal Government, which is been financed by the richer Emirates in the UAE

and it always suffers from lack of resources to carry out new projects. The research did not investigate the reasons behind that as it had different objectives. It could be a good topic for future research.

It was observed that the procurement process for the PPP management contract projects were carried out through tender process, while the other BOT projects were carried out through initiatives from the private partner or the public partner and through direct discussions and negotiations between both partners. The reason behind it is that management system was already existed and the Government wanted to improve it, while the BOT projects did not exist and they were new facility that the public sector required at that time, and in some cases it was the private partner who initiated the project, so it was natural to award the project directly to the concerned private partner who came first with the idea and was willing to invest in it.

It was observed that each case study perceived success and failure factors in different ways from other case studies, and their importance varied from one to another as shown in tables 3 and 4. For example, political support was number one success factor for all PPP projects except for the Theme Park. This is normal as PPP is a new method of procurement in the country, and it needs political support to push it forward. PPP is a political tool that politicians may use to achieve targets without being tied to the rigid government's procedures. Strong private consortium came in second position and it was important success factor for all projects except for the Theme park as there was no consortium in the project, it was one company established by individual investors that carried out the project. Stable economy was an important factor for all projects except for the waste recycling facility, although stable economy is a critical factor for foreign companies to invest in other companies.

Finally, we can say that PPP projects have good opportunity to success in the UAE provided that certain steps shall be taken by the Government like issuing a clear PPP Law and establishing a PPP regulatory authority that shall set up policies and procedures for PPP projects as well as to control and monitor the performance of the private partners.

The financial market should be more active in PPP projects and provide attractive financial packages for the private partners.

### **6.7 Recommendations for further research:**

This study has tested one aspect of Public Private Partnership in the UAE, which is critical success and failure factors for PPP projects in the UAE with case studies selected from the market. Further research could look into other aspects of PPP like:

- Drivers and barriers for PPP projects in the UAE.
- PPP strategies in the UAE.
- PPP projects in construction.
- PPP organization structure.
- Managing PPP projects in the UAE.
- Evaluating all crucial aspects of PPP management and proposing a model for managing PPPs in the UAE.

### **6.8 Limitations of the Dissertation:**

Lack of previous studies in this field as well as the few PPP projects in the UAE caused limitation to the research data, especially in carrying out comparisons between PPP projects within the same segment of industry, for example there was only one PPP project in the education field and that was compared to PPP projects from other fields. It could have been more appropriate if it was compared to another PPP project of similar nature. Interviews were the main tool for collecting data in this research. It was intended to record the interviews, but the interviewees denied permission as sensitive issues were discussed and there was confidentiality to information released to the public. Anyhow it was permitted to take notes during the interview, which was summarized later. Several telephonic enquiries made were ignored from documenting.

## **Chapter 7**

### **7.0 References and Bibliography:**

1. Adams, J., Young, A. & Zhihong, W. (2006), "Public private partnerships in China", *International Journal of Public Sector Management*, Vol. 19 No. 4, pp. 384-396.
2. Ahadzi, M., Bowles, G. (2004),"Public-private partnerships and contract negotiations: an empirical study", *Construction Management and Economics*, Vol. 22, pp. 967-978.
1. Akintoye, A., Li, Bing, Edwards, P.J. & Hardcastle, C. (2005), "Perceptions of Positive and negative factors influencing the attractiveness of PPP/PFI procurement for construction in the UK", *Engineering, Construction and Architectural Management*, Vol. 12 No. 2, pp. 125-148.
2. Akintoye, A., Li, Bing, Edwards, P.J. & Hardcastle, C. (2005), "Critical success factors for PPP/PFI projects in the UK construction industry", *Construction Management and Economics*, Vol. 23, pp. 459-471.
3. Akintoye, A., Li, Bing, Edwards, P.J. & Hardcastle, C. (2005),"VFM and Risk Allocation Models in Construction PPP Projects", *School of Built and Natural Environment, Glasgow Caledonian University, Glasgow G4 0BA*.
4. Akintoye, A., Edwards, P., Grilo, L., Hardcastle, C., Melhado, S. And Silva, S. (2006). "Challenges and Opportunities for the Brazilian Public Private Partnership Program". *Proceeding of Public Private Partnerships- Opportunities and Challenges Conference*. Arranged by Hong Kong University and Hong Kong Institution of Engineers-Civil Division. Hong Kong Convention and Exhibition Centre, Hong Kong.
5. Audit Commission (2003), *PFI in Schools*, Audit Commission, London.
6. Bagchi, P.K. & Paik, S.K. (2001),"The role of public private partnership in port information systems development", *The International Journal of Public Sector Management*, Vol. 14 No. 6, pp. 482-499.



7. Baker, C. Richard (2003), "Investigating Enron as a Public private partnership", *Accounting, Auditing & Accountability Journal*, Vol. 16 No. 3, pp. 446-466.
8. Ball, R., Heafey, M. and King, D. (2001), "Private finance initiative – a good deal for the public or a drain on future generations? Policy and Politics", Vol. 29 No. 1, pp. 95-108.
9. Ball, R., Heafey, M. and King, D. (2002), "Private finance initiative in the UK: policy and practice: schools infrastructure in Scotland", *Local Governance*, Vol. 28 No. 1, pp. 63-73.
10. Boswell, M.J. (2006). "PPP – Contract Administration". Proceeding of Public Private Partnerships- Opportunities and Challenges Conference. Arranged by Hong Kong University and Hong Kong Institution of Engineers-Civil Division. Hong Kong Convention and Exhibition Centre, Hong Kong.
11. Bradford, S. Gentry and Fernandez, Liza O. (1997). "Evolving Public Private Partnerships, General Themes and Urban Water Examples". OECD Workshop on Globalization and the Environment, New Challenges for the Public and Private Sectors. Paris, France.
12. Broadbent, J. & Laughlin, R. (2003),"Public private partnerships: an introduction", *Accounting, Auditing & Accountability Journal*, Vol. 16 No.3, pp. 332-341.
13. Broadbent, J., Gill, J. & Laughlin, R. (2003),"Evaluating the private finance initiative in the national health service in the UK", *Accounting, Auditing & Accountability Journal*, Vol. 16 No. 3, pp. 422-445.
14. Demsetz, H. (1968), "Why regulate utilities?", *Journal of Law and Economics*, Vol. 11, pp. 55-66. Department of Finance (2000), Ireland, Community Support Framework, 2000-2006, Stationery Office, Dublin.
15. Department of Finance (2001), *Framework for Public Private Partnerships*, Stationery Office, Dublin.
16. Dixon, Timothy, Pottinger, Gaye and Jordan, Alan, (2005). "Lesson from the Private Finance Initiative in the UK, Benefits, Problems and Critical Success Factors". *Journal of Property Investment and Finance*. Vol. 23 No. 5, pp. 412-423.

17. Domberger, S. and Jensen, P. (1997), "Contracting out in the public sector: theory, evidence and prospects", *Oxford Review of Economic Policy*, Vol. 13 No. 4, pp. 67-79.
18. Duffield, C.F., (2006). "PPP's in Australia". *Proceeding of Public Private Partnerships- Opportunities and Challenges Conference*. Arranged by Hong Kong University and Hong Kong Institution of Engineers-Civil Division. Hong Kong Convention and Exhibition Centre, Hong Kong.
19. Ezulike, Ekene, Perry, John and Hawwash, Kamel (1997). "The Barriers to entry into the PFI Market". *Engineering Construction and Architectural Management*, Vol. 4 No. 3, pp. 179-193.
20. Flinders, M. (2005), "The politics of Public-Private Partnerships", *Political Studies Association*, Vol. 7, pp. 215-239.
21. Glaister, Stephen (1999), "Past Abuses and Future Uses of Private Finance and Public Private Partnerships in Transport". *Public Money and Management* July – September 1999, pp. 29-36.
22. Heald, D. (2003), "Value for money tests and accounting treatment in PFI schemes", *Accounting, Auditing & Accountability Journal*, Vol. 16 No. 3, pp. 342-371.
23. Higton, N. (2006). "Using PPP's to Deliver Successful Rail Projects". *Proceeding of Public Private Partnerships- Opportunities and Challenges Conference*. Arranged by Hong Kong University and Hong Kong Institution of Engineers-Civil Division. Hong Kong Convention and Exhibition Centre, Hong Kong.
24. Hodge, G.A. (2004), "The risky business of public-private partnerships", *Australian Journal of Public Administration*, Vol. 63 No. 4, pp. 37-49.
25. Hurst, Claire and Reeves, Eoin, (2004). "An Economic Analysis of Ireland's First Public Private Partnership". *The International Journal of Public Sector Management*, Vol. 17 No.5, pp. 379-388.
26. Institute for Public Policy Research (IPPR) (2001), *Building Better Partnerships*, Institute for Public Policy Research, London.

27. Jamali, D. (2004), "Success and failure mechanism of public private partnerships (PPPs) in developing countries insight from the Lebanese context", *The International Journal of Public Sector Management*, Vol. 17 No.5, pp. 414-430.
28. Jefferies, M., MaGeorge, D., Chen, S.E. & Cadman, K., "Sustainable Procurement: a contemporary view on Australian public private partnerships (PPPs)", *Proceedings: The British University in Dubai*, pp. 144-145.
29. Klijin, Erik-Hans and Teisman, Geert R. (2002). "Institutional and Strategic Barriers to Public Private Partnership in Analysis of Dutch Cases". Paper for the British Academy of Management Conference 2002, 9-11 September 200, London, Middle Sex University.
30. Kumaraswamy, M., Anvuur, A. and Rahmang M., (2006). "Balancing Contractual and Relational Approaches for PPP Success and Sustainability". *Proceeding of Public Private Partnerships- Opportunities and Challenges Conference*. Arranged by Hong Kong University and Hong Kong Institution of Engineers-Civil Division. Hong Kong Convention and Exhibition Centre, Hong Kong.
31. Langford, J. (2001), "Managing public-private partnerships in Canada", paper presented at Conference on New Players and Processes: A Public Sector without Boundaries, Canberra, April. Ireland's first PPP 387.
32. Michie, J. (Eds), *Contracts, Co-operation and Competition: Studies in Economics, Management and Law*, Oxford University Press, New York, NY, pp. 1-39.
33. National Treasury PPP Unit, (2005), *National Treasury PPP Toolkit for Tourism, South Africa*, available at:  
[http://www.ppp.gov.za/Toolkits/Tourism\\_Final/toolkit.htm](http://www.ppp.gov.za/Toolkits/Tourism_Final/toolkit.htm)
34. Nyachhyon, Badan Lal, (2006). "Prospects and Constraints of Public Private Partnership for Urban Waste Management". *Economic Policy Network. Policy Paper 15*.
35. Omole, A.O. (2007). "BOT Projects and the National Development: Prospects and Challenges for Practitioners in Construction Industry". *NIGS Lagos Chapter Seminar*.

36. Papaioannou, Panos & Peleka, Maria. (2006), "Recent Practices on Success and Failure Stories from Funding Large Transportation Projects in Greece", 1<sup>st</sup> International Conference on Funding Transportation Infrastructure, Banff, Alberta, Canada.
37. Payne, Helen. (1997), "Key Legal Issues in Projects Procured under the Private Finance Initiative". *Engineering, Construction and Architectural Management*, Vol. 4 No. 1, pp. 195-202.
38. Pongsiri, N. (2002), "Regulations and public-private partnerships", *The International Journal of Public Sector Management*, Vol. 15 No. 6, pp. 487-495.
39. Qiao, L., Wang, S.Q., Tiong, R.L.K. and Chan, T.S. (2001), "Framework for Critical Success Factors of BOT Projects in China". *Journal of Project Finance*, 7(1), 53-61.
40. Rodney, W. & Gallimore, P. (2002), "Risk assessment in PFI schemes for primary health care", *Facilities*, Vol. 20 No. ½, pp. 52-60.
41. Rubin, Julia and Stank, Ewicz, Gregory, (2001). "The Los Angeles Community Development Bank: The Possible Pitfalls of Public Private Partnerships". *Journal of Urban Affairs*, Vol. 23, No.2; pp. 133-153.
42. Rubin, J. S. & Stankiewicz, G. M., "The Los Angeles Community Development Bank: The Possible Pitfalls of Public-Private Partnerships", *Journal of Urban Affairs*, Vol. 23 No. 2, pp. 133-153.
43. Shaoul, Jean, (2002). "A Financial Appraisal of the London Underground Public Private Partnership". *Public Money and Management* April-June 2002, pp. 53-60.
44. Singh, L.B. & Kalidindi, S.N. (2006), "Traffic revenue risk management through Annuity Model of PPP road projects in India", *International Journal of Project Management*, Vol. 24, pp. 605-613.
45. Steadman, T. (2006). "Key Lessons from the UK Experience of PPP". *Proceeding of Public Private Partnerships- Opportunities and Challenges Conference*. Arranged by Hong Kong University and Hong Kong Institution of Engineers-Civil Division. Hong Kong Convention and Exhibition Centre, Hong Kong.

46. S. Thomas Ng et al., A fuzzy simulation model for evaluating the concession items of public-private partnership schemes, *Automation in Construction* (2007), doi: 10.1016/j.autcon.2007.01.010.
47. Thomson, David. (2007). "Revised Guidance PFI and PPP VFM Assessment". Department of Finance and Personnel, UK.
48. Wang, Yin (2006), "Keys to Successful Public Private Partnerships (PPP's)". University of California SPPD Research. Proceeding of Public Private Partnerships- Opportunities and Challenges Conference. Arranged by Hong Kong University and Hong Kong Institution of Engineers-Civil Division. Hong Kong Convention and Exhibition Centre, Hong Kong.

## **Appendix:**

In all interviews M is the interviewer and C is the interviewee.

### **Appendix 1**

Interview with senior consultant – consultancy firm in case study 1:

**M:** Good morning

**C:** Good morning (introducing himself)

**M:** Explaining the project, the purpose of the interview and confidentiality handling of the information that will be obtained from the interview.

**M:** Can you describe the project?

**C:** Yes (he drew a chart explaining the distribution centres organization structure); their role is to receive water and electricity from plants like desalination plants and supply the customers with.

**M:** When was the project initiated?

**C:** 14 months ago, a tender process started. Do you know the process of PPP, like request for proposals?

**M:** Yes. Where did the project reach?

**C:** The bids were received, but the contract is still not awarded.

**M:** Why?

**C:** No commitment from the government.

**M:** Why?

**C:** You know that local citizens do not pay electricity and water bills. They receive the bills but don't pay it. The bids were very high, more than expected. So the government does not want to absorb more costs and want to keep the benefits for the locals.

Many employees have households, and water and electricity bills paid by their companies. So it is the low paid staffs that pay their bills that will be affected.

The other concern is the possible de-staffing, cutting down the staff.

**M:** Coming back to the PPP project and to make it clear, are they going to generate electricity?

**C:** No, generating power is excluded. The consortium will maintain the existing network and build new sub stations, which will be funded by the government.

**M:** How was the project priced?

**C:** They faced difficulties to provide good offers due to the fluctuations in prices.

**M:** Is there any tariff review mechanism in the contract?

**C:** No, and that is why the bidders submitted conditioned offers in order to protect their interests, especially in cases like collections of old bills.

**M:** What can PPP provide?

**C:** Better services and more efficiency. You can visit their site, a lot of information is provided there.

**M:** Which type of PPP is adopted?

**C:** Service contract.

**M:** Is there any dispute resolution mechanism in the contract, as there is no PPP law in the country?

**C:** There is a regulation bureau (RSB); you can visit their site to know more about it. There is a steering committee, two from the government, two from the consortium and 1 independent, which contract the project. Arbitration process is available. RSB may

resolve disputes before reaching the court. A law is necessary for PPP projects and government should issue one.

**M:** How was the tender process?

**C:** It was clear and transparent. The scope of work was clear. The participation fee was normal as any other tender fee.

**M:** What are the risks involved in the project and how were they mitigated?

**C:** Risks in design, construction and operation were identified by the advisors and allocated to the proper partner. The government requested prequalification to assess the bidders and through evaluation.

**M:** What should the private sector do to minimize the risks?

**C:** Proper due diligence, understanding the scope of work.

**M:** How will the consortium be paid?

**C:** Through monthly fees.

**M:** This will cover salaries and operational costs?

**C:** Yes.

**M:** Who is involved in the PPP project?

**C:** Two UK based companies, one for water and one for electricity; this is the consortium with lowest bid. The government appointed four advisors (He mentioned the values).

**M:** How does the availability of the financial market affect the project?

**C:** No effect, as the initial investment from the private consortium is low and can be easily funded from their revenues.

**M:** How is the consortium? Is it strong?

**C:** Yes



**M:** What are the values they can add?

**C:** They can provide innovative solutions in designing and constructing new network as well as in restructuring the organization to be more effectively.

**M:** How about the communication between the two companies?

**C:** Good, they acted as one unit in while negotiating. They have done similar projects all over the world, but they don't have experience in the local market.

**M:** Was there a thorough feasibility study?

**C:** Yes, but the prices received were higher than expected.

**M:** Is there any innovation in the project?

**C:** Not really. IT solutions may be provided; the staff will familiarize themselves quickly with it.

**M:** What is happening now with the project?

**C:** We are waiting for a decision.

**M:** What do you think is the most important success factor for the PPP project?

**C:** Political support.

**M:** Please rank the attached success and failure factors according to their importance to the project?

**C:** (He ranked them)

**M:** Thank you very much

**C:** You are welcome; please call me if you need further help.

## Appendix 2

Interview with the operations manager of a private partner in case study 2:

**M:** Good morning.

**C:** Good morning to you.

**M:** Thank you for this opportunity. All the information I get from this interview will be handled in strict confidentiality and for academic research only.

**C:** Thank you, sure. (He introduced himself and his experience)

**M:** Please describe the project.

**C:** It is better to watch a DVD about the project, done 3 years ago.

(We went to the meeting where I watched a DVD about the project)

**M:** Who is involved in the project?

**C:** Group of Saudi investors with one Arab investor, who formed the private investment company, the municipality.

**M:** What is the type of PPP?

**C:** BOT for 30 years renewable. The private organization pays annual rent to the municipality.

**M:** What does the municipality gain from this project?

**C:** No capital investment, a theme park.

**M:** why did the municipality select PPP?

**C:** To provide better services, the municipality does not have experience in running a theme park.

**M:** What is the value of the project?

**C:** About 300 million AED.

**M:** Where did the project reach?

**C:** It is under construction, but behind schedule.

**M:** Why?

**C:** Due to changes from our side. Lack of labours, some subcontractors employed illegal labours, which we had to kick out.

**M:** What is the area of the project?

**C:** 260,000 sq ft.

**M:** When will it be completed?

**C:** Summer 2008.

**M:** Do you think it will be successful? What are the risks?

**C:** Yes, but we have to do proper marketing, concentrating on school groups. The risks are not to have enough visitors.

**M:** Is there political support for this project?

**C:** Yes, the municipality supports the project and helps in getting approvals from public authorities.

**M:** Does the private organization have enough experience?

**C:** Not in the beginning, this theme park is their first project, but they employed experienced staff later on.

**M:** How was the tender process and how long time did it take?

**C:** There was no tender process. The Arab investor initiated the project by approaching the municipality and presenting his idea. Then he formed the investment company with

the Saudi investors. The decision did not take long time from the Municipality, some negotiations took place but I was not involved at.

**M:** When did you join the company?

**C:** After they signed the contract with the municipality.

**M:** What is the role of the municipality?

**C:** They carry out regular meetings and inspections with us to make sure that the quality is good.

**M:** What is the effect of not having a PPP law in the U.A.E?

**C:** It is better to have a PPP law in order to clarify the relationships and duties of each party involved in the PPP. The law and roles of health and safety should be followed in the project. A third party will be hired to carry out inspections and certify the safety of the rides.

**M:** How does the financial market affect the project?

**C:** The Company and the investors do not have a credit history in the U.A.E, so banks did not finance them. Banks drew back for financing BOT project as it is new and we don't own the land. They prefer to watch and see what will happen.

**M:** How was the contract arranged with the contractor?

**C:** As a re-measured contract. Items and areas in the BOQ. It was not a good arrangement as the project cost increased by one third due to increase in prices.

**M:** Is there any technology transfer involved in the project?

**C:** Not really. New rides and games may be.

**M:** Is there any innovation in the project?

**C:** We had to change the design to make it commercial. For example the jogging track used to cover 25% of the total area but it contributed with only 1% to the revenue, we had to change this.

**M:** Was there a thorough feasibility study carried out before starting the project?

**C:** There was but it was not a thorough one. The people, who did it, did not have experience in such a project, so when I joined I had to change a lot of things.

**M:** Please rank the following success and failure factors according to their importance.

**C:** (He ranked the factors)

**M:** Thank you very much

**C:** You are welcome, please contact me if you need any help or if you have more questions.

### **Appendix 3**

Interview with the head of commercial banking in the local bank partner of the consortium in Case Study 3:

**M:** Good afternoon.

**C:** Good afternoon.

**M:** Thank you for this opportunity. All information I get from this interview will be used for academic purpose only and will be handled in strict confidentiality.

**C:** No problem.

**M:** Can you describe the project?

**C:** The project is to finance phase 2 of industrial area.

**M:** Who are involved in the project?

**C:** The government, the local bank, and an international bank.

**M:** Does the consortium have sufficient experience in PPP projects?

**C:** The foreign bank does. It was involved in many PPP projects around the world and has big contact data and relationships with international companies. A committee was appointed by both banks to follow up the project progress and finalise the deal with the Government.

**M:** What is the purpose of carrying out this project?

**C:** To finance phase 2.

**M:** What is the cost of the project?

**C:** Approximately 1 billion AED.

**M:** How far the project reached?

**C:** Finalized, completed and under operation.

**M:** Why PPP was selected?

**C:** The government wanted a leading financial bank to trust the U.A.E economy to come and invest in the U.A.E.

**M:** What is the form ad type of PPP?

**C:** It was done as part of BOT.

**M:** How long is the concession period?

**C:** 20 years

**M:** What are the values for money targets in the project?

**C:** Infrastructure fund was raised. It was new education for us.

**M:** What are the risks involved in the project?

**C:** It was very successful, because the government was behind it. The government wanted the project to success. The project was the start of other PPP projects in the Emirate.

**M:** So there were no huge risks in the project.

**C:** I would not say that. We still have the design and construction risks. It can be considered as medium risks.

**M:** Who is operating the industrial are?

**C:** The consortium is operating the Industrial Zone; it appointed a CEO from the international bank partner.

**M:** Was there political support for the project?

**C:** Yes, The project had to success, the Government was behind it and it was willing to inject money. That was not an issue. The Crown Prince and his brother used to follow up the progress every day.

**M:** Do you consider the stable economy of the UAE as a success factor for the project?

**C:** Yes, certainly. It is very well-known that stable economy and stable politics is very important for any capital.

**M:** How was the tender process?

**C:** There was no tender. The Government approached us and we approached the foreign bank. It took 6 months of planning and negotiating until we finalised the deal.

**M:** Why did the Government approached your bank and why your bank approached this foreign bank in particular?

**C:** We are semi governmental bank, the Government owns most of the shares and we had good relationships with the Government. The foreign bank participated in PPP projects before, it has a branch in the UAE but not so active and it wanted to expand.

**M:** Was there any feasibility study?

**C:** Yes, a big legal house did it.

**M:** Any Innovation of technology transfer involved in the project?

**C:** Technology transfer, not really, most of was done in-house. Innovation was very important to be creative and push the project to get political blessing.

**M:** Please rank the attached factors.

**C:** Sure. (Ranking the factors)

**M:** Thank you very much.

**C:** Thank you.



## Appendix 4

Interview with Manager PPP and Monitoring Agency in the Education Council in Case Study 4:

**M:** Good afternoon

**C:** Good afternoon

**M:** Thank you for giving me this opportunity. This meeting will be used for academic research and all information will be handled in strict confidentiality.

**C:** Thank you, that is good.

**M:** Can you introduce your self and your role in the Education Council?

**C:** My name is (He mentioned his name) and I'm the Manager or PPP and Monitoring Agency in the Education Council. I supervise the work of the Monitoring Agency that has been hired to monitor the performance of the private companies in the PPP project.

**M:** Can you describe the project?

**C:** The government of the concerned Emirate established Education Council, which will take care of the education and public schools in the Emirate. It signed a memorandum of understanding with the Ministry of Education regarding this. The Education Council signed PPP contract with 6 private companies, 2 from UK, 2 from USA, 1 from New Zealand and 1 from Lebanon, to manage 61 public schools. It also hired an International Company to monitor those companies. The private companies will prepare new curriculum, train the school staff and it will assess the school performance and provide recommendations for the Education Council.

**M:** What are the aims of this project?

**C:** To improve the teaching delivery, to improve student performance and to strengthen the national identity and culture.

**M:** Why PPP was selected?

**C:** It is a vehicle for comprehensive changes, the government was not satisfied with the federal education outcomes, and the government wants to outsource the services.

**M:** How are the private companies paid?

**C:** By monthly management fees. It is very expensive. The Education Council will pay for the books, equipments and the new IT system. The government will pay for the infrastructure first then it will focus on the education program.

**M:** How much is the contract?

**C:** I cannot release such information, but it is very expensive.

**M:** What are the risks in the project?

**C:** The fundamental risk is that the companies do not work according to the policy; therefore we appointed the monitoring agency to ensure the quality of personnel hired by the companies.

The other risk is people' reactions regarding using western companies in a community that has Islamic and Arabic culture. The solution to that is by having more communication with the parents and explaining the advantages of the new curriculum and that we are not here to change their culture. Arabic, Islamic and social studies will remain in Arabic; we will teach science subjects and math in English and off course the English subject.

**M:** What are the values for money in this project?

**C:** Education is number 1 priority for the government and they are willing to spend money in order to get higher standard of education.

**M:** Where did the PPP project reach so far?

**C:** It is under operation at the moment. Phase 1 is completed, which includes KG schools to grade 5 Schools. Phase 2 is from grade 6 to 9, which is going on. Phase 3 is planned for next year and that will include grade 10-12.

**M:** Can you describe the tender process?

**C:** It was transparent and the scope of work was clear. The milestones for the project were first, selecting the schools for PPP, which starts in January. Second, RFP will be released in February and closes in April. Third, Contract will be finalized in June. Pre opening phase will take place in the summer starting from July, the management work will start in September. 20 companies participated in the tender and only 6 were selected. It was an open tender published in the council's web site. We selected the best companies.

**M:** What is the duration of the contract?

**C:** Three years.

**M:** How about the contract, does it include dispute resolution clauses?

**C:** It is very clear, well-known companies including legal firm prepared it. There is arbitration clause; if any dispute is not resolved it will be referred to the UAE courts. Anyhow, the companies should follow the standards, policies and roles of an international association that deals with educational PPP projects.

**M:** Does the project have political support?

**C:** Sure, the crown prince of the Emirate is the Chairman; his brother is a member of the board as well as the minister of education. There is political commitment and stable political climate. The companies are being paid well.

**M:** How is the project financed?

**C:** The government pays the private companies. They are paid 50% of the start up cost upon signing the contract and the balance 50% upon completion of the start up process,

then 30% of the annual management fees will be paid once the operation starts in September. So the initial investment required from the private companies is low.

**M:** Is there any technology transfer or innovation in the project?

**C:** I'm not sure about technology transfer, may be in IT and better facilities; but the competition between the 6 companies will lead to innovative ideas and solutions. We are assessing each company, and which ever prove their competency will win more contracts, economies of scale.

**M:** Please rank the attached success and failure factors.

**C:** Sure. (He ranked them)

**M:** Is there any thing you want to say or add?

**C:** The project is successful, but more accountability has to be established. For other Emirates cost may be an inhibitor as it is expensive process. We need to prepare an attractive agenda to persuade teachers and parents. The support of the political environment is tremendous, they visit the schools regularly.

**M:** Thank you very much.

**C:** You are welcome.

## **Appendix 5**

Interview with the Managing Director of the Waste Recycling Company in case study 5:

**M:** Good afternoon, sorry for the delay the traffic was horrible today.

**C:** Good afternoon, no problem.

**M:** Can you introduce yourself?

**C:** My name is (mentioned his name), I'm the Managing Director of the company. I have a bachelor degree in toxicology and pharmacology. I'm the CEO of the foreign private that own shares in this company.

**M:** Can you describe the project?

**C:** The project started by an Emiri Decree of His Highness the ruler of the Emirate in December 2006, in order to deal with the current environmental challenges, the solid waste; and air and water pollution in the Emirate. The project consists of constructing waste recycling facility, distributing of waste bins all over the Emirate, collection of waste and carrying out the recycling process. The company is empowered to take action regarding the environmental issues and set up the environmental policies and procedures for the municipality.

**M:** Who are the parties involved in the PPP project?

**C:** The municipality, a local private company owned by the ruling family and a foreign company. The mentioned parties established an environmental company that deals with waste recycling and they are the shareholders in the company. The company supervises the Emirate's land fill area, which is operated by a third party.

**M:** Why PPP was selected for this project?

**C:** Because it combines the private sector efficiency, flexibility and the public sector support. The government is normally heavy and slow while the private sector is quick.

We need the public support in order to get permission for distributing the recycling bins. You have to understand that to collect and then separate different waste materials like glass, paper and aluminium, from a normal rubbish bin which costs ten times more than by using a recycling bin.

**M:** What are the risks involved in the project?

**C:** Risks like changes in government may affect the project; therefore we are following the commercial law of the U.A.E. and trying to make the relationship with the government based on the contract. The company is structured as a limited liability company (LLC), which minimizes the risks on the partners. The other risk in the project is the changes in the scope of work that the government always demands. They think that the company is part of the government and they want it to carry out more works free of charge. We want to change that and explain that the company has to make profit in order to survive. We are trying to extract the business environment from the government.

**M:** What are the values for money in this project?

**C:** The government pays a small amount of money to establish an organization that will address environmental issues and focuses on efficiency and minimizes the hierarchy. It increases public awareness; PPP forms a team outside the government to address those issues allowing the government to retain its structure.

**M:** As there is no PPP law in the U.A.E, how does that affect the project?

**C:** It will not affect the project, if we need something, we will go directly to the ruler.

**M:** Who regulates the company?

**C:** The municipality is the regulatory agency.

**M:** How does the company make money?

**C:** From the sale of recycled materials. We are trying to convince the government to pay us the budgeted amount for environmental issues and infrastructure. Ads on the bins.

**M:** Does the project enjoy political support?

**C:** Yes, huge political support. We hope this continues from the ruling family.

**M:** What is the role of the foreign private company in the PPP project?

**C:** To bring suppliers, materials and consultants to the project.

**M:** How does the fluctuation in the prices affect the project?

**C:** Cost of labour will increase. It is a labour intensive business, especially on the collection. We are worried about the exchange rate as the dirham is worth more in the beginning of the project.

**M:** How was the tender process?

**C:** There was no tender process. The foreign private company has a long-standing friendship with the ruling family. It helped in identifying foreign companies to work in the Emirate. The ruling family approached the foreign company to establish the PPP project.

**M:** Is there any technology transfer in the project?

**C:** We will bring advanced recycling machines to the Emirate. We will distribute recycle bins, which are simple tools, for collecting waste; and try and educate people through campaigns on how to use them.

**M:** How about innovation?

**C:** We will have an innovative business model. We will bring technology for the disposal of tyres. It will change the tyres to garden products, children friendly products, furniture and raw materials.

**M:** Was there a thorough feasibility study?

**C:** Detailed feasibility study was done in 2006.

**M:** Is there demand on management time?

**C:** Yes, the government wants to enforce their standards on the company. We spend time fighting this and convincing them not to do that.

**M:** What is the value of the project?

**C:** 100 million USD

**M:** How is the communication between the private companies involved in the project?

**C:** It is strong and we have a long relationship.

**M:** How is the project financed?

**C:** Through the government.

**M:** Does the company have sufficient contacts and experience?

**C:** Yes, we have business experience and we are hiring the technical staff expert in the environmental issue.

**M:** How long did it take to establish the project?

**C:** June 2006 we started the project; it took six months to sign MOU with the municipality, then another six months for the capital to be paid by the government.

**M:** Please rank the attached success and failure factors.

**C:** Sure (He carried out the ranking)

**M:** Thank you very much

**C:** You are welcome and good luck with your dissertation.