

## Multiple Perspective of Public-Private Partnership Project Success: The Case of Kuwaiti Public Housing Initiative

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A Thesis Submitted to the University of Salford for the Degree of Doctor of philosophy

School of Science, Engineering and Environment The University of Salford

May, 2021

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## Acknowledgements

I would like to sincerely thank my research supervisor, Dr Mostafa Mohamad. Without his valuable advice, guidance, suggestions and support the completion of this research was not possible. I am also highly thankful to Professor. Hisham Elkady who offered his guidance and encouragement throughout my PhD study.

My appreciation goes to Dr. Yiannis Polychronakis, for his valuable feedback, support and guidance which enabled me to make further amendments in this research. I deeply appreciate his professional acumen.

I am also thankful to the examination panel for their insightful feedback so to make this thesis better.

I also would like to thank the Kuwaiti Government for sponsoring my PhD course. I must also thank all the participants of this research, without their comments, views and statements completion of this dissertation was not possible.

With all my heart, I would like to thank my parents, my wife and my children for their support and endless love. A heartfelt thanks to my younger brother who is critically ill and needs a kidney transplant. His precious words have given me the courage to finish this dissertation in the most difficult time of my life. I am indebted to my family for their understanding, patience, support, tolerance, and the sacrifices made by them during the course of my study. I dedicate this work to my younger brother.

#### **Abstract**

Increased urbanisation has led to the use of public-private partnerships (PPP) in the provision of quality housing. However, to get the desired value from PPP housing projects, close attention must be paid to the stakeholders of each project and their political-institutional rules. It is equally important to assess how the stakeholders perceive success and failure, which is an important critical success factor (CSF) in the measurement of the success of these projects. Thus, the aim of this research is to evaluate the key CSFs from the perspectives of various stakeholders in the PPP housing projects in Kuwait to determine which combination of factors has led to successful implementation.

Stakeholders' perspectives in this study are analysed using a multiple-perspective theory which by categorising perspectives into technical, organisational and personal perspectives provide the insights which are required to be integrated into the successful implementation of PPP projects in Kuwait. This research is based on qualitative methodology based on two case studies of Kuwait Authority for Partnership Projects (KAPP) and Public Authority for Housing Welfare (PAHW). This research has performed 30 semi-structured interviews and 3 focus group discussions.

Findings of both interviews and focus groups confirmed that the investment environment was the most important CSF from stakeholders' perspectives. Findings in this regard confirmed that the private sector was willing to invest in PPP projects provided that the public sector could improve the investment environment to enable PPP implementation. The second CSF which was identified via the findings of this research was the attractive project which contributed to the success of PPP housing projects as per the participants of this research. Findings confirmed that an attractive project meant a project which offered sufficient project profitability, had long-term demand for their products.

The findings of this research identified the third CSF as the reliable consortium which contributed to the success of PPP housing sector projects. Findings in this regard confirmed that a reliable consortium from public sector TOP's perspective comprised of strong and capable project teams, offered innovative and cost-effective technical solutions, had effective project organisational structures and were able to efficiently address environmental health and safety issues.

The findings of this research identified the fourth CSF as a sound financial package which contributed to the success of PPP housing sector projects. The findings of this research identified risk allocation as the fifth CSF which contributed to the success of PPP housing sector projects. The findings in this regard confirmed that optimal risk allocation was one of the underlying reasons for implementing PPP projects.

### **Chapter 1.** Introduction

#### 1.1 Area of concern

Increased urbanisation has led to the use of public-private partnerships (PPP) in the provision of quality housing (Liang & Wang, 2019). The use of PPP is increasing in the Gulf Cooperation Council (GCC) countries, particularly in Kuwait, the United Arab Emirates (UAE) and Qatar, because of diminishing oil revenues which have put increased pressures on the budgets of governments since 2015 (Alteneiji et al., 2019). As a result of increased financial strain, Kuwait, UAE, and Qatar have declared their intentions to invest in PPP to attract investment in the infrastructure sector, including in housing sector projects (Deloitte, 2016; Almarri, 2019). However, to get the desired value from PPP housing projects, close attention must be paid to the stakeholders of each project and their political-institutional rules (neo-institutionalism) (Cui et al., 2018). It is equally important to assess how the stakeholders perceive success and failure, which is an important determinant in the measurement of success of these projects (Gebrehiwet & Luo, 2017) because the stakeholders have different needs, expectations and perceptions which, if not handled well, can create conflict and dispute, thereby leading to failure (Alola, 2019). Stakeholders also have different social experiences which either lead to causality (technical thinking) or pragmatism (organisational and personal thinking) (Muhammad and Johar, 2019). Their ways of thinking may lead to different institutional rules and communication channels and differences in how best practice that may improve the usefulness of PPP projects are devised (Kivila et al., 2017).

Kuwait's strong fiscal position and its over-reliance on oil revenues have camouflaged its structural spending rigidities and have slowed implementation of priority public investment projects (Deloitte, 2016). Kuwait's possession of approximately 10% of the world's oil reserves means that it runs a trade and budget surplus (Osei-Kyei & Chan, 2017). However, it has been unsuccessful in investing its wealth in domestic infrastructure projects (Muhammad & Johar, 2019) and ranks 52<sup>nd</sup> in the

infrastructure band of the global competitiveness index which ranks investment by different countries in physical capital and infrastructure (Legatum Institute, 2019). The government and parliament have been working to address a housing shortage problem. The waiting list for housing applications at the Public Authority for Housing Welfare (PAHW) is expected to reach 174,000 by the end of 2020, a record in Kuwait's history (Bhatia, 2017). Political rivalries, poor planning, the scarcity of land for development, restrictive legislation and an entrenched bureaucracy are all blamed for the lack of infrastructure development which has led to record levels of waiting list applicants (Bhatia, 2017). It has been anticipated that PPPs would bring greater efficiency to the project, use more innovative technologies and benefit from economies of scale not available to national builders (Mouraviev and Kakabadse, 2015). PAHW would need to entice a foreign-run organisation to commit to a project to build public housing in an unfamiliar business environment to satisfy a social need (Aguinaldo, 2018). Investment in public housing is considered less prestigious than building luxury flats or a prestigious hotel, which may in part explain the low investment in public housing projects (Kavishe & Chileshe, 2019). Investment behaviours by Kuwaiti financiers suggest that the returns offered through foreign investment and the associated status and prestige of owning a foreign property have been more attractive options to investors than the construction of housing for people who do not have a lot of money to spend (Bhatia, 2017). Wealthier Kuwaitis are inclined to accept land from the state and use their loans to build their own houses (Aguinaldo, 2018).

Kuwait's relatively small population means that indigenous construction firms cannot benefit from economies of scale, as they do not have the repository of construction skills for large scale operations (Sattout & Batwala, 2019). Thus, one motive for using PPP in Kuwait is to improve private construction by foreign companies who have the requisite expertise and skills in construction and property management, which may help in building and improving the quality of housing projects which may not be solely achieved by indigenous construction companies in Kuwait (Sattout & Batwala, 2019). Where there are budgetary restrictions, PPP have the ability to raise additional

finances, which is one reason for the increase in PPP housing sector projects (Al-Saadi & Abdou, 2016). PPP has some advantages, including making the best use of private sector operational efficiencies to reduce cost, increasing quality and speeding up infrastructure development (European Commission, 2003; Muhammad & Johar, 2019). A major advantage lies in using resources from the private sector to alleviate some of the financial burdens of the government (Chan et al., 2010; Gao, 2018).

A great variety of individuals and organisations are engaged in PPP construction projects in one way or another (Hueskes et al., 2017). Individuals and their worldviews are innately different and change throughout different phases of a project (Moura & Teixeira, 2010). A lot of conflicts of interest arise among stakeholders in the construction projects, which are required to be successfully managed in order to reduce conflicting stakeholder stances and handle resistance to change in the projects (Shah & Harris, 2010; Morano & Tajani, 2017). Many projects are multidimensional in terms of cultures, organisations and social environments (Aaltonen et al., 2008; Alford & O'Flynn, 2012; Osei-Kyei & Chan, 2017). Thus, stakeholder management is essential in housing projects as these projects are executed in demanding and unpredictable institutional environments involving diverse actors who are affected by and attempt to influence a project (Aaltonen et al., 2008; Kang et al., 2019).

PPP projects must be evaluated from a social perspective because of their effect on the heterogeneous stakeholders (Chinyio & Akintoye, 2008). Deliberate stakeholder management can maximise the value of a project while taking everyone's concerns and needs into consideration (Olander, 2006). In PPP projects, this is done by private investors who establish a special-purpose company (SPC) which is granted permission to run a public business specified in a concession agreement, and to work with external stakeholders otherwise managed by the public client (Babatunde & Perera, 2017). Other stakeholders affected by PPP projects are the users, their representative unions, landowners and neighbours, local communities, businesses, statutory bodies, the media, the natural environment and its advocates such as environmentalists, as well as the general public (Babatunde & Perera, 2017). Thus, it

is important to understand the perspectives of various stakeholders that shape and govern the PPP projects, which is one of the reasons for this research.

It is important to conduct effective stakeholder management in the PPP projects in Kuwait because one reason attributed to the low performance of few PPP housing projects has been that various stakeholders and how their varying perspectives affect the quality of projects has not been taken into consideration (Custos and Reitz, 2010). Thus, it is important to evaluate stakeholders' perspectives, as they can be influential in resolving conflicts among stakeholders, which can also improve the performance of PPP projects (Mladenovic et al., 2013). Osei-Kyei and Chan (2015) also confirm that the lifecycles of PPP housing projects can be improved by maintaining good stakeholder relationships. The lifecycle of PPP housing projects is made up of five stages (Hodge et al., 2010). The first stage is the identification and selection of the PPP project. The second is conducting due diligence, which is a process to ensure that the chosen project is well designed and can be successfully implemented (Hodge et al., 2010). The third involves procurement, comprised of the bidding process and analysis of the bidding process to ensure transparency (Hodge et al., 2010). The fourth involves awarding contracts and provides information on dealing with the chosen bidder. The fifth stage involves contract management, which involves dealing with the construction and implementation of PPP housing projects (Hodge et al., 2010).

Jergeas et al. (2000) and Hartmann (2002) suggest that successful relationships between the project and its stakeholders are important for the successful delivery of projects and for meeting stakeholder expectations. It is important to build and maintain trust and commitment among stakeholders through effective relationship management (Bourne, 2005; Karlsen et al., 2008). According to Freeman (1984), the dynamics of the stakeholders should be acknowledged, as these affect the efficiency, efficacy and effectiveness of projects. Stakeholder dynamics represent an important part of PPP project management and are a very interesting stakeholder concept (Elias et al., 2002). The problems facing effective stakeholder management are how to identify suitable stakeholders, how to analyse their

needs, how to determine how they affect projects, the relationships which they have and the possible implications of these relationships (Ward & Chapman, 2008).

Thus, the underlying rationale of conducting this research is that effective management of stakeholders in PPP housing projects is vital for the effective and efficient functioning of these projects, and must be understood (Ward & Chapman, 2008). According to Yong (2010), effective stakeholder management in PPP projects involves extensive consultation with stakeholders in decision-making processes, which is important in avoiding conflicts in PPP (United Nations Development Programme-UNDP, 2017). According to Osei-Kyei and Chan (2015), stakeholder consultation does not denote the inclusion of just the main project participants, i.e. public and private sectors, but also other external parties such as civil society, users of projects, trade unions and political parties in opposition. These aspects are relevant to this study, as it seeks to analyse how the stakeholder consultation process is performed in the PPP housing projects in Kuwait, the extent such consultation has been successful in identifying the needs and expectations of various stakeholders and how this consultation and management of stakeholders has affected the quality of PPP housing projects in Kuwait.

Another aspect of this research is that there are critical success factors (CSFs), which are defined as those key areas of activity in which favourable results are absolutely essential, and organisations should focus on these factors to successfully accomplish a project (Rowlinson & McDermott, 1999). These must be evaluated to effectively manage PPP projects (Jacobson & Choi, 2008). According to Abdul-Aziz (2010), there are 15 key CSFs in PPP housing projects: action against an unethical developer; vigorous and clear agreement; a credible developer; constant communication among stakeholders; accountability for developers' profit-sharing; social accountability of developers; housing demand of buyers; negotiation skills; competent staff to negotiate; accurate projection; competition; adequate time to analyse proposal; political impact; constant monitoring; and compatibility between stakeholders. Thus, constant communication and compatibility between stakeholders are some of the effective CSFs which affect the quality of PPP housing projects.

There is an extensive amount of existing literature which identifies key CSFs in PPP housing projects (Jefferies, 2006; Jacobson & Choi, 2008; Jooste et al., 2011; Abdul-Aziz & Kassim, 2011; Ismail, 2013; Sabry, 2015; Osei-kyei & Chan, 2017; Kang et al., 2019). However, an important CSF is the stakeholders' relationship. Their management, communication and perspectives, which collectively affect the efficiency, efficacy and effectiveness of PPP housing, is an area not adequately addressed in existing literature (Ismail, 2013; Alteneiji et al., 2019). This research attempts to address this gap by identifying the key CSFs from the perspectives of various stakeholders in PPP housing projects which determine their success.

## 1.2 Aim and objectives of the research

The aim of this research is to evaluate the key CSFs from the perspectives of various stakeholders in the PPP housing projects in Kuwait to determine which combination of factors has led to successful implementation.

To achieve this aim, the following objectives have been set:

- To undertake a comprehensive critical review of literature so to identify the key CSFs in the housing sector projects. This objective is addressed in Chapter 2.
- To define and draw the theoretical framework of this research that includes multiple
  perspective of stakeholders in PPP housing sector projects. This objective is addressed in
  Chapter 3.
- To identify the key CSFs from stakeholders' perspectives (by conducting semi-structured interviews) which contribute to the success of PPP housing sector projects. This objective is addressed in Chapter 5.
- To evaluate the operationalisation of final framework by conducting three focus group discussions so to offer a tactical guide on how to manage PPP projects successfully. This

objective is addressed in Chapter 6.

## 1.3 Research question

Linstone (1989) argues that three main perspectives of technical, organisational and personal perspectives provide an opportunity to analyse the various perspectives of stakeholders in a project. According to Mohamad et al. (2015), it is important to analyse multiple perspectives of various stakeholders in PPP projects by mapping their differing viewpoints, which may help to identify potential problems and to generate the most suitable solutions that may improve the quality of PPP projects. Multiple perspectives theory, which refers to different representations, roles and viewpoints of individuals (Linstone,1989), offers an opportunity to identify the problems and corrective solutions that collectively determine the success of PPP housing projects (Mohamad et al., 2015). Hence, Multiple Perspectives Theory can offer the relevant insight to help understand the perspectives of various stakeholders to better understand the development of PPP housing projects in Kuwait. Thus, the following research question is answered in this study:

**RQ1:** To what extent can multiple perspectives theory help understand the development of PPP in Kuwait's Public Housing Projects?

To answer this research question, two sub-research questions that are linked are set for this research.

**Sub-RQ1:** What are the key Critical Success Factors (CSFs) in the PPP housing projects in Kuwait?

**Sub-RQ2:** How are the CSFs perceived (technically, organisationally, or personally) by the key stakeholders in PPP housing projects in Kuwait?

## 1.4 Scope of the study

The scope of this study is specific to the points below in an attempt to provide context based on the aims and objectives of this research.

- This study focuses on specific types of projects public housing projects under the PPP model.
- 2. The data was obtained from interviews targeting a variety of PPP stakeholders, including government officials appointed in housing departments and private-sector investors in Kuwait. The interviews included a variety of individuals from different backgrounds with different agendas and sometimes conflicting interests who will help expose and therefore minimise bias (Ng et al., 2012).
- 3. Many factors and criteria contribute to the effective implementation of PPP. However, this research is limited to stakeholders-related factors and criteria.
- 4. To meet the complexity of PPP, the research analyses the needs and expectations of the main stakeholders at different stages of the process. These include managing directors, engineers, managers, administrators, technical staff and end-users who are the members of the general public.
- 5. This research is limited to large scale housing projects operated by Kuwaiti government departments such as PAHW and the Kuwait Authority for Partnership Projects (KAPP).

#### 1.5 Research issues

The implementation of a PPP requires a lot of time and significant resources, but it is the preferred mechanism for many governments for providing efficient public services in fields such as healthcare, education, agriculture, housing, construction and transport (Yang et al, 2009). However, there are examples of failed attempts to implement PPP due to uncontrolled and unforeseen factors. For

example, the Al-Zour North Independent Water and Power Project (IWPP) in Kuwait failed due to the absence of clear risk-sharing arrangements and did a contingency plan for emergencies (Sattout & Batwala, 2019). The Mafraq-Ghweifat Highway project in Abu Dhabi in the UAE failed due to lack of alignment of stakeholders, as not all stakeholders were taken into confidence. They were not educated about the specifications of the project, and the project had unclear objectives (Alteneiji et al, 2019). The purpose of this study is to identify problems and factors related to the application of PPP in the housing sector. Its practical goal is to find solutions to these common problems. There are several identified stakeholders relevant to this research. These are engineers, managing directors, chief executive officers, managers, administrators, technical staff in the two case-study companies and endusers such as members of the general public using facilities provided by the housing projects.

## 1.6 Research motivation and significance

The concept of a private-public partnership is very complex, as various interest groups are involved and their interests are sometimes in conflict (Osei-kyei & Chan, 2017). The costs of PPP projects are usually higher than those of public and private sector projects as a result of conflicts that arise among stakeholders regarding managing and sharing risk (Kang et al., 2019). It is, therefore, important to devise mechanisms to share risk among stakeholders in an equitable manner so that conflicts between them may be reduced (Kang et al., 2019). The aim of this research is to analyse CSFs of PPP projects, to inform KAPP and PAHW about it and to contribute to their improved operations. Decision-makers such as managing directors, chief executive officers, managers and project managers in Kuwait will be better informed about factors that contribute to the success of PPP projects. The use of multiple perspective theory in this research may provide better insight into the different perspectives of various stakeholders in KAPP and PAHW so as to better understand the process of project development in these projects from their perspectives. The KAPP and PAHW will use the research findings to develop evidence- and theory-based strategies for the future development of PPP housing projects. Hence, the

contribution of the study will be both theoretical and practical. Theoretically, the study aims to provide a framework for the KAPP and PAHW to approach PPP in the housing sector. From a practical point of view, the expected outcome of the study is to inform the KAPP and PAHW about the factors that impact PPP, in particular by providing perceptions and expectations of different stakeholders.

This research responds to the accelerating interest of Kuwaiti officials and policymakers of the housing sector in successfully developing and implementing PPP projects, as there is a very limited understanding of the main issues which impact the successful implementation of PPP in the housing sector (Sattout & Batwala, 2019). Accordingly, this study aims to address these issues which impact the successful implementation of PPP projects from the stakeholders' perspective by applying the multiple perspectives theory. Among the expected study's outcomes, one is to prepare for the KAPP and PAHW a comprehensive list and explanation of factors that impact PPP in the housing sector. This is done through the comprehensive theoretical framework developed by the author. Finally, both PAHW and KAPP will use the findings, outcomes, and theoretical framework to successfully carry out PPP in the Kuwaiti public sector.

## 1.7 Research justification

As was already underlined, PPP projects are highly complex, especially due to a high number of involved stakeholders, a great number of resources required for the successful implementation, and insufficiently developed mechanisms for risk-sharing. Carrying out such projects requires extensive negotiations between diverse institutions, including financial institutions, state authorities and commercial practitioners. All have their own financial and legal advisors. As a consequence, transaction costs and procurement timetables are much higher and more complicated than in regular procurement options. The complexity of the PPP lies in the variety of stakeholders whose needs and expectations must be considered and reconciled, which are sometimes conflicting (UNDP, 2017). In this particular case are not limited to KAPP and PAHW, but include public institutes, governmental

departments and non-profit organisations have their stake and role in the development and implementation of a successful project (El-Gohary et al., 2006; Liu et al., 2016).

According to the literature (Zou et al., 2014; Ameyaw & Chan, 2016; Hwang et al., 2013; Gao, 2018), there are various areas in which government and public parties play their role in successful PPP implementation. Their cooperation includes contractual guarantees, government support (Cheung et al., 2012), appropriate allocation of sufficient resources for the project (Bhatia, 2017), government guarantees and sponsorships (Yuan et al., 2010) and preparation of a financial, fiscal framework to include tax reduction. Nevertheless, it is significant to underline that the roles of the government and the depth of its involvement are not the same in all countries (Ismail, 2013). This research evaluates the interest of Kuwaiti government officials in the PPP projects by conducting interviews, in order to analyse how well-informed these officials are in making decisions related to the procurement, delivery and implementation of PPP projects.

Currently, there is a lack of research (Ismail, 2013; Alteneiji et al., 2019) on the key factors that determine the success of PPP from the perspective of various stakeholder groups in the context of Kuwait (Sattout and Batwala, 2019). Hence, the aim of this research is to close this gap. In particular, the main PPP authorities, in this case, KAPP and PAHW, are in a situation of pressing need to obtain theoretical knowledge and practical guidelines to carry out the implementation professionally and efficiently, and to supervise the roles and activities of other involved stakeholders. This study is, therefore, conducted on KAPP and PAHW. The goals of this research are to provide these two casestudy organisations with a necessary theoretical framework and with practical guidelines so as to improve the development and implementation of PPP housing projects in Kuwait.

## 1.8 Overview of research methodology

This study included three phases of primary data collection to design a framework for PPP public housing projects, the operationalisation of such a framework, and its evaluation. This study used the

research strategy of building theory from the two cases of KAPP and PAHW. According to Eisenhardt and Graebner (2007), using case studies to develop theories about research topics generates fresh theories that make clear connection from extensive qualitative evidence to typical deductive research and thus enable people to generate rich interpretations which may be useful in addressing underlying research problems. Moreover, it is important to decide on an adequate research methodology in order to approach the phenomenon in question adequately and to precisely answer the research questions and obtain reliable findings and outcomes. In Chapter 4, the research methodology is presented and discussed in detail. However, this section provides a brief overview of the methodology selected. The philosophical approach was interpretative, while qualitative research methods were used. More precisely, it was decided that the method of case studies was most appropriate to explore the topic of various stakeholders' views of PPP. Accordingly, the researcher carried out two case studies, 30 semi-structured interviews, and three focus groups, which were recorded and later transcribed. All respondents verified their interviews.

The qualitative approach was chosen due to its flexibility and its appropriateness for obtaining the perceptions and thoughts of individuals. Here, the importance of using this approach was that it enabled the researcher to collect information from the point of view of insiders and their perspectives on various past and current events, which helped in answering the research question of this study.

Since the objective of this research was to obtain, explore, and interpret in-depth information about the selected phenomenon, i.e., PPP housing projects in Kuwait, qualitative methods were used to make sense of events and investigate the meanings that participants of this research attached to these events. The selected research strategy was an interpretive case study approach for carrying out in-depth research on KAPP and PAHW, two central authorities in the PPP in the housing sector in Kuwait. By

conducting these two case studies, the researcher explored both the challenges and the factors that

contribute to the success of the current PPPs in Kuwait.

Twenty-seven semi-structured interviews and three focus groups were used to obtain the primary data, whereas the secondary data was collected by analysing documentation and archives. The respondents of this research were members of various stakeholder groups, including end-users (members of the general public), managing directors, chief executive officers, managers, project managers, administrative and technical departments of KAPP and PAHW who reflected multiple perspectives of the phenomenon of PPP housing sector projects. The interviews included flexible, open-ended questions that allowed respondents to express their own concerns and to discuss the issues which they considered relevant in developing PPP housing sector projects. The template analysis was used to analyse the data.

To sum up, the purpose of the research, via two case studies of KAPP and PAHW, was to explore in depth the current PPP projects in which both PAHW and KAPP were involved, in order to obtain viewpoints of stakeholders in these two case study organisations, with the eventual aim of developing and improving the implementation of PPP housing sector projects in Kuwait.

#### 1.9 Structure of the thesis

This thesis comprises seven chapters.

Chapter 1 – Introduction

This chapter introduces the research topic and illustrated the importance of the research focus and its domain. It explains the research background, its aims and objectives, the research questions and the work undertaken to achieve the objectives. It also discusses the scope of the research study.

Chapter 2 – Literature review

The purpose of this chapter is to present literature review in relation to PPP in housing projects and to evaluate key CSFs of PPP in housing projects from stakeholders' perspectives. Firstly, this chapter reviews the literature in relation to PPPs by evaluating the definition, forms, structure, benefits and challenges of PPPs. Secondly, this chapter presents discussion on key stakeholders of PPP housing

projects. Thirdly, this chapter analyses the CSFs from stakeholders' perspectives in housing projects. Lastly, the research gap is presented in light of review of literature which form the basis to construct the theoretical framework of this research in Chapter 3.

#### Chapter 3 – Theoretical framework

This chapter introduces and discusses the main theoretical approaches that were used to construct the theoretical framework of this research. This chapter reviews stakeholder theory, neo-institutionalism theory and the multiple perspectives approach, and explains their relevance to the research project.

#### Chapter 4 – Research methodology

This chapter discusses the selected research philosophy and associated research methodology. It explains why the case study approach was chosen to study KAPP and PAHW. It also explains procedures for carrying out in-depth, semi-structured interviews and focus groups and the selection process of the respondents and their characteristics. The chapter provides a rationale for choosing primary data collection techniques, namely, in-depth, semi-structured interviews, and focus groups. It also explains procedures for the review and analysis of secondary data, which, in this case, was a documentation review. This chapter also explains how research sites were chosen and the protocol used to conduct interviews and focus groups. Concerning the data analysis, the researcher performed template analysis, a special form of thematic analysis (Clarke & Braun, 2006). This form of analysis uses hierarchical coding to deal with the large amount of information obtained through semi-structured interviews. Hence, the researcher developed a coding template to make sense of the data. The use of the template analysis was justified as it enabled the researcher to prepare an extensive list of factors that contributed to the success of PPP in the housing sector in Kuwait.

#### Chapter 5 – Findings & Analysis

This chapter provides findings obtained from 30 semi-structured interviews so to identify the key CSFs from stakeholders' perspectives the fieldwork. Five main themes have emerged from the findings and key CSFs in light of these findings are identified as investment environment, financial package,

reliable consortium, attractive projects and risk allocation. These findings are analysed in light of the literature review to determine the extent to which the findings of this research corresponded or disagreed with the key arguments presented in the existing literature.

#### Chapter 6 – Framework operationalisation

This chapter constructs a detailed guideline for stakeholders' CSFs by conducting 3 focus group discussions. It offers a manual for each stakeholder group on procedural daily routines and policies to be followed to develop a successful PPP public housing project.

#### Chapter 7 – Conclusions

In the last chapter, the major findings are briefly summarised. Next, this chapter presents how objectives of this research are achieved. In addition, the chapter also explains the limitations of the study design and methodology. It presents both theoretical and practical contributions to the study. Finally, this chapter provides suggestions for future research.

### **Chapter 2.** Literature Review

#### 2.1 Introduction

The purpose of this chapter is to present a literature review in relation to PPPs in housing projects and to evaluate their key CSFs from stakeholders' perspectives. The need to ensure affordable housing for all and the problem of reducing the housing deficit has resulted in increased support for effective partnerships as a tool which could increase the existing provision of affordable housing delivery in the GCC region, including Kuwait (Alteneiji et al., 2019). Nonetheless, there is no consensus on the specific form of partnership which is best suited to the delivery of affordable housing delivery in Kuwait (Bohsali et al., 2014). The word 'partnership' implies that more than one sector is involved in provision of products and services and this involves government and a non-profit or for-profit partnership (Draxler, 2008). One argument is that affordable housing in the GCC region can be implemented via PPP projects (Deloitte, 2018). According to Moskalyk (2011), the advantage of using PPP in housing projects is that the private sector is fully engaged to provide an affordable housing from the initiation to completion and implementation of projects which provides the public sector an opportunity to take advantage from the expertise of the private sector to improve the efficiency and effectiveness of projects.

In Kuwait, PPPs in housing projects have been adopted for two main reasons (Sattout & Batwala, 2019). One reason is to provide affordable quality housing to citizens, so a greater sense of prosperity is nurtured among citizens. The other is to ensure the involvement of local companies and Kuwaiti nationals in housing projects to ensure that local companies have a strong hold on the housing sector and can contribute towards the commercial and economic development of Kuwait (Sattout & Batwala, 2019).

Other reasons for adopting PPPs in housing sector projects in Kuwait are the demands of increasing

urbanisation, ageing infrastructure which requires rehabilitation, the need to expand networks to new populations and the attempt to reach previously unserved or underserved areas (UNESCAP, 2017). The limited financial capacity of the Kuwaiti government to successfully fund various housing projects has encouraged the increased participation of private sector companies to deliver housing projects via PPPs (Deloitte, 2018). Thus, PPPs bridge the gap in investment and offer project management benefits such as efficient project design, alignment of operations, timely delivery and increased use of modern technology which can improve the quality of housing projects (UNESCAP, 2017).

PPPs are increasingly being used in both developed and developing countries in housing sector projects and the literature also highlights the identification of CSFs key to successful implementation (Almarri, 2019). Alola (2019) argue that successful implementation of PPP depends on in identifying the CSFs from the stakeholders' perspectives as evaluation of CSFs, which may provide a richer and more practical knowledge of those CSFs.

The aim of this literature review is therefore four-fold. Firstly, it reviews the literature on PPPs, evaluating their definition, form, benefits and challenges. Secondly, it discusses key stakeholders of PPP housing projects. Thirdly, it analyses the CSFs from these stakeholders' perspectives. Lastly, the research gap in light of review of literature is highlighted which has formed the basis to construct the theoretical framework of this research in the following chapter.

## 2.2 The public-private partnership

There is no universally agreed definition of PPP as the literature suggests that there is no clear distinction between public and private spheres and some authors such as Phang (2016) and Kang et al. (2019) argue that, since the public and private sectors are amalgamating, so strategic management in the public and private sectors is more alike than different. Other scholars argue the significance of the public-private distinction (Hodge et al., 2010). Nonetheless, it is the notion of growing interdependence between various public and private sector organisations which forms the basic concept

of PPP (Reeves, 2013). This notion of increased interdependence has blurred the distinction between the public and private sectors (Reeves, 2013). PPPs are generally defined as a vehicle for combining the resources of both sectors, are an amalgamation of organisational arrangement having the characteristics of both (Wettenhall, 2010). A similar definition is provided by the United Nations Economic Commission for Europe- UNECE (2014) which defines the PPP as:

'Any collaboration between public bodies, such as local authorities or central government and private companies tend to be referred to a public-private partnership (PPP)'.

This definition is relevant within the context of this research as government in Kuwait is unable to provide affordable housing to all citizens and the underlying premise for developing and implementing PPPs in the housing sector is to combine resources of government and private housing companies to provide quality and affordable housing for Kuwaiti citizens (Al-Saadi & Abdou, 2016). Another definition from the PPP Knowledge Lab of the World Bank Group is:

'A long-term contract between a private party and a government entity, for providing a public asset or service, in which the private party bears significant risk and management responsibility and remuneration is linked to performance. PPP (Public Private Partnership) is the general term for partnerships which involve everything from operating facilities and providing services on behalf of the public, to flexible methods of financing these services (The Government of UK, 2013).'

The significance of this definition is that an underlying reason for PPP collaborations in Kuwait's housing sector is to transfer significant risk to the private companies, which remain responsible for operations, managem

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ent and providing services. As a result, the Kuwaiti government is more inclined to using PPP as a means to finance housing sector projects (Sattout & Batwala, 2019). The risk-sharing and ability to mitigate risk in an equitable manner reduces conflicts among stakeholders, which are considered one of the key CSFs. This strengthens relationships which are vital in providing quality housing projects via PPPs (Almarri, 2019). Another useful definition of PPP is provided by the United Nations Economic Commission for Europe (2017) as:

'PPPs involve concessions or other contractual arrangements with public bodies (federal,

state or local) whereby the private sector makes a service available to the general public. The projects also must share risk between the partners. The best formula for sharing risk is that risk is allocated to the party which is best able to manage and therefore minimise, the cost of risks. The need to utilise private sector management and expertise, not only the capability of raising finance, is also common (United Nations Economic Commission for Europe, 2017).'

This definition is relevant for this research as private sector companies in Kuwait take responsibility for providing housing services to the citizens and since the private sector has a larger budget than the public sector to finance housing projects, it is the main party to bear risk in such projects. As a result, the general perception in Kuwait is that PPPs are used as a means to raise finance and to reduce costs (Abdul-Aziz, 2010). In Kuwait, PPPs are also used to capitalise on the expertise and capabilities of the private sector, which handles the design, development, financing, maintenance and operation of the housing over a long period, with payment from the public sector or end-user for the services provided (Almarri, 2019). This research recognises the unique attributes of PPP as the distribution of risk and responsibility, including ownership, to build asset conceptualisation and to obtain adequate funding and above all to reap benefits from the expertise and resources of the private sector (Burger & Hawkesworth, 2011; Muhammad & Johar, 2019).

### 2.2.1 History of PPPs

The notion of PPP initially generated in the UK and was the first country to develop the concept for public service projects. It was about partnering with the private sector to bring about the delivery of efficient, cost-effective and measurable public services within modern facilities and minimising the financial risk (Grimsey & Lewis, 2007). PPPs were established to offer innovative and entrepreneurial approaches to ensure the provision of services, infrastructures and facilities (Hodge et al, 2010). Furthermore, creating strong partnerships has to do with the movement of service delivery away from a

project-by-project approach to one which includes strategies and policy development plans; this is why PPPs were introduced (Karim, 2011).

Initially, the concept of PPP was introduced in the UK by John Major's 1992 Conservative government, in what then was termed a 'private finance initiative', when the UK government contracted with the private sector to finance, operate and build the public services and infrastructure for long-term projects of almost 30 years (Tieman, 2003). Soon after its inception, PPP had become the desired mechanism for governments in many countries for providing more effective and efficient public services in different fields such as transport, construction, housing, water, education and health (Yang et al, 2009). For instance, PPP agreements are approximately 14% of the UK government's total capital investment in public services annually and in 2006, 794 PPP deals had been signed for a value of more than £50 billion (National Audit Office, 2008). The most noticeable PPP investments in the UK have been in the health industry with more than 70% of projects in this category (Fabre and Straub, 2019).

Following the UK example, PPP initiatives have been undertaken in many other countries such as Australia, Canada, USA, Germany, France and many other parts of the world including developed and developing countries (Alteneiji et al., 2019). Figure 1 below represents the increasing trend in European PPP projects between 1999 and 2009. In the first 15 years (i.e. 1990-2004), more than 50% of the PPP projects were initiated in the UK with the pattern changing after 2004 when the concept was expanded in other European countries (EIB, 2010). Figure 2 below presents a country breakdown by value and number of PPP projects in 2018 (EIB, 2018).

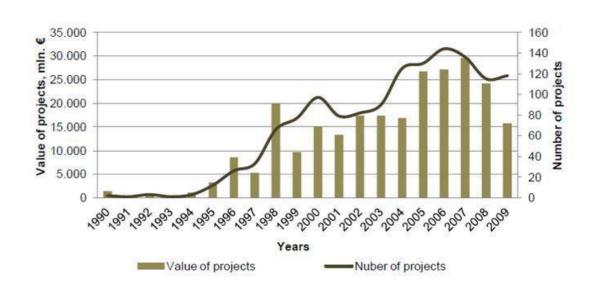


Figure 1 European PPP trend (1990 - 2009) (EIB, 2010)

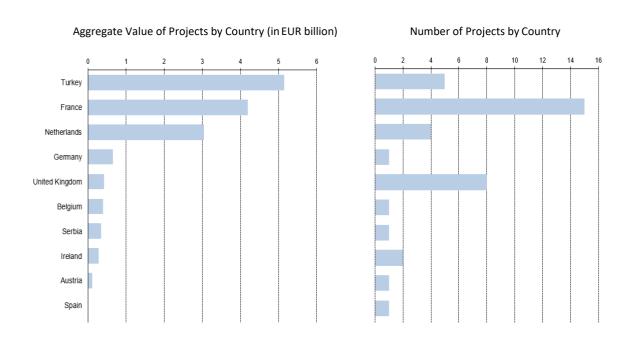


Figure 2 Country breakdown by value and number of PPP projects in 2018 (EIB,2018)

As illustrated in Figure 2, Turkey was the largest PPP market in Europe in terms of value with a total of EUR 5.1 billion in 2017 and France was the largest in terms of number of projects, with 15 deals closed in 2017 (EIB, 2018). Moreover, Figure 2 also shows the number of concluded PPP projects in 2017, 5 countries (UK, Ireland, France, Netherlands and Turkey) closed at least two PPP deals and 10 countries (UK, Ireland, France, Netherlands, Germany, Belgium, Serbia, Austria, Turkey and Spain) closed at least one PPP transaction in 2017 (EIB, 2018).

Privatisation has been the basis of most PPP projects in the UK, including the housing sector, and for some years the private sector has been providing funds to supplement public funding in the housing projects of the social sector (EIB, 2018). Since 1988, the Housing Corporation has been dependent on

private financing to supplement public capital subsidies to fund housing association construction programmes by targeting financial institutions or by encouraging a consortium of interested private investors to provide money directly from capital markets (Lomax, 1996; Brookings Institute, 2014). The introduction of a Housing Private Finance Initiative (PFI) in the UK was reported by the Office of the Deputy Prime Minister in 2003 (Hodge et al. 2010). PFI is a method introduced by the government to encourage partnerships between the private and public sectors. It is argued that the advantage of using PFI is that the financial risk of a housing project over-running is successfully transferred from the public to the private sector (Hodge et al., 2010). In addition to this, it is argued that PFI has become a popular form of housing initiative in the UK because it provides financial incentives to builders to improve the quality of their work, as they are responsible for maintenance of houses after construction (Davies, 2019). It is also suggested that the use of housing PFI in the UK increased due to increased investment in social housing, which brought vital improvements in housing conditions and maximised the value of public money through the transfer of associated risk from the public to the private sector (Davies, 2019).

Akbiyikli & Eaton (2008) have suggested that PFI is a subset partnership of PPP, which is typically a generic term utilised for all partnerships involving construction. The explanation provided by HM Treasury (2008) supports this by suggesting that PPP is an advanced PFI version to satisfy the needs of the host government. Just like PPP, the public sector is involved as a service or product purchaser, directly from the private sector for a particular time, typically long-term with existing mechanisms of payment (Saussier, 2013). Furthermore, PFI is also perceived as a financial scheme in which private investment changes the traditional provision of funds for the procurements of traditional construction delivered by the public sector to offer affordable housing, as indicated by the World Bank (2015). This aspect of housing PFI is relevant for this research as the aim here is to determine how privatisation has offered affordable housing in Kuwait from the viewpoints of stakeholders and whether these stakeholders view the sharing of risk in housing sector projects as equitable and as a means to align all

stakeholders (Alteneiji et al., 2019). It is therefore important to identify the stakeholders of PPP.

#### 2.2.2 Stakeholders of PPPs

According to the Asian Development Bank (2006), the stakeholders of PPP may be public partners, private partners, nongovernment organisations<sup>1</sup> (NGOs) or community-based organisations<sup>2</sup> (CBOs). This division of stakeholders highlights the underlying mission of organisations in terms of whether they intend to produce value only for stakeholders in financial terms or whether their mission is to create value for society at large (Ram & Corkindale, 2014). Thomson and Perry (2006) argue that underlying mission of organisations whether they are run for profit or not determines their behaviour in partnerships and when the mission of an individual partner organisation does not correspond with the partnership goals, it becomes a source of conflict. The underlying mission of organisations is the basis on which relationships among stakeholders are nurtured and the organisational mission can also be used to communicate shared values among stakeholders, so conflicts are not generated among the stakeholders regarding developing compatibility with the organisational mission (Babatunde, 2015). This aspect of taking into consideration the organisational mission is particularly important for this research, as public partners such as public sector housing authorities, concessionaries, local councils, banks, NGOs such as environment protection agencies and CBOs such as organisations striving to provide affordable and equitable housing to all residents in Kuwait are all involved in this research as key stakeholders. Since these stakeholders have different organisational missions, keeping in view their for-profit and not-for profit motives, the research has specifically evaluated how differences among stakeholders with their different organisational missions has resulted in conflicts, and which preventive actions are in place to minimise such conflicts. Reduced conflicts between stakeholders of PPPs are

<sup>1</sup> NGOs are non-profit organisations which operate independently of any government and their primary objective is to serve a social, political or any other communal cause (Chen, 2010).

<sup>&</sup>lt;sup>2</sup> CBOs are non-profit organisations that work at a local level to improve life for communities and their objective is to develop fairness across community in all streams from healthcare, education, basic amenities of life such as food, shelter, clothing, access to spaces and information for the less-abled individuals (Cheung et al., 2012).

one CSF which positively affect the perceptions of stakeholders (Sabry, 2015).

The public partners in a PPP are government entities, including ministries, departments, municipalities and state-owned enterprises (Jacobson & Choi, 2008), and the private partners consist of local or international consortia and may include businesses or investors with technical or financial expertise and experience necessary to the project, contractors and consultants (Babatunde & Perera, 2017). Kang et al. (2019) argue that the private contracting party comes together with the public element represented by the government as the principal stakeholder in a PPP project. Thus, it could be inferred that private contracting parties have the mission to serve the public interest in a PPP project (Kang et al., 2019), however a more likely explanation is that they have their own financial goals and may compromise on serving the public interest which may affect the relationships among stakeholders and resultant quality of PPP projects (Babatunde, 2015).

The private element in a PPP project includes the construction supervisor and inspectors, engineers, architects, financial investors and construction contractors. Chan et al. (2010) argue that the involvement of private party is integral to the success of a PPP project as its involvement improves coordination and leadership, managerial competence and organisational structure (Steijn et al., 2011). Improved coordination between stakeholders results in improved communication and flow of information which is also an important CSF that positively affects stakeholders' perceptions (Mouraviev & Kakabadse, 2015). Another advantage of using a private party in a PPP is the skills and competencies it brings which can be vital in developing and improving the design of housing projects as the private party has the benefit of strong organisational and financial expertise which improves the quality of PPP projects (Chan et al., 2010). The strong organisational and financial expertise is an important CSF as lack of a budget and inadequate skills and competencies of project teams can create tensions between stakeholders in various phases of projects from inception, design, development till implementation and regular maintenance (World Economic Forum, 2017).

This aspect of private parties in providing financial and organisational expertise is particularly

important for this research, as the empirical part of this research has analysed whether the financial and organisational expertise of private parties in PPP housing projects in Kuwait is adequate and how this expertise has contributed towards the positive perception of PPPs among the stakeholders. End-users, which are the users of housing projects including the general public, are also key stakeholders for whom PPP projects are undertaken (World Economic Forum, 2017). It is important to correctly identify the external and internal stakeholders as incorrect identification or not including them all in the consultation process may result in resistance and can affect the perceptions of stakeholders (OECD, 2015). The external stakeholders of PPP projects include banks, investment firms, government, government agencies (local councils, state or federal government, state monitoring and regulatory agencies and political parties) trade unions, public service users, the general public and NGOs (APMG, 2019). The internal stakeholders are all the public sector's officers and employees who are directly or indirectly associated with the project cycle at every stage, from design to final implementation (APMG, 2019). This aspect of identification of internal and external stakeholders is important for this research as timely identification of stakeholders and communication with them as part of this study has provided insight in the empirical part of this research how gaining stakeholders' support via their correct identification and developing effective communication with them (Kang et al., 2019). Preventing delays in the project by effective identification and management of stakeholders is an important CSF which can positively affect stakeholders' perceptions (Kang et al., 2019).

#### 2.3 Forms of PPP

PPPs are comprised of an array of partnership arrangements classified on the basis of the risk allocation in a partnership agreement, the degree of the participation of the parties or groups (stakeholders) and the ownership and responsibilities of the given project (HM Treasury, 2008). There is no exclusive preferred arrangement of partnership applicable to every project (EIB, 2018), and so the projects studied in this research may have varied partnership arrangements as against having a standard

PPP structure, as a result of which the needs and expectations of all stakeholders should be identified so as to develop positive perceptions among the stakeholders about the structure of PPPs. As a flexible form of PPP offers a lean structure which results in mutual decision making, this is one CSF which also positively affects stakeholders' perceptions and developing good governance (Muhammad & Johar, 2019). The partnership arrangements' application also decides the forms of PPPs governance (Kang et al., 2019). It relies on the specific needs, how suitable the particular project developments are and the requirements of the particular model which is designed with its own strengths and weaknesses (Osei-Kyei & Chan, 2017). Various PPP partnership arrangements are built with different goals, and those which can provide maximum benefits to all stakeholders and serve the public interest via timely and quality delivery of PPP housing projects are considered effective (Reeves, 2013). Table 1 illustrates various forms of PPP. Wang et al. (2012) argue that, although there are various forms of PPP, the contractual method is the same for all.

Table 1. Forms of PPP (Source: Wang et al., 2012)

Source	Partnership Arrangement	Delivery Method
United Nations (2008)	Build Own Operate (BOO):	The private partner takes responsibility for
		providing funds, construction and running
		a facility;
		The facility is owned by the private sector.
		Facility ownership is not transferable.
	Build Own Operate Transfer	An award of a franchise will be given to a
	(BOOT):	private entity for providing funds,
		designing, constructing and ensuring the
		facility is run;
		End-user may be charged for facility use;
		The moment contract period is complete;
		a transfer of ownership takes place by the

	asset.
Build Operate Transfer	The private partner takes responsibility for
(BOT):	providing funds, designing, ensuring that
	the facility is constructed and run;
	Long term concession;
	The moment the concession period is
	finished, a transfer of ownership is done
	by asset;
	Just like BLOT and BOOT, except the
	asset ownership.
Build Lease Operate Transfer	Franchise award will be given to a private
(BLOT):	entity for providing funds, designing,
	carrying out the construction, running
	leased facility;
	Charge end-user for facility use in
	opposition to rent payment.
Design Build Finance Operate	Private partner take responsibility for the
(DBFO):	provision of funds, design, even the
	construction and ensuring the facility is
	operated and maintained;
	Long term agreement;
	The moment the contract period is
	finished, ownership will be transferred by
	the asset.
Finance only:	Project is funded by a private entity,
	directly or with the use of other
	financial mechanism;
	Typically a financial institution;
	Issue of bond or long-term lease.

	Design Build (DB):	The private partner will take the
		responsibility of designing and building
		the facility on the basis of certain
		performance requirement by the public
		sector.
		Based on Turnkey, particularly with a
		certain fixed price
		Contended as being a usual public works
		contract, not just of PPP.
Fiscal Affairs Department	Build Own Operate (BOO):	Private partner to take responsibility for
International Monetary	Build Develop Operate	designing, building, taking ownership, the
Fund (IMF) (2004)	(BDO):	development, operation and even the
	Design Construct Manage	management of facility on the basis of
	Finance (DCMF):	certain performance requirement the
		public sector provided;
		Transfer of the public sector to take
		ownership is not obligated;
		The variety of DBFO, the Design Build
		Finance Operate
	Buy Build Operate (BBO):	Private sector, having to buy or lease a
	Lease Develop Operate	The current facility from the public sector;
	(LDO):	An upgrade of the facility will occur;
	Wrap Around Addition	The private sector will run;
	(WAA):	Transfer of ownership directly to the
		public sector is not obligated.
	Build Operate Transfer	Private partner to take responsibility for
	(BOT):	designing, the construction and running of
		the facility;
		The moment the contract period is over,

	facility ownership is transferred;
	Private partner can probably rent or have
	the facility leased from the public sector.
Build Own (BOOT): Operate	
Transfer	
Build Rent (BROT): Operate	
Transfer	
Build Lease (BLOT): Operate	
Transfer	
Build Transfer Operate	
(BTO):	

The one common attribute among all forms of PPP is that the private sector is primarily financially responsible for funding and managing the projects. It also bears most of the risk in designing, constructing and running PPP projects. The most common forms of PPPs in housing sector projects are BOO, BOOT and DBFO (Biygautane, 2017). These three forms of PPP governance are particularly relevant for this research as these are commonly used in housing sector projects as evident via empirical findings of this research because these three forms of PPP highlight the level of private sector involvement in Kuwait's housing projects ranging from leasing and contract management to financing, permanent ownership or transferring back a housing asset to the public sector on the conclusion of a contract which continues for a period of 20 to 30 years (Biygautane, 2017).

Another common attribute of various forms of PPP is that the role of government in buying services from the private sector which allows the government to reduce its level of fiscal debt, spending. Thus, various forms of PPP allow the government to use private-sector funding such as capital investment (Adair et al., 2011). It is also suggested that various forms of PPP provide required skills, competencies, monetary support to provide products and services efficiently which may not be available from the public sector (Boles et al., 2013). Figure 3 illustrates the level of private sector

involvement in various forms of PPP governance:

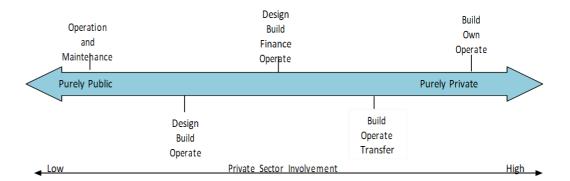


Figure 3 Private Sector Involvement Level (Kwak et al., 2009)

The level of involvement in DBFO and BOT is low, because when they are finished, ownership of the assets is transferred back to the public sector, while the level of involvement is high in the BOO as transference of ownership to the public sector is not obligatory. As a result, the BOO attracts higher investment from the private sector (Kwak et al., 2009). Thus, it was important for this research to determine which forms of PPP in Kuwait have the highest involvement by the private sector and to what extent transference of ownership at the end of the projects affects perceptions of stakeholders. It is important to evaluate various forms of PPP governance and four common forms of PPP governance (BOT, BOOT, BOO and DBFO) within the context of housing sector projects are evaluated in the next part of this chapter.

### 2.3.1 Build Operate & Transfer (BOT)

BOT is a form of PPP in which a project company serves as the promoter which has the responsibility to finance, design, construct and operate a facility for a concession period before it is transferred to the government (Ozdoganm & Birgonul, 2000). According to Walker and Hampson (2003), the reason behind the successful implementation of BOT projects in the housing sector is that the sponsors of the project source the funds needed for implementation through equity contributions and loans. Zhao et al

(2013) argue that the BOT entity takes over the financing, design, construction and operation, with the client not taking any direct risk other than if the concession agreement is unsatisfactory, there is non-compliance with the set requirements, or if the customer's needs are not met. Ameyaw and Chan (2016) argue that BOT contracts are allocated a higher risk value as a result of which larger risk values are transferred to private sector partners. It is this notion of allocating the higher risk value to private partners in the BOT contracts which is relevant to this research as the empirical part of this research specifically explores stakeholders' perceptions, i.e. private companies in BOT projects in terms of how higher allocation of risk to private partners is viewed by them and whether higher risk allocation to private partners has improved the development of housing sector projects in Kuwait.

#### **2.3.2** Build-Own-Operate-Transfer (BOOT)

According to Merna and Smith (1994), a BOOT project is:

'A project based on the granting of a concession by a Principal, usually a government, to a Promoter, sometimes known as the concessionaire, who is responsible for the construction, financing and operation and maintenance of a facility over a period of the concession before finally transferring the facility, at no cost to the principal, a fully operational facility. During the concession period, the Promoter owns and operates the facility and collects revenues to be able to repay the financing and investment costs, maintain and operate the facility and make a margin of profit.'

Rowlinson & McDermott (1999) observe that this form was established for the construction of canals and railways by governments who used it as a means to obtain funds from the private sector for infrastructure projects for which sole funding by the government was not possible. Ogunlana (1999) opines that the usefulness of a BOOT project lies in the consortium whose responsibility includes the construction, operation and retrieval of revenue from the sum borrowed. Yumurtaci and Erdem (2007)

state that it is the guarantee of return on investment generated by the projects which make BOT projects the preferred form of investment in housing projects. This aspect of guarantee in relation to return on investment by BOT projects is relevant for this research as the ability to attract higher investment is conditional on the return on investment guaranteed by the consortium (Acar & Durucasu, 2014). This research has stakeholders' perceptions to determine how the guarantee for lenders in terms of revenue resulted in a favourable investment environment which is one of the main CSFs for lender stakeholders (Biygautane, 2017).

#### 2.3.3 Build-Own-Operate (BOO)

BOO is the form of PPP in which the private sector consortium designs, builds and operates a facility or service delivery over its lifetime and the private sector retains the sole ownership of assets and facilities (Woodward, 1995). The private sector also bears the risk from operations and retains any return on investment (Woodward, 1995). Ogunlana (1999) notes that the use of BOO in housing sector projects is high due to the sole ownership of housing assets by the private sector and the prospects which these projects offer to private companies in additional revenue. This is important in this research as it analyses the perceptions of private sector stakeholders towards BOO projects and how the sole ownership, operational risk, and revenue has improved the investment climate in housing projects in Kuwait. However, the disadvantage of BOO projects is that they are complex and involve a number of stakeholders, as a result of which various contracts are required for each stakeholder and all these contracts must be connected, which may not be possible (Ogunlana, 1999). This aspect is relevant for this research as BOO projects are commonly used to design, build, construct, operate and maintain housing projects in Kuwait (Alteneiji et al., 2019) and to what extent they offer contractual alignment between stakeholders is an important CSF (Alteneiji et al., 2019).

#### 2.3.4 Design-Build-Finance-Operate (DBFO)

The DBFO model is a PPP arrangement in which the government contracts with the private sector to provide assets and arrange debt financing from commercial banks for a high share of the cost of the asset and equity for the balance of the funding requirement (Badu et al., 2012). As in BOT, BOOT and BOO projects, the private sector is responsible for ongoing operation and maintenance services in respect of the assets. (Gupta et al., 2013). The main feature DBFO projects is that the asset which is owned by the private sector for the contractual period recovers its costs through public funding (Gupta et al., 2013). The strengths of DBFO projects are that they deliver a more predictable and consistent cost profile because of the public funding (Chou & Pramudawardhani, 2015). Liu et al. (2016) argue that DBFO in housing projects offers increased risk transfer, which offers better incentives for the private sector to adopt a whole-life costing approach to design as a means of comparing options, their related costs and revenue over the contractual time period. These elements of DBFO are relevant for this research as the predictable and stable cost profile of housing projects through public funding and incentivising the private sector by increasing risk transfer are key CSFs from the stakeholders' perspectives which create a favourable environment of investment in PPP housing projects (Osei-Kyei & Chan, 2017).

DBFO focuses on contractual output and the public sector only states the contractual specifications, leaving the private sector to determine the best way to meet them (Kavishe et al., 2018). This increases the scope for the private sector to innovate in designing solutions to meet the output specification (Kavishe et al., 2018). This aspect of DBFO is relevant to this research as it analyses how much autonomy is granted to the private sector to determine the best way to meet the contractual specifications and how such autonomy affects the state of innovative technologies in housing sector projects. Having evaluated four common forms of PPPs, it is important to identify the benefits and challenges of PPPs which is presented next in this chapter.

# 2.4 Benefits of PPP

This section firstly evaluates the general benefits of PPP followed by their benefits in housing projects.

#### 2.4.1 General benefits

The main benefit of PPP is its ability to ease constraints on public finances, which may not be adequate to finance public sector projects; hence the public sector is more inclined to use PPPs (Asian Development Bank, 2006). Its other advantages are: reduced life-cycle costs; more efficient allocation of risk; faster implementation; improved service quality; and increased revenue (Leiringer, 2006). Whereas, Grimsey and Lewis (2007) note that lower project costs, competitive advantages, shorter construction times, higher overall quality of the end product and the benefits accrued from allowing the private sector to use innovative solutions are why PPP arrangements are preferred in housing sector projects. Valdimarsson (2007) suggests that the key benefit of PPP is to attract private capital investment to either supplement public resources or release them for other public needs. Jacobson and Choi (2008) argue that PPPs attract more capital investment from the public sector and increase efficiency and use of resources. Kwak et al. (2009) argue the key benefit of PPP is to reform the public sector through reallocation of roles, incentives and accountability. Kwak et al. (2009) also suggest that PPP facilitates allocation of operational roles to private sector consortia while the government retains and focuses on important public sector responsibilities such as regulation and supervision. Alfen et al. (2009) observe that the key benefit of PPP is to properly implement a public sector project as a result of which there is a lower aggregate cash outlay for the government and better provision of service for the customer. These benefits are relevant for this research as it establishes that, from the stakeholders' perspectives, the main benefits of PPPs are to attract higher amounts of capital investment by involving the private sector and, since the private sector is more competent in skills, capabilities and resources, these benefits are the main CSFs of stakeholders' perceptions (World Bank, 2015).

Transfer of risk is considered to be another main benefit of PPPs (Wang et al., 2012). It is possible to transfer some, or all of the risk involved in PPP projects to the private entity for an agreed price (Wang et al., 2012). Yee (2013) states that private sector entities are more willing to share risk and that risk offers opportunities on which private sector entities capitalise and generate income. Thus, risk is not considered a threat but rather an opportunity by private sector entities in PPP projects (Reynaers, & De Graaf, 2014). This benefit of the transference of risk is particularly relevant for this research as it evaluates how risk is allocated among the public and private sectors in PPP housing projects in Kuwait and whether risk allocation is considered fair and equitable by all stakeholders. Fair and equitable risk allocation is a key CSF which improves on stakeholders' perceptions in PPP housing sector projects (Brookings Institute, 2014).

Another benefit of PPP is the minimisation of the government's operational responsibilities by outsourcing non-core activities to the private sector (Sabry, 2015). Consistent cash flow also makes PPP beneficial as the state budget is allocated in a fixed manner for each ministry and budgetary amendment for any public sector project is a difficult and time-consuming process which can be addressed by using PPPs (Fung, 2015). Thus, use of PPP offers continuous cash flow to finance public sector projects which is why these are increasingly used in housing sector projects (Babatunde, 2015). This benefit of continuous cash flow offered by PPP projects is relevant for this research as it analyses whether continuous cash flow is offered by the PPP projects, which is an important CSF which positively affects stakeholders' perceptions as it generates a favourable investment environment (Osei-Kyei & Chan, 2017).Next, the specific benefits of PPP in housing projects are evaluated.

### 2.4.2 Benefits of PPP in housing projects

Governments prefer PPPs in housing projects because of the greater involvement of private sectors which are known to be more efficient and innovative than the public sector (Hodge & Greve, 2007). Smith (2008) argues that the private sector's competitive pressures ensure quality delivery of public

services as they might be better able to manage risk associated with projects than the public sector (Kwak et al., 2009). The better management of risk offers financial benefits which are the key benefit of PPP in housing projects and improves which also improve the quality of housing services provided by the projects (Kwak et al., 2009). Hodge et al. (2010) argue that the financial benefits are the key reasons why PPPs are used in housing projects because they able to deliver high-quality services at lower costs than through public provision. The use of public funds helps leverage private sector involvement, resulting in lower cost, which is then supported and improved by private investment to offer affordable and quality housing projects (Public Works Financing, 2011). The improved development process is a key benefit of PPP projects as the development process is enhanced by the effectiveness which comes from working together, bringing together a pool of expertise, resources and skills in a collaborative rather than a competitive approach (Alford & O'Flynn, 2012). This benefit of this collaboration between public and private sector offered by PPP housing projects is specifically relevant for this research as the empirical part of this research addresses how collaborative is the partnership between public and private sector as per the stakeholders as PPP projects which offer increased collaboration between public and private sectors are considered effective and efficacious by the stakeholders (Eadie et al. 2013). Table 2 illustrates the benefits of PPPs.

Table 2. Benefits of PPPs

Benefits of PPP	Source
Clearer definition and specification of user needs;	Mumford (1998)
More careful lifetime design and costing by the private constructor;	
Speedier construction and commissioning;	
More effective monitoring of contracts;	
Incentives that better align effort with risk and rewards; and	
Decision making that better exploits asset compatibility.	
The potential of accruing efficiency; and	Hurst and Reeves
Value for monetary gains from the projects.	(2004)
An innovative policy tool to mitigate the lack of dynamism in traditional public	Jamali (2004)
services.	
Minimising government's budget on expenditures;	Vining and Boardman
Provision of the infrastructure and the services by the private sector are at a	(2008)
lower cost; and	
Reduces the government's risk, particularly during the design and construction	
phase and the operating phase.	
Faster delivery of public infrastructure;	Reeves and Ryan
Reduction in public spending; and	(2007)
Better value for money compared to traditional methods of procurement.	
Transfer of risk to the private sector;	Li et al. (2005)
Solving the problem of public sector budget constraints; and	
Non-recourse or limited recourse to public funding.	
Provide an integrated solution for public infrastructure/services;	Cheung (2009)
Facilitate creative and innovative approaches;	
Solve the problem of public sector budget restraint; and	
Saves time in delivering the project.	

Improved operation and efficiency of public services by accessing private	The Government of
sector processes, technology and innovation.	UK (2013)
Long term value-for-money created through appropriate risk-sharing	
throughout the whole life of the project;	
Projects delivered on time and budget through incentivization of private sector	
partners; and	
An alternative source of funding for public infrastructure and services.	
Possibility for smaller investments;	Brzozowska (2006)
Possibility for conducting other public investments;	
Savings to the budget;	
Transfer of new technologies;	
Sharing the risk;	
More competition in the market;	
Guarantee of the services for a longer time;	
Decrease of the political influence in the economy; and	
More transparency in the economy.	

Table 2 shows that the benefits of PPPs are the ability to attract higher investment, risk sharing, innovative use of technology, improved efficiency of public sector services, value for money delivered by risk-sharing across the public and private sectors, guaranteeing return on investment by lenders and in improving transparency. These benefits are relevant to this research as it evaluates the key benefits which PPPs in housing sector projects may offer based on the stakeholders' perspectives in relation to the ability to provide finance, how risk is shared and managed in PPPs projects, and how PPPs projects offer value for money and improve skills and capabilities of individuals in housing sector projects, keeping in view the increased involvement of the private sector. Having identified the benefits, next, this chapter evaluates the challenges in relation to PPPs.

## 2.5 Challenges of PPPs

Despite the increased use of PPPs as a means to finance housing sector projects, their use still presents

certain challenges which must be addressed to guarantee that PPPs provide the required return on investment (Smith, 2008). According to Nguri (2009), the use of PPPs is still in its infancy and as governments still provide various public services, the role of PPPs has not been strengthened in the provision of public services. PPPs have their strengths and limitations, and hence must be entered into with good information and commitment (Nguri, 2009). Babiak & Thibault (2009) suggests that the use of PPPs requires balance from all stakeholders and continuous maintenance and if PPPs are not entered into with caution, it is possible to experience organisational and partnership failure which is the main challenge in using PPPs. Next this chapter analyses these challenges in detail to determine which of the challenges which are identified in existing literature may correspond with the findings of respondents in the empirical part of this research.

#### 2.5.1 Flexibility

Flexibility is one of the challenges of PPP (Smith, 2008). According to Sun and Meng (2009), flexibility is the ability of the contract to deal with varying circumstances. Flexibility in PPP contracts is initiated by relying on good personal relationships between stakeholders rather than through the contract itself (Nysten-Haarala et al., 2010). Taleb (2010) suggests that PPP contracts have a problem with flexibility in that all stakeholders are not equally involved in the projects' lifecycle. As a result, there remains a sense of loss of control among stakeholders which prevents them from working in a collaborative manner. It is due to a lack of flexibility that changing relationships among stakeholders at various phases of projects are not taken into consideration, thus, changing strategies are not specifically documented in the PPP contracts (Al Zarooni & Abdou, 2011). This is important for this research it addresses how stakeholders view change in PPP contracts and how change is managed in the PPP contracts by developing good personal relationships among stakeholders. As Yuan et al. (2012) note, a key CSF which improves stakeholders' perceptions is how much flexibility PPP contracts offer to deal with contingencies, reduce unpredictability and provide a sense of confidence among stakeholders in

order to work in a collaborative manner.

#### 2.5.2 Policy, legal and institutional frameworks

In the preparation, design, delivery and management of projects and public services through PPPs, new approaches, policies and capabilities are needed (Greve, 2015). One of the common criticisms on PPP arrangement is that there is a need for complex and time-consuming management which may not be possible as stakeholders believe in using conventional approaches of management through all stages of the project lifecycle (Greve, 2015). In some cases, this criticism can be misplaced as it may be important to recognise that the existing conventional approaches may need improvement (Liu et al., 2016). This sometimes reflects a genuine constraint in the policy, legal and institutional framework or in the implementation process of the PPP (Kwofie et al., 2016). Projects implemented through PPP require a supportive and effective legal framework which leads to increased collaboration among stakeholders (Kwofie et al., 2016). HM Treasury (2016) suggests that if government policy regarding adoption of PPP is clearly documented, both private and public sector are more inclined towards the adoption, mobilisation and implementation of PPP as a way to develop the economy. This aspect is relevant to this research respondents were asked to express their opinion about PPP policy in Kuwait and if existing PPP policy in housing sector projects was appropriate for implementation and how satisfied they were with the law regarding PPP that relevant legislation is adequate to attract investors which is one of the legal prerequisites in PPP projects (Hodges & Dellacha, 2017).

#### 2.5.3 Communications management

PPP is characterised by a complex technical nature and this can create misunderstanding of its benefits and the justification for its use (Hwang and Low, 2012). They are often associated with privatisation or outsourcing of public services as a result of which the private sector at times focuses on how to generate a return on investment and the public sector focus on the provision of public services, leading

to a conflict of interests which jeopardises communication between the two (Iossa et al., 2013). Poor communication is an issue which affects the quality of PPP projects (Iossa et al., 2013) and Cruz and Marques (2013) suggest that a communications plan is needed from the beginning of PPP projects and project managers must convert the communications strategy into action. Ismail (2013) believes in the importance of developing a communications plan and monitoring its effectiveness by providing information for remedial actions if required to manage the relationships with stakeholders. Eadie et al. (2013) note that a communications plan should be transparent so that stakeholders can trust what is being communicated. Bohsali et al. (2014) believe that a communications plan should focus on connecting with the public throughout all stages of the project lifecycle and provide mechanisms for feedback if the public is dissatisfied with any aspect of the PPP projects which can be a vital communication management tool in PPP projects. Holt (2014) suggests that a dedicated customer centre is required in PPP projects to enable timely and two-way communication between the public and private sectors, and that the roles and activities of each must be clearly stated to avoid communication issues and achieve synergy of outcomes. These issues are relevant for this research as it analyses whether a communications plan clearly specifies the role and activities of stakeholders in both public and private sectors, how credible and transparent the plan is and to what extent it achieves synergy of outcomes.

#### 2.5.4 The capacity of the public sector and processes for project preparation

It is good to have the right institutional frameworks in place to support PPPs, but the ability and processes to deliver projects within these frameworks is another subject of concern and a major source of constraint (Kwak et al., 2009). In the lifecycle of PPPs from initial analysis to long-term management of the contract can be affected by this (Saleh et al., 2009). Hence, there is a need to have a wide range of skills, some of which may be new to both the public and private sectors (Saleh et al., 2009). This is often difficult when the public sector lacks capacity and experience (Taleb, 2010).

Preparation, design and management of PPP contracts can be a complex and resource-intensive undertaking for a public authority and the inclusion of inexperienced personnel can hamper the quality of PPP projects (Hertogh & Westerveld, 2010). Moskalyk (2011) suggests that the appointment of external consultants who have relevant expertise can improve the quality of PPP projects. However, Gunduz et al. (2012) disagree, observing that the acceptance of the intervention of external advisers is not a guarantee as they may not be affordable, their availability might not be sufficient for the contract, or they may manage the project poorly. Another problem is resistance from those new to contractual arrangements within the public sector because they are unfamiliar with the processes and approaches involved (Gunduz et al., 2012). Eadie et al. (2013) state that new contractual arrangements are often made in PPPs due to political pressure to deliver projects faster, which hampers the quality of PPP projects. This is relevant for this research as it evaluates which processes in the stakeholders' perceptions improve the quality of PPP projects, how the role of external consultants is viewed by stakeholders, to what extent political pressure results in generating new contractual arrangements and how such new contractual arrangements improve the contractual outcomes.

#### 2.5.5 Value for money

The justification of the benefits of a project is essential for it to be accepted (Zhang, 2008). Hence, when PPP is chosen for a project, public authorities must provide an estimate of the benefits of the PPP option compared to other options at an early stage (Morallos & Amekudzi, 2008). Takim et al. (2011) argue that two fundamental characteristics of PPP are risk transfer to the private sector and better value for money (VFM) for stakeholders. VFM assessment is a challenge which affects the accurate estimation of cost and benefits in pursuing a PPP project (Tang et al., 2010). Takim et al. (2011) suggest that two primary goals in assessing VFM are exploring the factors that will influence project delivery to assess potential bidders and identify ones that can bring VFM to the project by reducing risks, and to select potential bidders and award PPP projects in a competitive environment (Reeves,

2013). To address these problems, knowledge of how PPP bids are analysed, and performance expectations should be incorporated in the form of binding legal agreements (Bohsali et al., 2014). These aspects are relevant for this research as it addresses whether PPP housing sector projects are evaluated over the long term to establish if they will generate the benefits promised (Brookings Institute, 2014). The relevance of VFM assessment in this research is how satisfied the stakeholders feel with the selection of potential bidders and how PPP bids are analysed in housing sector projects. This is one of the CSFs of PPP housing sector projects (Gudiene et al., 2014). It is therefore important to analyse CSFs of housing sector projects and to explore these CSFs in relation to stakeholders' perceptions in order to evaluate the performance of PPP housing sector projects in Kuwait. These are discussed next in this chapter.

## 2.6 Critical success factors (CSFs) of PPP

Research into CSFs for PPP started in the 1990s as the identification of factors which affect the outcome of a project, both in terms of management and implementation (Ismail, 2013). The development and implementation of PPP projects are complex, time-consuming and often cost-intensive and if factors related to performance across the lifecycle are determined from the outset, it facilitates projects accomplishing their objectives (Ismail, 2013). In addition to this, the financial, legal, contractual and political risks are also quite high, which also require one to identify the factors which are crucial to the successful development and implementation of PPP housing sector projects (Holt, 2014). Thus, identification of these factors is vital for successful completion of PPP projects and considerable research emphasis has been placed on these factors (Osei-Kyei and Chan, 2017; Kang et al, 2019; Almarri, 2019). One important step in this respect is identifying and analysing the factors critical to PPP project success and the relative significance of these critical success factors in housing projects (Muhammad & Johar, 2019). This section therefore analyses these key CSFs. This section firstly presents a definition of CSF, followed by discussion of CSFs of housing sector projects.

Secondly, this section analyses CSFs of PPP housing sector projects based upon stakeholders' perceptions; the needs and expectations of stakeholders are analysed in the later part of this section. Lastly, this section concludes with the identification of a research gap which is used to construct the theoretical framework of this research in the next chapter.

#### 2.6.1 Definition of CSFs

Daniel (1961) was the first to suggest the concept of success factors which must be developed to achieve organisational success. Later, the concept was developed by Rockart (1979) and by Bullen and Rockart (1981) as a step in designing a management information system (MIS) and suggested the term 'critical success factor' so as to establish managers' information needs:

'Critical success factors (CSFs) are the limited number of areas in which satisfactory results will ensure successful competitive performance for the individual, department or organisation. Critical success factors are the few key areas where 'things must go right' for the business to flourish and for the manager's goals to be attained' (Bullen & Rockart, 1981, p.7).

Freund (1988) said that it is about analysing all the factors critical to the effective implementation and completion of a project, and Rowlinson & McDermott (1999) pictured CSFs as foundational matters in most projects that ought to be considered for effective and efficient implementation. Ingram et al. (2000) said that they should be few in number, measurable and controllable, while Chan et al. (2010) define them as the key areas of activities in which favourable results are required to be achieved to accomplish organisational objectives. Chan et al. (2010) categorised these CSFs under seven headings: equitable allocation of risk among the public and private sector; a strong presence of private consortia; prudent government control; clear project goals; project economic viability: adequate legal framework and a stable political environment; and an available financial market. This definition of CSF in relation

to PPP as provided by Chan et al. (2010) is relevant for this research, as key CSFs in PPP housing sector projects in Kuwait are identified as those which have equitable allocation of risk between the public and private sector, and have strong presence of private sector which offer required financial, technological and management support to govern the PPP projects (Alteneiji et al, 2019). This definition of Chan et al. (2010) is also relevant for this research as the empirical part of this research evaluates the role of government, stable political environment and relevant legislation as the key CSF as without government support in form of monitoring, control, backing and legislation, PPP projects are unable to achieve their objectives (Almarri, 2019). Lastly, this definition of Chan et al. (2010) is also relevant for this research, as the empirical part of this research also evaluates the key CSF, according to the stakeholders' perceptions, as the economic viability of PPP projects and the available financial market to support, monitor and manage PPP projects. Next, this section evaluates the literature in relation to CSF of PPP in housing projects.

## 2.6.2 CSFs of PPP housing projects

PPP is considered a solution to bridge housing gaps through the development of quality and costeffective housing (Abdul-Aziz, 2010). This is because the strengths of the two sectors (public and
private) are combined, which Tharun (2014) describes as a kind of a lasting partnership between
agencies from private and public domains, in the form of contracts, with the aim of designing,
financing, implementing, operating, and maintaining housing projects and services. PPPs can provide
the public sector with an opportunity to enjoy commercial dynamism, help to provide finances where
there are budgetary restrictions, and introduce innovations and efficiencies which are achieved by
bringing in investors from private agencies who contribute their skills, capital, and experience (Tharun,
2014). Thus, sustained high growth and equity are the main objectives of these PPPs (Singewar and
Deshmukh, 2016).

A housing PPP is a contractual scheme between the private sector and the government in which the

private sector carries all or most of the risk to do with long term management responsibilities (Alford and O'Flynn, 2012). This includes risk involved in the design, financing, construction, facilities management and property values (Reynaers & De Graaf, 2014). Thus, one CSFs in housing sector projects is the sharing of risk among public and private sector (Reynaers & De Graaf, 2014) which is relevant for this research it explores how risk-sharing is allocated between various stakeholders and whether it is equitable (OECD, 2015).

Organisational reputation is another important CSF here (Zhang, 2005; Li et al., 2005; Hardcastle et al., 2006; Jacobson & Choi, 2008; Abdul-Aziz, 2010) because public agencies expect their reputation to be improved through their partnership with private sector companies (Jacobson & Choi, 2008). As public agencies are faced with challenges such as limited financial and technical resources and political intervention which may affect the quality of housing sector projects (Abdul-Aziz, 2010), project reputation, robustness, timely completion are also important (Coates, 2008). The robustness of the project which is also how it is seen by the general public and the number of people to be served tends to bring reputation (Coates, 2008). According to Onyemaechi et al. (2015), when PPP is involved in housing projects, it carries the ability to enhance reputation as private developers are known to handle projects in an excellent and efficient manner. This aspect of organisational reputation is important for this research as public sector housing agencies in Kuwait face financial, technical and skills shortage and role of PPP in this regard is considered important to provide required financial, technical and skills support to public sector agencies which is argued to be one main CSF for using PPPs in housing sector projects in Kuwait (Sattout & Batwala, 2019).

Abdul-Aziz (2010) suggests that project reputation is an important CSF in housing sector projects. It is based on timely and, where possible, early completion of the project as people pay more attention to completion targets and non-delivery or late delivery of housing projects negatively affects the perceptions of all stakeholders (Adinyira et al., 2014). On-time project completion and quality workmanship in delivering the housing sector projects make PPP projects attractive, which is an

important CSF which positively affects stakeholders' perceptions (Yang et al., 2013). This aspect is relevant for this research as PPP projects are considered attractive in Kuwait because of the effective management control provided by the private sector and the higher technical innovation which is provided (Sattout & Batwala, 2019).

Open communication between stakeholders is another important CSF (Kang et al., 2019). It builds mutual trust between the private and public sectors which is vital in reducing conflict and improving consultation throughout all stages of the project lifecycle (Wang et al., 2012; Osei-Kyei & Chan, 2017). This also improves synergy between the public and private sector as a result of which a reliable consortium with the strong presence of the private sector is established (Babatunde & Perera, 2017). This CSF of a reliable consortium in the form of a strong presence of the private sector is valid for this research, as contractual arrangements between the public and private sector and strong competencies are the main reasons for using PPPs in housing sector projects (Kavishe et al., 2018).

Another important CSF in housing sector projects is a well-organised and strong control and monitoring mechanism to ensure compliance with housing project policy and standards which creates a strong investment environment (Onyemaechi et al., 2015). The stability and commitment of the government are also required for successful PPP housing project implementation (Onyemaechi et al., 2015). The role of government is important to ensure that relevant legislation supporting the implementation of PPPs is in place (World Bank, 2015). This is also confirmed by Kavishe et al. (2018), who suggest that a strong investment environment is an important CSF in housing sector projects and the role of an independent, fair and efficient legal framework is important to successfully implement PPP housing sector projects. This is important for this research as it evaluates the investment environment in Kuwait from the stakeholders' perspectives to determine the extent to which the legal framework and role of government are conducive to implementation of PPP projects. Table 3 illustrates key CSFs of PPP housing projects.

**Table 3. CSF of PPP Housing projects** 

Critical success factors	Source	
Organisation reputation	Abdul-Aziz (2010), Alexandrou and Colpus	
	(2001), Susilawati et al. (2005)	
Project reputation	Abdul-Aziz (2010), Agus (2002)	
Early completion	Abdul-Aziz (2010), Okuwoga (1998)	
On-time completion	Abdul-Aziz (2010), Okuwoga (1998)	
Action against errant developer	Abdul-Aziz (2010)	
Reputable developer	Abdul-Aziz (2010)	
House buyers' demand	Abdul-Aziz (2010)	
Political influence	Abdul-Aziz (2010)	
Consistent monitoring	Abdul-Aziz (2010), Cuorato (2002), and	
	Susilawati et al. (2005)	
Robust and clear agreement	Abdul-Aziz (2010)	
Constant communication	Abdul-Aziz (2010), Cuorato (2002) and	
	Dixon, Pottinger and Jordan (2005)	
Negotiation skills	Abdul-Aziz (2010), Asenova et al. (2002)	
Compatibility between partners	Abdul-Aziz (2010), Cuorato (2002), and	
	Susilawati et al. (2005)	
Developer's profit-sharing	Abdul-Aziz (2010)	
Accountability	Abdul-Aziz (2010), Payne (2000)	
Adequate negotiation staff	Abdul-Aziz (2010), Asenova et al. (2002)	
Developer's social accountability	Abdul-Aziz (2010)	
Realistic projection	Abdul-Aziz (2010)	
Competition	Abdul-Aziz (2010)	
Ample time to evaluate proposal	Abdul-Aziz (2010)	
Sharing of information	Susilawati et al. (2005)	
Trust	Susilawati et al. (2005)	

Project cost  Adinyira, Botchway and Kwofie (2) Ahadzie, Proverbs and Olomolaiye (2007)  Cost of individual house-units  Adinyira, Botchway and Kwofie (2) Ahadzie, Proverbs and Olomolaiye (2) Okuwoga (1998)  Overall project duration  Adinyira, Botchway and Kwofie (2) Ahadzie, Proverbs and Olomolaiye (2007)  Rate of delivery of individual house-units  Adinyira, Botchway and Kwofie (2) Ahadzie, Proverbs and Olomolaiye (2007)  Overall project and individual house quality  Adinyira, Botchway and Kwofie (2) Ahadzie, Proverbs and Olomolaiye (2007)  Overall client satisfaction  Adinyira, Botchway and Kwofie (2) Ahadzie, Proverbs and Olomolaiye (2007)  Extensive admission of natural ventilation or lighting on individual house-units  Adinyira, Botchway and Kwofie (2) Ahadzie, Proverbs and Olomolaiye (2007)  Overall risk containment  Adinyira, Botchway and Kwofie (2) Ahadzie, Proverbs and Olomolaiye (2007)  Overall or individual house unit environmental impact  Adinyira, Botchway and Kwofie (2) Ahadzie, Proverbs and Olomolaiye (2007)  Health safety measures with individual house-units  Adinyira, Botchway and Kwofie (2) Ahadzie, Proverbs and Olomolaiye (2007)  Tachnology transfer or imposation	
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Technology transfer or innovation Adinyira, Botchway and Kwofie (20)	(2014),
Ahadzie, Proverbs and Olomolaiye (2007	<b>37</b> )
Extensive use of local materials Adinyira, Botchway and Kwofie (20)	(2014),
Ahadzie, Proverbs and Olomolaiye (2007	07)
Ease and cost of maintenance Adinyira, Botchway and Kwofie (20	(2014),
Ahadzie, Proverbs and Olomolaiye (2007	07)

Availability of committed and competent private	Onyemaechi, Samy and Pollard (2015)
developers	
Government commitment and support	Onyemaechi, Samy and Pollard (2015)
Large housing demand market	Onyemaechi, Samy and Pollard (2015)
An effective and efficient mortgage system	Onyemaechi, Samy and Pollard (2015)
Access to low-cost and lasting funds for project	Onyemaechi, Samy and Pollard (2015)
developer and subscribers	
Adoption of PPP frameworks which bring low-cost,	Onyemaechi, Samy and Pollard (2015)
affordable and quality housing	
Enabling laws	Onyemaechi, Samy and Pollard (2015)
Good and robust legal and regulatory framework	Onyemaechi, Samy and Pollard (2015)
Good profit margin	Onyemaechi, Samy and Pollard (2015)
Feasible and viable proposals by private developers	Onyemaechi, Samy and Pollard (2015)
Access to developable land	Onyemaechi, Samy and Pollard (2015)
Well-structured MOUs	Onyemaechi, Samy and Pollard (2015)
Availability of willing financial institutions to act as	Onyemaechi, Samy and Pollard (2015)
financiers	
The synergy of public and private sector	Onyemaechi, Samy and Pollard (2015)
Adoption of a PPP model that delivers cheap, quality	Onyemaechi, Samy and Pollard (2015)
and affordable housing	
Removal of the hostile effect of human factor in	Onyemaechi, Samy and Pollard (2015)
PPP housing project implementation	
Transparency in PPP housing project execution	Onyemaechi, Samy and Pollard (2015)
Weakness and strength of the public and private	Onyemaechi, Samy and Pollard (2015),
developers	Zhang (2005) and Tam, Li and Chan (1994)
Measures to manage the risk exposures by the	Onyemaechi, Samy and Pollard (2015),
government	Grant (1996) and Zhang (2005)
Provision of supplemental periodic services payment	Onyemaechi, Samy and Pollard (2015),
by the government	Wang (2007)
	<u> </u>

Table 3 above illustrates various CSFs of PPP housing projects. The key CSFs common to the findings of Okuwoga (1998), Alexandrou & Colpus (2001), Agus (2002), Cuorato (2002) and Susilawati et al. (2005) are organisational reputation, political influence, monitoring and control by the private sector, government laws regarding PPP implementation and risk-sharing. Ahadzie et al. (2007), Wang (2007), Coates (2008) and Abdul-Aziz (2010) identify constant communication, trust between partners, transparent exchange and communication of information and strong presence of private sector partners as key, while Adinyira et al. (2014) and Onyemaechi et al. (2015) identify value for money, equitable risk allocation, client satisfaction, and synergy between public and private sector is what makes the overall financial package strong in PPPs and such a financial package is one of the effective CSFs which positively affects the stakeholders' perceptions in implementation of PPP housing sector projects. These stakeholders' perceptions of CSFs in housing projects are analysed next in this chapter.

#### 2.6.3 Stakeholders in PPP housing projects

The government, private establishment or consortium and community are the three stakeholders in PPP projects (Olander, 2007). The government or private consortium usually comes up with the project initiative based on the needs of the end-user. The community which is also known as the end-user is a key stakeholder in infrastructure projects (Olander, 2007). Ng et al. (2010) in this regard suggest that project failure can be a result of stakeholders' opposition if their expectations are not met or when they are not attended to. It is therefore important to understand stakeholders' needs and expectations in order to successfully implement PPP projects (Ng et al. 2010).

## 2.6.4 Needs and expectations of stakeholders in PPP housing projects

The needs and expectations of stakeholders in PPP housing projects are required to be identified at the pre-design stage of these projects as this stage is the focal point of PPP projects (Girling, 2006). At this

stage, particular attention is required to be given to evaluate the needs of the customers of housing sector projects, needs of internal and external stakeholders and needs of the design team (Akbiyikli & Eaton, 2008). Ismail (2013) also emphasises that identification of needs and expectations of stakeholders in the inception and early design stages in the life of the PPP project is a vital CSF. Thus, the needs and expectations of stakeholders must be addressed in order to deliver a PPP project on time as per the required budget and the required quality. The early stages of PPP projects are when the vital decisions which impact upon the real value of the projects, efficiency, and timeliness are finalised (Engel et al, 2013). Thus, various researchers (Ismail, 2013; Rwelamila et al, 2014; Osei-Kyei & Chan, 2015; Babatunde & Perera, 2017; Osei-Kyei et al, 2018) have suggested that a successful PPP housing project is accomplished when stakeholders' needs are identified and met both individually and collectively in the early stages of PPP housing projects.

UNDP (2017) in this regard suggests that in order to integrate the needs of stakeholders into the early stages of PPP projects, it is vital to allow the stakeholders to convey their needs and expectations in an appropriate forum. One such approach is called strategic need analysis (SNA) (Smith et al. 2002; Deloitte, 2018) which addresses the involvement of as many critical stakeholders as is practically feasible. The SNA approach includes clients, managers, project managers, employees of housing sector projects, end-users (customers of housing projects), consultants, and identifying their needs and expectations in the early stages of PPP projects. Kang et al. (2019) argue the importance of adopting the SNA approach in identifying needs and expectations of stakeholders in PPP housing projects due to the extensive involvement of stakeholders at three levels via briefings, seminars, and workshops. Kavishe et al. (2018) also confirm the adoption of the SNA approach because of the possibility of obtaining various perspectives of stakeholders at the Level 1 (briefing stage) where briefing is performed in the form of seminars and workshops. While, at Level 2, all stakeholders are involved in creating alternative strategies for the accomplishment of objectives of PPP housing projects (Deloitte,

2018). Whereas, at Level 3, stakeholders develop an extensive performance brief for the PPPs' project implementation (Kang et al., 2019). Sattout & Batwala (2019) also confirm the usefulness of this three-level SNA approach in identifying and understanding the needs and expectations of stakeholders. As the outcome of this approach generates a complete performance brief based upon stakeholders' input so to guide PPP project team members to develop and implement the PPP project within suitable parameters (Sattout &Batwala, 2019). This approach to identifying the stakeholders' needs and expectations is vital in managing conflicts among stakeholders which may occur in the absence of a unanimous performance brief (Almarri, 2019).

This SNA approach is specifically relevant for this research as the empirical part of this research explores how satisfied stakeholders feel with the current approach in identifying the needs and expectations of stakeholders. Moreover, this research also explores to what extent the three-level approach results in generating a unanimous performance brief reflecting the perceptions of all stakeholders in order to successfully implement PPP housing sector projects. It is therefore essential to evaluate CSFs of PPP implementation in housing projects based upon stakeholders' perceptions which are presented next in this section.

### 2.6.5 Stakeholders' perceptions of CSFs in PPP housing projects

For PPP project operations to be efficient, the stakeholders are required to be thoroughly consulted and must be involved throughout the project life cycle (HM Treasury, 2008). However, the challenge here is that the stakeholders can differ on the issue of how to best manage the operations involved in the implementation of the project (Mladenovic et al. 2013). Hence, this led to the critical assessment and evaluation of how the stakeholders think the operational stage of the PPP project can be effectively managed. One suggestion in this regard is if consensus regarding common CSFs based upon stakeholders' perceptions can be obtained, the operation and implementation of PPP projects can be improved (Tang et al., 2012).

In the study of Ismail (2013), stakeholders' perspectives majorly the private and public sectors were used to examine the CSFs for PPP project implementation in Malaysia. From the study results (Ismail, 2013), the public sector (being a stakeholder in PPP arrangements) regards the dedication and responsibility of the partners, investment environment of the country, good governance, and the technical feasibility of the project as the key CSFs in PPP arrangements. While, for the private sector, available financial market, favorable legal framework, investment environment, and good governance are considered to be the critical CSFs from stakeholders' perspectives on the PPP implementation. The good investment environment is the critical CSFs from stakeholders' perspectives as per the study of Rijkswaterstaat (2014), and the role of political decisions to boost the PPP projects is significant specifically during the design phase of the project. Thus, the government, politicians are vital stakeholders in PPP projects and the primary cause to initiate changes in PPP projects as they have the power to impact upon project decisions by granting final approvals on the PPP projects (Taleb, 2010; Barton, 2015).

The stable economic environment is another essential CSF from stakeholders' perspectives in the study of Barton (2015) which argues that the investment environment in the form of the steady macroeconomic condition is one vital CSF that affects the successful implementation of PPP projects. Therefore, the investment environment is one CSFs from stakeholder's perspectives which positively influence the implementation of PPP projects (Bock & Linner, 2015). This CSF of investment environment is specifically relevant for this research as the empirical part of this research explores how sound is the investment environment in Kuwait and what is the economic policy of government in Kuwait towards PPP's implementation in housing projects. The empirical part of research also analyses how sound is the political and legal environment which are the vital CSFs from stakeholders' perspectives in creating a favourable investment environment in Kuwait (Sattout & Batwala, 2019).

The second important CSF from stakeholders' perspective in PPP projects is the attractiveness of PPP projects which is defined as how favourable the partners perceive the PPP projects. Moreover, how much compatibility develops between the public and private sectors via PPPs, which is one vital CSF that positively impacts the stakeholders' perceptions (Van Gils et al., 2009). The economic viability of PPP projects as perceived by stakeholders and a unanimous project brief which results by consulting with client and end-users is what makes a PPP project attractive as per the stakeholders as identified in the study of Ram & Corkindale (2014). This aspect is relevant as the empirical part of this research explores how PPP projects develop compatibility between public and private partners and in designing a unanimous project brief in order to implement attractive PPP projects.

Li et al. (2005), in their study, focused on the CSFs influencing PPP project implementation in the UK. Their results illustrate that reliable consortium is one CSF from stakeholders' perspectives which allow the successful implementation of PPP projects. The reliable consortium is mainly identified as the strong and knowledgeable private partner in PPP projects as a result of which feasible proposals are presented by the private developers who hold the key in the successful implementation of PPP projects (Li et al., 2005; Cheung et al., 2012; Babatunde, 2015). The reliable consortium is a vital CSF from the stakeholders' perspective as it highlights the role of the private sector in awarding contract type and method in PPP projects (Babatunde, 2015). The contract type and contract award method used by private partners in PPP projects aim at achieving synergy between the public and private sectors (Sabry, 2015).

Moreover, CSF which positively impacts upon stakeholders' perceptions is the skills and competencies which private partner offer in PPP projects as a result of which quality of PPP projects is improved (Sabry, 2015). This CSF of the reliable consortium is specifically relevant for this research as the empirical part of this research explores how the stakeholders view reliable and knowledgeable private partners in this research and what skill, capabilities and technical robustness private sector add in the

PPP housing sector projects in Kuwait. Moreover, how synergy concerning outcomes between the public and private sector develops as per the stakeholders' perceptions of this research to successfully implement the PPP housing projects.

Financial package is another vital CSF as per the stakeholders' perceptions in the study of Hwang et al. (2013). Financial package is defined as the value for money and good profit margin which PPP housing projects offer as a result of which these are used as a method to finance housing sector projects (Hwang et al., 2013). Well-structured and useful payment tools rated number one amongst the top three positions for the stakeholder groups, showing its high impact on PPP project management at the operational stage (Hwang et al., 2013). Furthermore, Reynaers & De Graaf (2014) also suggests that one of the significant issues of the two major project parties in the PPP scheme during service operations is payment structure which negatively affects the quality of implementation of PPP projects as per stakeholders (Reynaers & De Graaf, 2014). The payment mechanism is of great concern to project parties, especially the private investors as they want clear and favourable financial package so to recover investment costs. While cost and benefit analysis is what makes the financial package in PPP projects attractive as per the stakeholders' perceptions in the study of Fung (2015), this CSF is also relevant for this research as the empirical part of this research evaluates to which extent PPP projects add value for money. In addition to this, how the financial package offers finical and technical resources in the implementation of PPP projects which is a crucial CSF from stakeholders' perspectives as identified in the study of Kang et al. (2019).

Furthermore, risk allocation is another vital CSF as per the stakeholders' perceptions which affect the implementation of PPP in housing sector projects (Ke et al., 2010). Effective operational risk management also ranked high in the study of Osei-Kyei and Chan (2017), while Ke et al. (2010) also see risk as a critical component of PPP project management, especially at the phase of operation. Li et al. (2005), Jacobson and Choi (2008) in their studies on PPP implementation, also emphasised the

significance of efficient and optimal risk management. Osei-Kyei and Chan (2017) in this regard suggests that at the operational stage of PPP projects, the risks involved include operational cost overruns, change in technology, inflation, change in market demand, high maintenance cost, exchange rates fluctuations, and legislation changes. Due to these risks, it is significant to perform an adequate risk allocation to ensure that equitable transference of financial, operational and overall project risks are performed in the PPP housing projects (Babatunde & Perera, 2017). These risks must be carefully handled if the effectiveness of the project's operational performance is desired (Kang et al., 2019). Therefore, appropriate alleviation methods must be put in place to ensure the effective control of operational risks in order to have successful PPP project operational management (Alola,2019). This CSF of risk allocation is relevant for this research as the empirical part of this research explores how risk identification and management is performed in PPP housing sector projects. This research also analyses how the stakeholders consider equitable risk allocation and how collective responsibility about risk management is shared between public and private sectors which is an essential CSF from stakeholders' perspective (Alteneiji et al., 2019).

In conclusion, the quest for sustainable development in the face of urbanisation has been driving governments to consider the collaboration of the public and private sectors in the provision of sustainable houses (Deloitte, 2018). The CSFs based upon stakeholders' perceptions as identified via existing literature in this section include the role of government commitment and policies in building the investment environment which is a crucial CSF from stakeholders; perspectives in order to successfully implement PPP projects (Sattout & Batwala, 2019). Other factors such as the reliable consortium in the form of competency of private developers, the expertise of workmanships offered by the private sector is another vital CSF from stakeholders' perspective (Sabry, 2015). An attractive project is another essential CSF that is identified via a review of the literature (Fung, 2015). As transparent and consistent communication between parties, consistent monitoring, feasible proposals

by private developers is what makes PPP projects successful in housing sector projects (Ram & Corkindale, 2014). While, financial package in the form of good profit margin, value for money and cost versus benefit analysis is identified as another vital CSF from stakeholders' perspective as identified in the literature (Kang et al., 2019). Lastly, risk allocation is identified as another essential CSF from the stakeholders' perspective as an important factor affecting the successful implementation of PPP housing sector projects (Alola, 2019).

Thus, CSFs derived from the literature review addressing housing projects pointed out five groups of factors, including, investment environment, attractive project, reliable consortium, financial package, and risk allocation. Based on these five CSFs, a summary of previous works is presented next which is used to design interview questions in the empirical part of this research.

#### 2.6.6 Summary of previous works

The key CSFs of PPP housing sector projects as per stakeholders' perceptions are classified into five categories of investment environment, attractive project, reliable consortium, financial package, and risk allocation. Table 4 below provides the typology of common CSFs in PPP housing sector projects which are identified via existing literature in the previous section:

Table 4: Typology of Common PPP CSFs (Adapted from Zhang, 2005)

1- Investment environment		
Prevailing investment environment	Favourable Economic environment/situation	Effective and efficient mortgage system
Project characteristics	project participants	Interactive processes
Quality of technical workers employed	Strong legal environment	Design interlace management
Completion dates and quality of workmanship	Industrial relations environment	Technologically advanced solutions and physical environment
Social concerns	Environmental factors	Sound economic policy
Steady macroeconomic condition	Careful government control	General impact on the environment
Political influence	Strong government support	Action against the delinquent developer

Compatibility between project partners	On-time completion	Quality workmanship
Adequate fiscal planning	Technical expertise	Innovation in design
Early project completion	project reputation	Availability of key resources
Capable project manager	multidisciplinary project team	Sufficient funding up to project completion
Correct project identification	commitment to the whole project	Project team motivation
ease of maintenance	project manager experience and skills	Project safety
demand market for large housing	Control systems	Long term demand for public facility
cheap, affordable and quality housing	access to unencumbered land	Experienced and multidisciplinary project team
Community support	scope and work definition	Clear project brief alongside customer requirements
Expertise and experience	project manager goal commitment	individual units health and safety
Management control	project goal orientation	Client or user satisfaction
good relationship among the partners	scope and project work definition	delivery of standard projects
Effective resource management	project manager objective commitment	Construction and design planning effort
Compatibility of skills	Technical innovation	Stakeholder management and
among key project parties	geared towards overcoming	stakeholder relationships
Selection of appropriate	project complications	
subcontractors  3-Reliable consortium		
Developer's profit-sharing	Project implement-ability	Conformance to quality
method	1 Toject implement-ability	Comormance to quanty
Negotiation skills	Efficient approval processes	Technology transfer
Feasibility study and	A suitable organization	Subcontractor involvement
Consortium structure	structure, control of the su contractors works	
Concessionaire consortium	Early partnering implementation	partnering process
Effective changes of shareholdingsin private consortium	Mutual trust	Readiness to improve project processes
Dependable concession schemes with due diligence	Technical knowledge	Contractual arrangements
Public and private sector commitment	Organization reputation	Capital for development
Synergy of public and private sector	Contract type and contract award method	Prevailing strategic alliances
Feasible proposals by the private developers and well-structured memorandum of understanding	Individual house quality	Overall project quality
Strong private sector	Individual house-units speed of delivery	Overall project duration
Strong private consortium; end-user consultation	Government guarantee	Effective procurement
Transparent and competitive	Well-organized legal and	Strong and knowledgeable
procurement process	regulatory structures	private partner
4-Financial package		
value for money	Lowest development cost	Cost certainty

Strength and financial capability of private developers	Acceptable tariff levels	profitable economic parameters
Access to cheap and lasting funds for developer and subscribers	Stable macroeconomic structure	Financial capability
Objectives with multiple benefits	Added value for adopting PPP	Attractive financial package
Acceptable level of user fee charges	Accessible financial market	Bankable project with sufficient stakeholders involvement
Provision of supplemental periodic services payment by the government	Financial accountability and transparency	Cost and timely planning
Well-structured and effective payment mechanism	Sufficient financial resources until project completion	Financial market significance
overall project cost	Financial competence	Stakeholder consultation on user fees adjustment
Valuation of project cost and benefits Financial and technical resources	Availability of financial institutions ready finance projects	Good profit margin
5-Risk allocation		
Project risks, financial risks, and schedule deviations	Transfer of sales risk	Transfer of cost overrun risk
Risk sharing	Transfer of defect risks	Transfer of delay risk
Transfer of financial risks.	Risk identification and risk management	Shared authority between public and private sectors
Creating a strategy for resolving conflicts	Measures to manage the risk exposures by the government	Effective operational risk management
Flawless identification of project responsibilities	Transparency in PPP housing project execution	Overall risk containment
sharing resources	Rational risk allocation	Risk mitigation
Periodic evaluation of service delivery	Judicious government control	Collective responsibility between public and private
Reliable and effective service delivery		sectors

# 2.7 Research gap

The previous section outlines the vital CSFs from stakeholders' perspectives which positively impact the successful implementation of PPP projects. However, stakeholders' perspectives can be better explained via systemic thinking, which is defined as a set of synergistic and analytic skills that are used to improve the capability of identifying and understanding systems (Arnold & Wade, 2015). Thus, the use of systemic thinking predicts the behaviours and offer insight to initiate changes in those systems

in order to generate desired effects (Arnold & Wade, 2015). However, there is a lack of systemic understanding of how the stakeholders of PPP projects interact and how their perceptions affect the successful implementation of PPP projects (Fung, 2015). Various studies are available on the PPP project management with a focus on the CSFs (Okuwoga, 1998; Alexandrou & Colpus ,2001; Agus, 2002; Cuorato, 2002; Susilawati et al, 2005; Ahadzie et al, 2007; Wang, 2007; Coates, 2008, Abdul-Aziz, 2010; Fung, 2015; Osei-Kyei & Chan, 2017; Kang et al, 2019), however, most of the studies do not explain the systematic interactions of CSFs. For instance, as per OECD (2009: p113), "many OECD countries have a transparent and systematic process of public consultation to enhance the quality of the regulatory process by guaranteeing that the impact on citizens and businesses is considered." Thus, understanding CSFs in systemic thinking would allow the researcher to better comprehend the stakeholders' perceptions in order to implement PPP projects in housing sectors successfully.

Thus, systemic thinking argues that the stakeholders' perceptions are required to be considered if success is expected from the PPP projects (Babatunde & Perera, 2017). Lack of systematic understanding of CSFs may lead to failure in PPP implementation (Alola, 2019). Understanding the needs and expectations of stakeholders (perception) is a part of CSFs (Hodge et al., 2010). Cleland and Ireland (2002) while studying stakeholder management said a project team must know about whether or not they are successfully managing the project stakeholders. Yang et al. (2009) described CSFs as those activities and practices worthy of attention to ensure effective management of stakeholders. Thus, the analysis of CSFs in PPP projects should be linked to stakeholders' perceptions if success is desired (Brookings Institute, 2014).

Communication with the stakeholders and establishing joint goals, and project priorities are two essential aspects of improving stakeholders' consideration in projects (Sabry, 2015). The decisions made and efforts of decision-makers in communication with stakeholders for any construction project

determine the long-term performance of the project as well as its capacity to attain the stakeholders' needs satisfactorily (Babatunde & Perera, 2017). Aaltonen et al. (2008) explained that the kind of relationship management between the PPP project team and the wider project stakeholders is essential. Although these proposed factors seem to be critical success factors to manage stakeholders in housing projects, yet most of these studies fail to prioritise the relative importance of those success factors and do not consider the need to evaluate stakeholders' management from the perspective of systemic thinking (Fung, 2015; Alola, 2019).

PPP projects are complicated, as there are various stakeholders' interests (Zou et al., 2014; Osei-Kyei and Chan, 2018). An essential way of accessing stakeholders is by identifying their interests, and this can be done by evaluating their interests about systemic thinking, i.e., how the desired interest of stakeholders can bring the desired effects in the system which in this case is stakeholders' perceptions (Osei-Kyei et al., 2018). While, Kang et al (2019) suggest that the evaluation of stakeholders' needs and constraints in PPP projects means to carefully scrutinise the stakeholders' area of interests and highlight the issues from stakeholders' concerns which can also enrich systemic thinking so to understand stakeholders' perspectives better. There is a need to address all stakeholders' concerns and needs during the project process to obtain a satisfactory and realistic solution to the problem and challenges put forward which can also improve systemic thinking about stakeholders' perspectives (Alola, 2019). Figure 4 below, thus presents the research gap as identified via the review of the literature. Figure 4 below illustrates that systemic thinking in order to better understand the CSFs from stakeholders' perspectives along with the five CSFs which can collectively determine the successful implementation of PPP housing sector projects in Kuwait. Therefore, it is essential to explain PPP project CSFs with stakeholders' perspective for successful delivery.

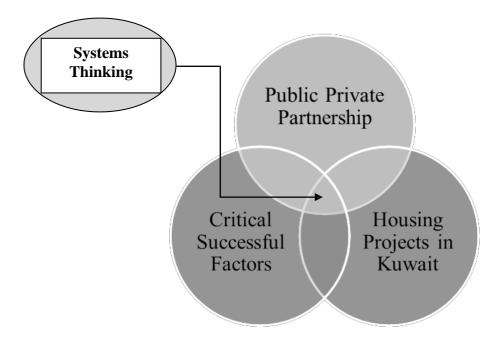


Figure 4: Research gap

## Chapter 3. Theoretical Framework

## 3.1 Introduction

This chapter aims to provide the theoretical framework as a foundation for creating a conceptual model to address the first objective of this research. The first objective of this research, as stated in Chapter one is aimed at constructing a theoretical framework to analyse the PPP success factors based upon stakeholders' perceptions in Kuwait's housing sector projects. As identified in the previous chapter, the use of systemic thinking in order to explore stakeholders' perceptions can provide a better insight to understand and fulfil stakeholders' needs and expectations which are vital for a successful implementation of the PPP projects (Nederhand & Klijn, 2019). It is argued by Dalkin et al (2018) that the use of soft system methodology (SSM) in system thinking provides a better understanding towards the viewpoints of stakeholders as SSM offers a complex yet an adaptive-systems based approach for understanding problems by developing rich pictures in relation to the problems which stakeholders experience in a system.

The system in SSM is not a formal structure, instead, it is more of a theoretical dynamic combination of interrelating agents towards a problem located within a context (Ribesse et al. 2015). Williams et al (2016) in this regard argue that the use of SSM can provide a better insight into the stakeholders' perceptions as it offers the system maps, i.e., the vibrant pictures which are generated against the perceptions of the real world by process of comparison. This in turn, initiates a debate between stakeholders who have different agendas and levels of separation from the situation (Checkland & Scholes 2009). Hindle (2011) confirms that this comparison is the basis as a result of which stakeholders acquire a better understanding of a situation and are engaged in a natural learning cycle which leads to improvements in a given problem. Mazano (2016) agrees with Hindle (2011) by suggesting that the use of SSM offers to better understand problem situations by illustrating them in diagrammatic forms to help signify the complex nature of the real world (worldview). The starting point in an SSM diagram is a transformation (T), from a specific perspective, i.e., what is transformed

from input to output (Checkland & Scholes, 2009). Once the transformation is detected, other vital elements of SSM using the mnemonic CATWOE (customers, actors, transformations, worldview, ownership, environment) can be configured, which can provide an in-depth understanding about the stakeholders' perspectives that can be used to transform the problem situation (Nederhand & Klijn, 2019).

This aspect of CATWOE (Checkland & Scholes, 2009; Dalkin et al., 2018) in relation to SSM is relevant for this research as it is used to identify the Customers (end-users of housing projects), who benefit from this transformation, helps in identification of Actors/stakeholders who enable the transformation. Transformation (what needs changing, which in this case is lack of integration of stakeholders' perspectives in PPP housing projects). Worldview (the problem statement, why lack of integration of stakeholders' perspectives in PPP housing projects is a problem). The owner (to whom the system is answerable, which in this case is both internal and external stakeholders), and finally, the Environment (which impacts the system).

The use of SSM also involves the evaluation of various theoretical frameworks that form the basis of developing rich pictures about problematic situations (Williams et al., 2016). Furthermore, the use of theoretical frameworks also facilitates researchers to plan and organise different aspects of the research problem which provides significant insight to understand the research problem and enhance the reliability of research outcomes (Yin, 2017). Hence, this chapter is structured as follows: The First section, offers a critical evaluation of the most two dominant theories in the PPP literature, namely the Stakeholder Theory and the Neo-institutional Theory, and presents their relevant strengths/limitations along with their relevance in this research. Secondly, this chapter evaluates multiple perspectives theory (MPT) which is used in this research and elaborates why this framework applies to the implementation of the PPP in housing projects in Kuwait. Lastly, this chapter presents the theoretical framework for this research.

## 3.2 Stakeholder Theory

Stakeholder theory is a conceptual model of organisation's management that offers an ethical approach to manage for-profit organisations from the perspectives of various stakeholders (Freeman, 1984; Freeman, 2010). The broad set of internal and external stakeholders needs to have a vested interest to keep the business going and profitable (Freeman, 2010). Essentially, a business must create value for all stakeholders and to ensure sustainability and continuous operations. Organisational executives have to align the interests of the employees, suppliers, customers, shareholders, and communities (Jagosh et al., 2013). Figure 5 below presents the stakeholder theory view of the firm which state that various stakeholders, i.e., employees, suppliers, financiers, communities, trade unions, political groups, trade associations, competitors and customers must work together in order to achieve organisational goals (Freeman, 1984; Freeman et al., 2010).

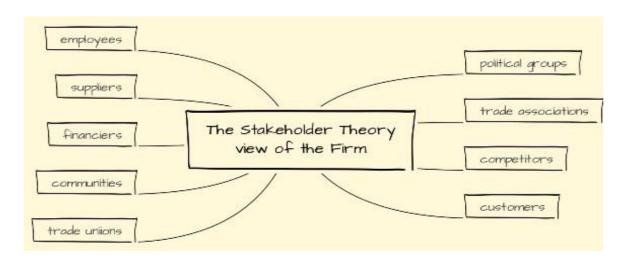


Figure 5: Stakeholder theory (Source: Freeman, 1984, P:65)

The stakeholder theory has gained wide popularity among managers, media, and researchers (Phillips, 2003; Hodge & Greve, 2007; Verweij, 2015; Kang et al., 2019). Any task, mission, project, organisation, or business venture involves various stakeholders who have interests in its

success (Freeman and Moutchnik, 2013). Hence, organisations as groups of stakeholders can be classified as those individuals whose mission is to manage their interests (Yang et al., 2013). Thus, the basic definition states the stakeholder as "any group or individual who can affect or is affected by the achievement of the organisation's objectives" (Freeman, 1984: P: 32; Ribesse et al, 2015). The greater the venture, the greater the number of the stakeholders. Hence, there is a complex system of influences and interests in which all projects operate (Ribesse et al, 2015). Different interest groups impact the decisions, whereas simultaneously, the interests of various stakeholders need to be met, depending on the critical natures of decisions and policies. The project manager (PM) is in charge of identifying stakeholders (Freeman and Moutchnik, 2013). Importantly, it is necessary to look beyond the formal organisation structure, considering that in many cases, there are external stakeholders as well. Hence, the PM must consider indirect and informal types of stakeholders as well (Willems, 2014). To meet the organisational objectives, the PM must evaluate and assess all external and internal in a balanced manner (Freeman, 2010). There are two primary components of Stakeholder Management, namely, stakeholder mapping and stakeholder analysis, with the PM overseeing both (de Vries & Yehoue, 2013). An organisation creates a positive relationship with its stakeholders and ensures the economic benefits of managing the interest of stakeholders by utilising both stakeholder mapping and stakeholder analysis (Bohsali et al., 2014). The stakeholders must perceive the services as valuable, so that these benefits can be realised (Fung, 2015). These benefits include sharing of complementary resources and capabilities, acquisitions and mergers, development of joint ventures, and sharing knowledge and information about the project performance (Fung, 2015). These benefits are specifically important in the context of this research as stakeholders in PPPs collaborate mainly to share knowledge and improve the performance of PPP projects by acquiring skills, capabilities and financial resources of the private partners (Deloitte, 2016).

Moreover, the way the stakeholders perceive the mission and objectives of the projects sets its

performance directions (Kwofie et al., 2016). The stakeholders, such as financiers, employees, and shareholders set the company priorities, and choose guiding strategies (Deloitte, 2016). Hence, it requires an awareness of the expectations of various stakeholders and the degree to which they can demonstrate their influence when making crucial decisions. According to Zhang et al. (2017), the attributes of power, legitimacy, and urgency determine how influential the stakeholders are in a PPP project. Power refers to the capacity to impact the company's behaviour, and it does not consider if the stakeholder has or not the legitimate claim (Zhang et al., 2017). While, urgency refers to the extent to which a stakeholder will receive immediate attention of managers to his claim (Zhang et al., 2017).

Whereas, legitimacy is the extent to which stakeholders' claim is considered legal and form contractual obligation in a PPP contract (HM Treasury, 2016). These three attributes of stakeholders in terms of power, urgency, and legitimacy are relevant for this research as the participation of stakeholders in PPP projects is formed and determined by the power which stakeholders have in the PPP policy, decisions and control which stakeholders have in the implementation of PPPs (Deloitte, 2016). The attribute of legitimacy and urgency of stakeholders is relevant for this research as to how closely stakeholders' interests in PPP projects match with the objectives of PPP policy in its implementation determine the success of PPP projects (Almarri, 2019). Thus, effective stakeholder management is vital in order to successfully develop and implement PPP projects (Almarri, 2019). The next section will evaluate the stakeholder management.

### 3.2.1 Stakeholder Management

Stakeholder Management (SM) and Project Management (PM) are closely related (Cheung, 2009). The development of modern project management processes has started in the 1950s, whereas stakeholder management has emerged from modern project management techniques (Tang et al., 2010). Stakeholder Management is defined as the process of managing the

expectation of all individuals and groups interested in a project and those that will be affected by its results (Almarri, 2019). Accordingly, the project manager must fully understand the issues and values of the stakeholders to be able to deal with potential conflicts and to ensure that all stakeholders are involved during the entire project (Almarri, 2019). Stakeholder management is performed in projects using stakeholder mapping and stakeholder analysis; each of these concepts is evaluated next in this section.

### 3.2.1.1 Stakeholder Mapping

Stakeholder mapping is defined as a process which enables an organisation to accurately measure the power and intentions of stakeholders and to develop strategies accordingly (Carroll & Buchholtz, 2014). The effectiveness of stakeholders is determined by their capacity to modify the implementation process, the plan, and the course of action (Fung, 2015). Hence, having a stakeholder map helps organisations to measure the intent of stakeholders and analyse their levels of involvement and categorise them to determine if stakeholders support or object to a project (Dalkin et al., 2015). Figure 6 below illustrates five categories of stakeholders.

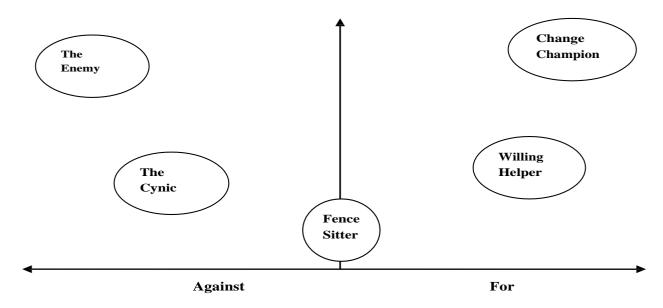


Figure 6: Stakeholder Mapping (TDA Development, 2007: P4)

Five categories are identified in figure 6 above. The first category refers to the change champions who

are the stakeholders that fully support the implementation of the company policies, and they are willing to take personal responsibility for the successful implementation (TDA Development, 2007; Gebrehiwet & Luo, 2017). This category is relevant for this research and housing authorities such as PAHW & KAPP are classified as change champions as these are the stakeholders who must ensure the successful implementation of PPP housing sector projects. The second category of willing helpers are those stakeholders who are ready to assist in carrying out the changes if the management provides the required information and resources (TDA Development, 2007; Osei-Kyei et al., 2017). This category is relevant for this research, and private sector is identified as a willing helper, as without the involvement of private sector, relevant skills, expertise, and financial resources cannot be provided to the public sector which can also hamper the performance of PPP projects (Osei-Kyei et al., 2017).

The third category of fence-sitters are defined as those who do not have firm opinions about the policies, mainly because of the lack of time, interest, and knowledge. However, their lack of attention in projects can jeopardise the overall success of projects (Babatunde & Perera, 2017). This category of fence-sitter is relevant for this research and customers (end-users) of housing projects are identified as the fence-sitter as their satisfaction is what determines the overall success in PPP housing projects in Kuwait (Sattout & Batwala, 2019). Furthermore, the fourth category of the cynic is defined as those who may appear to be against the management, but if properly managed, this category can help the management to make the right decisions (Kang et al., 2019).

This category of a cynic is relevant for this research, and it is identified as the pressure groups and lobbying agencies in PPP housing sector projects which strive to ensure that affordable housing is provided to all citizens (Alola, 2019). While, the fifth category of an enemy is defined as those opposing the actions of management whenever possible (Nederhand & Klijn, 2019). This category is also relevant for this research, and it is identified as the competitors of housing authorities in PPP projects in Kuwait (Alteneiji et al., 2019). It is, therefore, essential to analyse each of these categories

of stakeholders to identify which stakeholders can readily support and oppose the PPP projects and which strategies should be devised for those opposing PPP projects in order to reduce conflicts among stakeholders (Sattout & Batwala, 2019). Thus, it is crucial to perform stakeholder analysis which is discussed next in this section.

## 3.2.1.2 Stakeholder Analysis

Administrators, advisors, and management need to conduct a stakeholder analysis to assess the project's environment and to develop strategies and projections (Carroll and Buchholtz, 2014). Stakeholder analysis aims to identify and categorise all stakeholders and organisations which should adopt a balanced approach in analysing stakeholders by balancing between the goals of the stakeholders and goals of the organisation (Willems, 2014). According to Kwofie et al. (2016), three steps should be ideally performed in analysing stakeholders in PPP housing sector projects. First step involves identifying relevant stakeholders and to categorise them into primary (who are affected the most, both positively and negatively by the decisions of management or project outcomes) and secondary stakeholders (who are indirect beneficiaries, referred to as intermediary persons or organisations) (Freeman, 2010; Kwofie et al, 2016). This first step of identification of relevant stakeholders is relevant for this research as the primary stakeholders are identified as the investors, employees, shareholders, suppliers, and customers in PPP housing projects (Sattout & Batwala, 2019). Whereas, public stakeholders such as communities and government can be regarded as primary stakeholders, as these provide legal frameworks and infrastructures for the operation of PPP housing sector projects (Kang et al., 2019). While, secondary stakeholders are also relevant for this research which are identified as pressure groups and media, both of which can indirectly affect the reputation of PPP projects if these projects are not considered to be reliable by the customers of housing sector projects (Alola, 2019).

The second step in stakeholder analysis is about determining the power and influence of each stakeholder (Gebrehiwet & Luo, 2017). Primary stakeholders in the PPP projects have high power and interest as these stakeholders are directly linked with the PPP's policy implementation and have the legal powers to amend the PPP contracts (Gebrehiwet & Luo, 2017). This aspect of high power and high interest is also relevant for this research as these primary stakeholders having high power to implement, develop and amend PPP contracts and having high interest to ensure that PPP projects are successful in providing quality and affordable housing, which makes these primary stakeholders influential in PPP housing sector projects (Alteneiji et al., 2019). While, secondary stakeholders have low power and low interest in the PPP projects as these are less affected by the PPP's policy implementation (Almarri, 2019).

Nonetheless, both primary and secondary stakeholders' interests should be aligned with the PPP's housing sector projects' objectives, so there is an agreement regarding common objectives which should be accomplished both by primary and secondary stakeholders (Osei-Kyei & Chan, 2017). The third step in stakeholder analysis involves evaluating all stakeholders and identifying the ones which are most important for the successful implementation of PPP projects (Bhatia, 2017). This step is also relevant for this research as the performance of various stakeholders in this research is evaluated in light of the objectives which are assigned to each stakeholder, and their respective strong or weak performance determine their importance and future collaborations in the PPP housing sector projects (Bhatia, 2017). Stakeholder theory also offers certain limitations that should be taken into consideration. These limitations are evaluated next in this chapter.

### 3.2.1.3 Limitations of stakeholder theory

It is argued by Marcoux (2003) and Kaler (2006) that stakeholder theory does not provide an exact definition of the stakeholders, as a result of which the basis on which stakeholders are identified in a project remains vague. Grimsey & Lewis (2007) argue that without establishing the normative boundaries to define stakeholders, the academic theorists can establish their criteria for differentiating stakeholders; a practice likely to confuse company directors concerning best applicable standards. This limitation is handled in the current research by embracing the definition of stakeholder as provided by Freeman (2010) who states that the stakeholders are the comprehensive set of internal and external individuals who have vested interests to keep the business going, profitable (both public and private sector housing organisations) and to serve the greater interest of public at large (customers of PPP housing sector projects).

Another limitation of stakeholder theory is that stakeholder analysis is done subjectively based on the direct or indirect vested interests of the top management (Bucholtz & Carroll, 2012). For instance, companies can prioritise the stakeholders rather than customers or employees to increase the corporate capital and receive personal commissions. As a result, some vital stakeholders can be eliminated by the board of directors to achieve personal agendas (Bucholtz & Carroll, 2012). This limitation is handled in this research by taking into consideration the perspectives of all stakeholders in the PPP housing sector projects starting from top management of housing authorities to the end-users, i.e., the customers of PPP projects, so to ensure that no vital stakeholders are excluded in this research.

Apart from the ambiguities surrounding stakeholder's definition, this theory cannot guide the company's directors on how to rank/prioritise stakeholders (Kaler, 2006; Harrison & Wicks, 2013). Overall, some stakeholders play more roles compared to others, making organisations

prioritise them based on the roles (Harrison & Wicks, 2013). Although, delineation and classification of stakeholders seem challenging, directors must clearly define the role of all stakeholders, since the role influences stakeholders' benefits (Harrison & Wicks, 2013). Nonetheless, given the lack of explicit guidance from the theory, companies' executives find it difficult to make appropriate judgments in line with stakeholders' needs and expectations which cause conflicts among stakeholders (Ismail, 2013). Furthermore, stakeholder theory is considered limited in terms of defining what stakeholders expect from organisations as it does not provide clear outcomes for all stakeholders (Ismail, 2013).

Moreover, Schipper & Silvius (2014) have criticised the stakeholder theory for arguing that the interests of conflicting stakeholders can be compromised or balanced against each other. Therefore, it is suggested that in addressing stakeholders' interests, it is vital to negotiate and emphasise on the agreeable outcomes, not through compromises, rather than having conversations with the stakeholders (Schipper & Silvius, 2014). This limitation of stakeholder theory is addressed in the current research by utilising multiple perspective theory in terms of identifying the vital technical, organisational and personal perspectives of stakeholders which are considered essential to address conflicting stakeholders in the PPP housing sector projects (Sattout & Batwala, 2019).

Lastly, another main limitation of stakeholder theory is argued to be its reliance on the social contract concept which states the importance of morals and values in managing the stakeholders (Mansell, 2013). This reliance on the social contract concept of stakeholder theory undermines the principles on which a market economy is based (Mansell, 2013; Kang et al., 2019). The limitation is addressed in this research by utilising the multiple perspective theory, which is based both on the principles of social contract concept and market economy. As the stakeholders in the empirical part of this research have addressed the importance of financial value generated by the PPP housing projects which is regarded to be one key CSF from

stakeholders' perspectives on the PPP housing sector projects in Kuwait (Alola, 2019). It is also essential to evaluate the Neo-institutional theory, which is another conventional theory used in PPP literature to evaluate stakeholders' perceptions (Ose-Kyei et al., 2018). The next section explains the neo-institutional theory.

## 3.3 Neo-institutional Theory

The neo-institutional theory represents a critical perspective for understanding organisational behaviour as situated within and affected by other organisations & social forces (Sandhu,2015). These social forces encompass cultural norms, beliefs, and values (Badewi & Shehab, 2016). The neo-institutional theory argues that institutions are a system of incentives and rules which highlight the notion of bounded reality (Bridwell-Mitchell, 2016). Bounded rationality assumes that rational choices of stakeholders are constrained (Bridwell-Mitchell, 2016). Furthermore, the neo-institutional theory suggests that stakeholders continuously compete against each other to acquire power (Venkataraman et al, 2016). Moreover, neo-institutional theory advocates the importance of sociological understanding which is about understanding the institutional cultures, structures, norms, and rules (Currie & Spyridonidis, 2016).

Nonetheless, the neo-institutional theory has certain limitations, such as; concerns for the institutions but it ignores the external stakeholders who play an important role in shaping the organisational behaviour (Alvesson et al., 2017). Moreover, this theory only explains the process of institutional change, but it does not explain the reasons for the institutional change regarding both the political as well as the social framework, which are important to understand the institutional change (Alvesson et al., 2017). Neo-institutional theory is used in the PPP literature to demonstrate its successful implementation in utility and transportation initiatives, where fixed agenda was set and the notion of bounded rationality was applicable (Alvesson & Spicer, 2019). This theory could help in understanding the power possessed by either the public or private players and how each side generates actor-centered institutionalism, where

standardised routines and implementation strategies are forced by one side of the PPP agreement (Alvesson & Spicer, 2019). Moreover, this theory could signify some social & cultural elements that enrich the organisation's code of conduct and tactics during the implementation of PPP projects (Alola, 2019).

However, the use of neo-institutional theory is not justified for this research as this research is based on stakeholders' perceptions of PPP housing sector projects where all stakeholders from both the public and private sectors are considered equal, and their equal role in terms of standardised routines and implementation strategies is one CSF which positively affects the implementation of PPP housing sector projects (Alteneiji et al., 2019). Another justification for not using neo-institutional theory is that since it advocates that the particular investments which are made by the private partners in the form of knowledge, money or resources, which make those private partners vulnerable (Alvesson & Spicer, 2019). This results in the investing partner to be dependent on the other partner, which may give rise to an opportunistic behaviour such as taking short cuts or compromising on quality (Alvesson & Spicer, 2019). This research on the other hand regards the role of investing partners, such as private partners as the ones adding value in the PPP projects by investing in knowledge, money and resources, which are vital from stakeholders' perspectives to improve the performance of PPP housing sector projects in Kuwait (Sattout & Batwala, 2019). Thus, this research uses multiple perspective theory, which is evaluated next in this chapter.

# 3.4 Multiple perspective theory

Multiple perspective is a term that refers to different heterogeneous representations, roles, and viewpoints which be used both in non-collaborative and collaborative contexts (Linstone, 2010). This theory serves to help the system practitioners to bridge the gap between the real world and the theory and between the analysis and action (Linstone, 2010). In this theory, the starting point as seen by the practitioner is a complex-functioning real-world entity, and such a system is

referred to as ill-structured or problematic which needs to be resolved (Hall & Davis, 2007). Hence, the goals of the practitioners are to carry out the decision-making process, implement the decisions, and manage the system operationally (Hall & Davis, 2007). Upon assessing the real system, the next step is to envision the ideal system called the conceptual model (Gregory et al., 2012).

Multiple perspective theory advocates that the consensus is not achieved on a single best option, but rather a solution is reached with the help of explicit evaluation of stakeholders' perspectives concerning nature, the reason for the problem and its solution (Lilliestam & Hanger, 2016). Thus, unlike stakeholder theory which relies on the notion of bounded rationality, multiple perspective theory relies on the notion of plural rationality which states that without exploring the multiple perspectives of stakeholders, improvement in the system's thinking is not possible (Scolobig & Lilliestam, 2016). The use of multiple perspective theory as against the stakeholder theory is thus, justified for this research as the plural rationality based upon the multiple perspectives of stakeholders has formed the basis to explore the research questions of this study. Moreover, the use of multiple perspective theory is better justified for this research as against the stakeholder theory, as the multiple perspective theory is aimed at delivering results (which in this research relates to the improved implementation of PPP housing sector projects by taking into consideration the stakeholders' perspectives about the vital CSFs) by identifying the solution which enhances both financial and stakeholders' value (Demirel et al., 2017). While, the stakeholder theory only concentrates on the social contract concept and discard the economic value concept, whereas, multiple perspective theory highlights the importance of combining both the social contract and economic value concept (Demirel et al., 2017). Hence, the use of multiple perspective theory is better justified for this research as the PPP housing sector projects create both economic value for the stakeholders and also consider the evaluation

of vital stakeholders' perspectives valuable to create stakeholders' discourses in the form of shared, structured or unstructured ways of speaking thinking, interpreting and signifying ideas (Yin, 2017).

Furthermore, the use of multiple perspective theory facilitates the co-production of knowledge by translating heterogeneous stakeholders' perspectives into technical options as a result of which a compromised solution is reached (Lilliestam & Hanger, 2016). While, the stakeholder theory is aimed at co-producing the knowledge by converging the perspectives of stakeholders (Roth, 2017). The use of multiple perspective theory is thus, justified for this research as knowledge, i.e., varying perspectives of stakeholders in PPP housing sector projects has resulted in developing technical solutions such as how to develop integrated system by incorporating CSFs as per stakeholders' perceptions so to improve the implementation of PPP projects in Kuwait (Ismail, 2017). Osei-kyei & Chan (2017) and Muhammad & Johar (2019) have also confirmed the adoption of multi-perspective theory to improve the implementation of PPP housing sector projects as the facilitated dialogue by means of interacting with various stakeholders enable top-down planning by the government authorities along with their network of experts such as private sector officials in PPP projects. Thus, the adoption of multiple perspective theory is justified in this research as the individual perspectives of stakeholders call for deregulation, offer innovative solutions and encourage the equitable risk allocation, all of which are vital CSFs from stakeholders' perspectives to improve the quality and performance of PPP housing sector projects (Almarri, 2019). Table 5 below, thus, summarises the key differences between the stakeholder and multiple perspective theory.

Table 5: Differences between the stakeholder and multiple perspective theory (Adapted from Scolobig & Lilliestam, 2016)

Stakeholder theory	Multiple perspective theory
Stakeholder theory is based on the	Multiple perspective theory is based
notion of bounded rationality.	on the notion of plural rationality.
Stakeholder theory emphasises the	Multiple perspective theory focuses
importance of the social contract	on the importance of both social and
concept and marginalises the	economic value concept.
importance of the economic value	
concept.	
Stakeholder theory aims at generating	Multiple perspective theory aims at
solutions by converging the	generating solutions by encouraging
stakeholders' perspectives.	heterogeneity among the stakeholders'
	perspectives by conducting facilitated
	dialogues.
Knowledge is co-produced in the	Knowledge is co-produced in the
stakeholder theory by comparing	multiple perspective theory by
various alternatives.	utilising informed opinions of
	stakeholders to generate co-produced
	options.
Stakeholder theory does not provide	Multiple perspective theory provides
clear outcomes for stakeholders.	clear outcomes for stakeholders using

facilitated dialogue.

Multiple Perspective theory proposes three complementary perspectives (namely, Technical, Organisational, and Personal-TOP) to address complex system problems (Mohamad et al., 2014). Thus, TOP perspectives are evaluated in the final part of this chapter.

## 3.5 TOP perspectives

Linstone (1989, 2010) argues there are three main perspectives of systems, namely technical (T), organisational (O), and personal (P), and each of them have different properties and characteristics. As shown in Table 6 below, these differ based on goal, mode of inquiry, ethical basis, planning horizon, communication, and other characteristics; nonetheless, it is a comprehensive and holistic approach (Meyer et al., 2007).

	Technical (T)	Organizational (O)	Personal (P)
Goal	Problem solving, product	Action, stability, process	Power, influence, prestige
Mode of inquiry	Modeling, data, analysis	Consensual and adversary	Intuition, learning, experience
Ethical basis	Rationality	Justice, fairness	Morality
Planning horizon	Far	Intermediate	Short, with important exceptions
Other characteristics	Cause and effect	Agenda (problem of the moment)	Challenge and response
	Problem simplified, idealized	Problem delegated and factored	Hierarchy of individual needs
	Need for validation, replicability	Political sensitivity, loyalties	Filter out inconsistent images
	Claim of objectivity	Reasonableness	Need for beliefs
	Optimization (seek best solution)	Satisficing (first acceptable solution)	Cope only with a few alternatives
	Quantification	Incremental change	Fear of change
	Trade-offs	Standard operating procedures	Leaders and followers
	Use of averages, probabilities	Compromise and bargaining	Creativity and vision by the few
	Uncertainties noted (on one hand)	Avoid uncertainties	Need for certainty
Communication	Technical report, briefing	Language differs for insiders, public	Personality important

#### Table 6: Characteristics of the Three Perspectives Source: Adapted from Linstone (1989, p.312)

Moreover, they all have different underlying axioms, paradigms, and assumptions. It is recommended to take all these perspectives into account when making decisions, therefore, as many perspectives as possible are considered when analysing the problem and in planning a decision, as each perspective can bring unique insights (Heeks, 2008). Accordingly, a threedimensional view of the problem is ensured (Heeks, 2008) The technical perspective; a modern phenomenon is based on engineering and science, and, in fact, the multiple perspective approach has emerged in reaction to drawbacks of this approach (Roth, 2009). This perspective uses tools such as econometrics, structural modelling, system dynamics, decision and costbenefit analysis, and game theory which all aim at problem-solving from the systemic perspective (Linstone, 2010). The *O* perspectives reflect the culture, its norms and beliefs (Linstone, 2010). It deals with issues such as fairness, justice and social entities, and aims at evaluating how organisational outcomes are determined and affected by the organisational norms and beliefs (Luhmann, 2012). While the **P** perspective is the most challenging to define, as it represents how an individual sees the world (Steenhuisen & Van Eeten, 2013). It focuses on beliefs, challenges, values, morality, power, influence. Its purpose is to discover how individuals impact events and how their collective perspectives can handle complex problems which is why utilising TOP perspectives in the PPP projects can offer significant insight about the stakeholders' perspectives that are required to successfully implement PPP housing sector projects (Biygautane, 2017).

The use of TOP perspectives in the PPP projects in three steps provides sufficient guidelines to deal with the problems which undermine the performance and effectiveness of PPP projects (Klijn & Koppenjan, 2016). The first step is to analyse alternatives, the second step is to decide which alternative to select, and the third step is to implement the selected alternative (Klijn &

Koppenjan, 2016). The T perspective is mostly used in the first step to overcome the gap between the analysis and action, and it is critical to consider P and O perspectives, as these two perspectives differ fundamentally from the T in a sense that they go beyond scientific methods and engineering (Gebrehiwet & Luo, 2017). Nonetheless, it is, at times challenging to make a distinction between O and P perspectives, but the most efficient organisations usually develop congruence between them (Gebrehiwet & Luo, 2017).

Furthermore, as suggested by Osei-Kyei & Chan (2017), complex problems can be seen from several perspectives. For instance, P perspective can be applied to the decision-making process relevant to technology in implementing the PPP projects. In contrast, the T perspective can be considered when making decisions related to the organisation, for example, how to use technological competencies of the private sector to align the stakeholders in the PPP projects (Osei-Kyei & Chan, 2017).

The multiple perspectives, when taken together, represent a Singerian inquiring system (Tarafdar & Davison, 2018). A Singerian inquiring system refers to a meta-inquiring system, as it encompasses inquiring systems such as dialectic, model, data and it is also considered pragmatic, which means that content is relative to objectives and goals (Tarafdar & Davison, 2018).

Table 7 below shows in detail how the risk assessment functions when approached from different perspectives. From this table, it can be observed that three perspectives do not use the same terminology, nor the same methodology is used to carry out the analysis and in generating the conclusions. To illustrate, while the T perspective is based on statistical inference, whereas P perspective considers perceived horrors. Similarly, validation and replicability of analysis in the T perspective is contrasted with concepts of salvation and excommunication prominent in P perspective. Although these perspectives are different, they offer a holistic approach to analyse stakeholders' perspectives (Heikkinen et al., 2019) resulting of their use in the current study.

Technical (T)	Organizational (O)	Personal (P)
One definition of risk for all	Definition customized to organization or group	Individualized definition
Compartmentalizing risk by discipline	Compartmentalizing risk by organizational slot	Time for consequences to materialize (discounting of long-term effects)
Probabilistic analysis; expected value calculations	Compatibility with standard operating procedures (SOP)	Age of individual
Statistical inference	Avoidance of blame; ability to diffuse responsibility	Perceived horrors (cancer, AIDS, Hiroshima)
Actuarial analysis	Inertia; warnings ignored	Fears based on personal experience
Fault trees	Fear exposure by media; attempt stonewalling	Influenced by media coverage of risk (China Syndrome)
Margin of safety design; fail-safe principle	Financial consequences	Economic cost (job loss, opportunity for gain)
Quantitative life valuations, cost-benefit	Impact on organiz. power	Freedom to take voluntary risks
Validation and replicability of analysis	Threat to product line	Salvation; excommunication
Failure to grasp "normal accidents" (Perrow, 1984)	Litigious societal ethic	Peer conformity pressure
Intolerance of "nonscientific" R risk views	Reliance on experts, precedent	Peer esteem (exhibit courage manliness)

# 3.6 Rationale for adopting TOP Perspectives

When studying the critical success factors which affect PPP project implementation, scholars need to concentrate on factors such as the investment environment, reliable consortium, robust financial package and risk management, and keeping multiple perspectives of the stakeholder views in mind (Perrault, 2017). In the case of PPP projects, three perspectives; technical, organisational, and personal, are most significant (Kang et al., 2019). This is because the technical viewpoint reveals from the stakeholders' perspective to the extent the technological

robustness of the private sector adds value in the PPP projects in terms of return on investment (Kang et al., 2019). The personal perspective illustrates the importance of the personality of the stakeholders in their understanding of PPP's project success and failure (Kang et al., 2019). Lastly, the organisational perspective explores the power and influence as key constructs in PPP' project management and success or failure (Deloitte, 2018).

PPP projects like any given system are typically viewed from various perspectives (Deloitte, 2018). During the evaluation stage of PPP projects, multiple perspectives serve various reasons (Alola, 2019). For example, all project assessments involve multiple stakeholders, including project sponsors, project developers, project managers, the general public, policymakers, administrators, and the community (Muhammad & Johar, 2019). Thus, in the PPP's project evaluation stage, the project evaluator can analyse the projects from the viewpoint of the other stakeholders (Muhammad & Johar, 2019). In the context of Kuwait housing projects, this means viewing the PPP projects from the views of public entities, the private sector, national assembly, and end-users (Sattout & Batwala, 2019).

The use of TOP perspectives in the PPP projects may prompt the project managers to thoroughly analyse why project sponsors are pressuring them to assess their project from the users (outside) perspective or the reason they have to illustrate project outcomes and impacts (Muller & Turner, 2007; Cui et al., 2018). Once, project managers in the PPP projects understand the pressures on different stakeholders (in most cases project sponsors), they may understand in detail why they need to appreciate the contribution of other stakeholders which is an important CSF to improve the quality of PPP projects (Cui et al., 2018).

On the contrary, project sponsors, at times, may fail to understand the reason as to why the agencies they sponsor to undertake PPP projects resist their call for project evaluation (Wang et

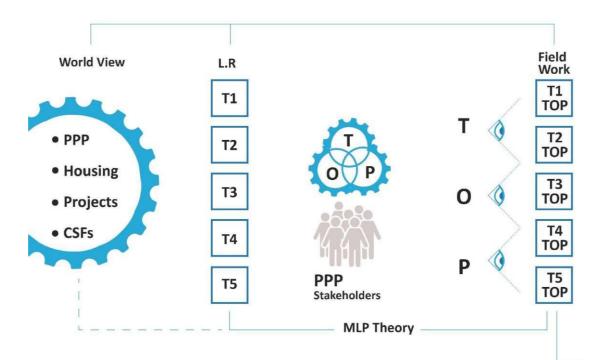
al., 2018). If the project sponsors start to see the project through the views of the stakeholders participating in or implementing the project, they can attain a better understanding of the entire project (Wang et al, 2018). Thus, understanding different perspectives of the stakeholders in the PPP projects, including technical, organisational, and personal perspectives, improve the effectiveness in the PPP projects (Wang et al, 2018). Hence, multiple viewpoints are significant and critical in understanding the meaning and the content of mega projects such as PPPs (Xiong et al, 2018). Throughout a project appraisal, it is vital to have major stakeholders (both external and internal) look at various parts of the project so that they can share their perceptions and consider the perception of other stakeholders to address the problems in the implementation of PPP projects via the facilitated dialogue (Xiong et al, 2018). Based on the discussion in this chapter, the theoretical framework of this research is presented in the next section.

### 3.7 Theoretical framework of this research

Figure 7 below illustrates the theoretical framework of this research. The starting point in the framework suggests that the worldview, i.e., the problem statement in this research highlights the lack of integration of stakeholders' perspectives on the PPP housing sector projects being the problem. This can be resolved by exploring the perspectives of stakeholders which can influence or be influenced by the stakeholders' perceptions, experiences, and understandings of the realities in the PPP housing sector projects in Kuwait. These stakeholders' perspectives mainly of the private sector, public sector, national assembly and the end-user in the PPP housing sector projects in Kuwait would establish the link between the PPP projects' CSFs and how these CSFs are perceived by the stakeholders so to influence the policy changes or reforms. The basic foundation of this theoretical framework is that the stakeholders in the PPP projects do not operate in a vacuum, instead the stakeholders' actions are influenced by the key CSFs which in this case are identified via the review of literature (LR) as the five CSFs of the

investment environment (marked as T1 in the figure below), attractive project (marked as T2 in the figure below), reliable consortium (marked as T3 in the figure below), financial package (marked as T4 in the figure below) and the risk allocation (marked as T5 in the figure below). These five factors are identified as the key CSFs from the stakeholders' perspectives; however, there is a lack of systemic understanding of how the stakeholders of PPP projects interact and how their perceptions affect the successful implementation of PPP projects in the context of Kuwait. Consequently, this theoretical framework argues that the inclusion of the multiple perspective theory (marked as MLP in the figure below) of stakeholders by specifically evaluating the TOP perspectives can help to illustrate the key CSFs from the stakeholders' perspectives which may lead to the PPP' project success. The TOP perspectives are thus, used to conduct the fieldwork to generate a relevant framework for acquiring an understanding of how various stakeholders such as the public sector (marked as T1 TOP in the figure below). Private sector (marked as T2 TOP in the figure below), national assembly (marked as T3 TOP in the figure below), end-user (marked as T4 TOP in the figure below) and other stakeholders (marked as T5 TOP in the figure below) in the empirical part of this research would subjectively make sense of their experiences and knowledge of PPP's policy implementation from their perspectives. Therefore, the theoretical framework of this research argues that the worldview, identification of five CSFs from the literature review and utilising TOP perspectives of multiple perspective theory can collectively provide a thorough understanding of the key CSFs from the stakeholders' perspectives which would impact how these stakeholders implement these CSFs and inform policy reforms in order to make the PPP housing sector projects successful.

Figure 7: Theoretical framework of this research



# **Chapter 4.** Research Methodology

# 4.1 Introduction

The aim of this chapter is to provide the research methodology which is selected to collect the primary data of this research. This chapter also presents the selection of the research philosophy, research approaches, methodological choice, research strategy, time horizon, data collection and data analysis tools. Various researchers such as Hanson (2005); Bryman (2012); Yin (2013) and Saunders et al. (2016) believe that the design of a research is vital as it has a great influence on the validity of the end results. For instance, Kagioglou et al., (2000) discusses the nested research methodology which includes three main stages: research philosophy, research approach, and research techniques (Figure 8).

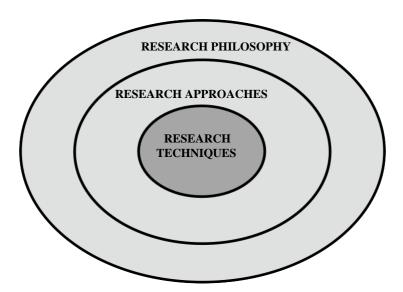


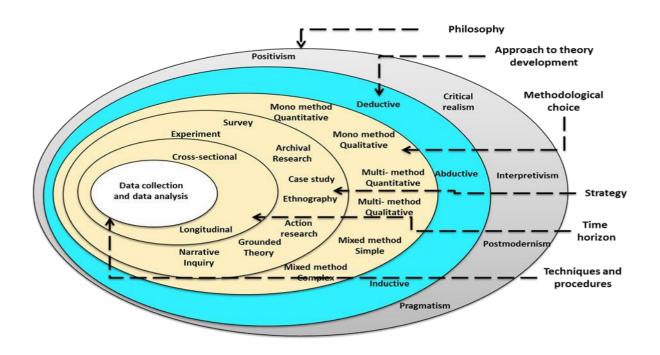
Figure 8: Nested Research Methodology (Source: Kagioglou et al.2000, p.143)

Whereas, Crotty (1998) and Saunders et al (2016) suggest that an effective research design should be comprised of four elements of research epistemology, theoretical perspective, methodology that governs the choice of selected method which is used in a research. Table 8 provides a summary of this design.

Table 8: Research Design Elements. Source: Crotty (1998)

Research Design Dimensions	Explanation
Epistemology	Theory of knowledge, in particular concerning scope, methods and validity. This includes subjectivism, constructionism and objectivism.
Theoretical perspective	Some assumptions, which guide the researcher's thinking. The main examples are positivism, interpretivism, post-positivism, critical inquiry and postmodernism
Methodology	Is a research strategy that links methods to the research outcomes. The common methodologies used by most researchers are grounded theory, experimental research, ethnography, survey research, phenomenological research, discourse analysis and action research,
Method	It includes procedures and methods employed. They range from questionnaire, cognitive mapping, focus group, interview, case study and statistical analysis.

Likewise, Saunders et al., (2016) developed the research onion model which consists of six layers which start from the research philosophy, approach, strategy, then time horizons, the choices, and finally data collection and analyse. This model is displayed in the Figure 9 below.



This study adopts the six layered research onion model of Saunders et al. (2016) as a guideline. The notion behind choosing this model is its comprehensive nature which encourages the researcher to review each stage systematically (Saunders et al. 2016). Therefore, in line with Saunders et al. (2016) model, the research process for this study consists of research philosophy, research approach, research strategy, time horizons, methodological choices, and finally data gathering and analysis techniques.

# 4.2 Research philosophy

Research philosophy is also regarded as the paradigm, and belief systems (Hanson, 2005). Therefore, the definition of research philosophy may vary among the researchers (Hanson, 2005; Denzin, 2017). Thus, Denzin (2017) defines paradigm as philosophical views that characterise a basic set of beliefs which control human action. Traditionally, there are two main paradigms or worldviews to conduct research; which are positivism and interpretivism (Barrett and Sutrisna, 2009; Denzin, 2017). Moreover, the combination of these two traditional paradigms have resulted in new paradigm such as pragmatism (Flick, 2017). However, the assumptions on the nature of reality vary in each of these two research philosophies as a result of which these assumptions support the researchers in deciding on the philosophy as per the aim of the research study (Flick, 2017). Since, the aim of this research is to evaluate the key CSFs from the perspectives of various stakeholders using the multiple perspective theory in the PPP housing projects in Kuwait to determine which combination of factors has led to successful implementation. Thus, the evaluative assumption of this research justifies the selection of interpretivism research philosophy in this study.

### 4.2.1Philosophical assumptions under the positivism paradigm

Based on the stances of ontology, epistemology and axiology, the positivism paradigm, according to Fellows and Liu (2008), assume that a phenomenon obeys natural laws and can be subjected to quantitative logic. Similarly, positivism also assumes that reality can be observed, studied and modelled (Fellows and Liu, 2008). Consequently, positivists take a deductive approach to research (Gill and Johnson, 2010). Also, known as the objectivist perspective, positivism suggests that reality can be independently observed as it is single; therefore, experienced the same way by everyone and stress on objective knowledge, empirical regularities and deductive tests (Collis and Hussey, 2014). This makes this particular worldview very objective and as such promote the believe that there is a single reality of nature which means no matter the angle from which it is viewed, it will be experienced the same way by everyone, it only recognises observable phenomena and non-metaphysical facts. (Denzin, 2017). However, the axiological assumptions by positivism philosophy acknowledge that the research is unbiased and value-free as according to the positivist researchers they are free or independent of their research work (Collis and Hussey, 2014; Becker, 2017).

### 4.2.2 Philosophical assumptions under the interpretivism paradigm

Unlike positivism, interpretivism assumes that a phenomenon does not obey natural laws but is interpreted based on peoples' understanding of the reality surrounding the phenomenon (Walliman, 2001). As a result, the interpretivists believe that nature can only be interpreted based on where one is standing (Hanson, 2005). Eventually, this makes the interpretivism philosophy subjective as people understand things differently (Barrett & Sutrisna, 2009). Based on this stance, the interpretivism construct reality based on the person involved making one person's reality different/likely to be different from another person's due to the difference in observations and perceptions which are also modified by upbringing, education and training (socialisation) (Kalof et al.,2008). Although applicable to quantitative theories (Fellows & Liu, 2008), the interpretivism paradigm is largely aligned with the

qualitative studies as subjectivists tend to use the interpretive, qualitative or idiographic approach to science (Klein & Myers, 1999; Brown, 2010).

At the philosophical level, there is a clear connection between positivism and interpretivism (Brown, 2010). Nonetheless, Easterby-Smith et al. (2012) state that the link may become unclear at the research design level if the researcher is interested in understanding the real situation by considering diverse perspectives. Thus, understanding the world in practice may necessitate integration of both quantitative and qualitative data (Easterby-Smith et al., 2012).

Eventually, aside the two traditional paradigms, there are other non-traditional paradigms which combine the two paradigms to achieve the aims of the research (Collis & Hussey, 2014). Bryman & Bell (2015) mention other paradigms such as realism and pragmatism. The pragmatist perspective is a philosophical stance which arises out of actions, situations and consequences (Biernacki, 2014). Consequently, pragmatism combines both views from positivism and interpretivism to better understand a research problem (Biernacki, 2014). Unlike the traditional perspectives, pragmatism places more importance on the problem being studied as well as the questions being asked instead of the methods (Biernacki, 2014). For this reason, pragmatists rely on both qualitative and quantitative sources (multiple methods) of data collection (Glaeser, 2014). Additionally, pragmatism focuses on the practical implications of the research as the best means to answer research questions and problems (Klenke, 2016). In this regard, Collis & Hussey (2014) and Klenke (2016) provide a summary explanation of the philosophical assumptions that underpin the two traditional philosophies. Table 9 presents this explanation.

Philosophical assumption	Positivism	Interpretivism
Ontological assumption (the nature of reality)	Reality is objective and singular, separate from the research	Reality is subjective and multiple, as seen by the participants
Epistemological assumption (how researchers get and receive knowledge (reality) about the world)	Researcher is independent of that being researched	Researcher engages with that being researched

Axiological assumption	Research is value-free and	Research is value laden and
(the role of values)	unbiased	biases are present

Table 9: Assumptions of the main research philosophies in social science (Adapted from Collis and Hussey, 2014 & Klenke, 2016)

Since, this research uses the interpretivism philosophy, so it is important to evaluate the context within which the research is conducted. Thus, it is difficult to separate the PPP stakeholders from the social contexts in which they exist, and their viewpoints cannot be understood without examining their opinions of their experiences. Therefore, the researcher cannot be objective, because he is part of the phenomena, as well as he does not aim to test causality and fundamental laws but rather, he tries to understand what is happening. Thus, the researcher and stakeholders are equally involved in this research both having their own personal interests. This is also known as reflexivity which in this research is aimed at improving one's lived experience (stakeholders' perceptions) and then using such experience to enrich one's understanding of the field (Berger, 2015) which in this case refers to the improved understanding of the PPP housing sector projects in Kuwait. Since, positivism does not explain why such phenomena occur, therefore, it is necessary to gain an understanding of PPP stakeholders' perceptions. According and based on the above discussion, it is clear that the positivism is inappropriate for this research.

Therefore, for this specific research work, the interpretivism research philosophy has been adopted. The research study applies an ontological assumption, which states that reality is constructed socially (Bryman & Bell, 2015). Whereas the epistemological assumption is the anticipation, which states that the knowledge is gained by examining the perceptions of the people in the case studies (Bryman & Bell, 2015). Furthermore, the axiological assumption

signifies that the research study is value- laden so there is a possibility of researcher's or participants' bias and it is important in this regard to avoid the bias (Klenke, 2016). The bias is avoided in this research by allowing participants to review the results and by checking for alternative explanations which according to Saunders et al. (2016) is considered useful in avoiding bias in a qualitative research. Figure 10 illustrates the research positioning of this study.

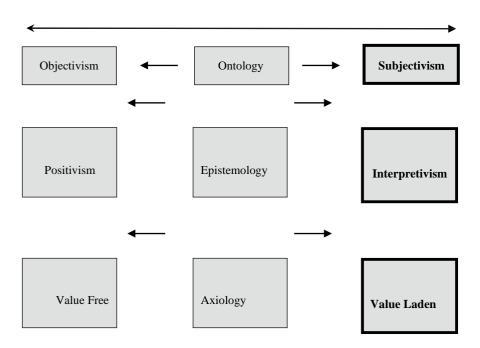


Figure 10: The positioning of this study (Adapted from Collis & Hussey, 2014)

# 4.3 Qualitative and Quantitative Methods

The two major types of research approach in social science are qualitative research approach and quantitative research approach, which represent the interpretivism and positivism research philosophies respectively (Easterby-Smith, et al., 2012 and Yin, 2013). The quantitative approach is mainly linked with the positivism research philosophy that concerns about the

counting and measuring of the things (Collis and Hussey 2014). Saunders et al. (2016) state that the base of the quantitative research is on the meanings, which are derived from the numbers. The accumulation of the numerical outcomes as well as the standardised data plus the analysis carried out via the usage of diagrams and also the statistics are used in the quantitative research (Yin, 2013). Besides, the quantitative research is concerned with the questions like how often, how much, and how many which all involve quantification of data (Yin, 2013).

Table 10 below reviews the main differences between the qualitative and quantitative methods.

Qualitative	Quantitative
Stress on understanding	Stress on testing and verification
Emphasis on understanding from people's opinion	Emphasis on facts of social events
Interpretation and sane approach	Logical and acute approach
Observations in natural settings	Controlled measurement
Subjective 'insider view'	Objective 'outsider view'
Explorative direction	focus on hypothesis testing
Process oriented	Result oriented
Holistic perspective	Exacts and analytical
Generalisation from one setting to another	Generalisation from sample to population

Table 10: Differences between qualitative and quantitative methods (Adapted from Ghauri and Gronhaug, 2005)

Alternatively, the qualitative research typically focuses on implicit and explicit meaning of words instead of quantifying an accumulated amount of data to be statistically analysed (Saunders et al., 2016). The qualitative research is aimed at gathering the results in non-standardised data, that needs grouping into different categories, plus the analysis is carried out by the usage of conceptualisation (Saunders et al., 2016). Therefore, it is considered that the

qualitative method is constructive as well as reflective of the point of views of individuals so to obtain accurate understanding about the social and human activities (Collis & Hussey 2014; Saunders et al., 2016). Moreover, Flick (2017) suggests that since the qualitative methodology emerges from the interpretivism, thus, reality is considered to have multiple meanings. Besides this, the strength of qualitative methods lies in ascertaining deep, detailed, underlying meanings plus a description of the phenomenon which a researcher intends to explore (Flick, 2017). Thus, the qualitative methodology is more appropriate in comparison to the quantitative methodology in order to conduct a research on any particular event or social procedure, which is problematic to express meaningfully (e.g. people's experience or behaviour) (Denzin, 2017).

Hence, as per the characteristic nature of this particular research study, which is based on the interpretivism research philosophy and embraces the assumption that the participant of this research study constructs the reality, the use of qualitative methodologies is justified for this research. Furthermore, this research emphasises on the meaning instead of numbers and it is aimed at obtaining an understanding of the major success aspects of the PPP housing project in Kuwait. Therefore, the qualitative methodologies are the most appropriate methodologies to be applied in this research study.

# 4.4 Research approach

The logic of the research study is called research approach, and it is the roles of the present knowledge body, which is collected through the literature reviews, the process that researchers use for the data collection plus following data analysis task (Barrett & Sutrisna, 2009). The research aim, objectives, philosophy and the processes of research study influence the reasoning of the research. Two basic types of research: deductive and inductive research approaches typically use for the reasoning of the literature study. It can be argued that, theories and methodologies (data collection and analysis) are neither correct nor incorrect; instead, they are either very useful or less useful (Collis and Hussey, 2014).

Besides, it is important that a researcher should select or adopt one research approach out of the two, that is, inductive and deductive approaches (Saunders et al., 2016). In the deductive approach, a theory is developed first, and then a research strategy is designed to test it. On the contrary, in the inductive approach, data are collected and analysed to produce the theory (Saunders et al., 2016). Besides, the inductive is often associated with qualitative and it is moves from a specific to a general idea; whereas, the deductive method moves from a general idea to a specific idea. Additionally, an inductive approach starts by observations and through those observations and inferences, new ideas are shaped into a theory at the end of the research (Goddard & Melville, 2004; Howard & Brady, 2015). Moreover, in deductive approach the researcher develops a theory first and then finds observations or evidence to support the theory (Collis & Hussey, 2014; Howard & Brady, 2015).

Furthermore, another type of research approach that addresses the weaknesses associated with inductive and deductive approach is known as abductive approach (Denzin, 2017). The research process that applies abductive approach starts with the facts finding and then proceeds with major explanations about phenomenon (Saunders et al., 2016). Facts usually appear as the researcher encounters experimental phenomena that cannot be accounted for using current theories (Franzosi, 2016). The researcher who adopts this approach mainly aims at selecting the best explanation from the choices presented to explain the facts that are found during the initial data collection stages (Franzosi, 2016). Furthermore, the investigator combines cognitive and numerical reasoning to account for all facts that are identified (Bryman and Bell, 2015, p. 27).

Table 11 below compares the deductive and inductive approach.

Deduction	Induction	
Moving from theory to data	Moving from data to theory	
Used in natural sciences	Used in social sciences	

very structured approach	Flexible structure to permit changes
Explain causal relationships between variables	Understanding of meanings humans attach to events
to generalise conclusions samples selected of sufficient size	Less concern with the need to generalise

Table 11: Comparison of the deductive and inductive approach (Adapted from Collis & Hussey, 2013)

On the other hand, Atkinson (2005) and Denzin (2017) provide an argument that there is no theory which is free of empirical research and the empirical research study itself is based on certain basic ideas and concepts. Thus, researchers start with some conceptual framework, and it would be unrealistic for them to carry out a field study or involve in a research procedure without a proper framework, model or paradigm on pertinent conceptions in the field of interest (Denzin, 2017).

According to the characteristic nature of the research study, which is a theory building instead of theory testing the researcher has begun with the literature review for understanding as well as recognising the key stakeholders of the undertaken PPP projects in terms of their power influence and legitimacy; the processes that stakeholders follow in developing PPP projects; as well as the current status of PPP housing projects in Kuwait and the key success factors in the PPP that affect such projects. Thus, the use of inductive approach is justified for this research. Moreover, the literature review has provided the theoretical framework on the basis of which the empirical research is conducted in this study and the use of literature review as a starting point to form the theoretical framework to explore a research phenomenon justifies the adoption of inductive approach (Saunders et al, 2016).

According to Franzosi (2016), research approaches can be classified as exploratory, explanatory

or descriptive. The descriptive research seeks to describe the natural surroundings of the phenomenon under investigation. This approach is appropriate for gaining data that explain how phenomenon usually occurs. The research questions on 'what' and 'how' are classified as explanatory (Saunders et al., 2016). While, in an exploratory research, a researcher seeks to explore issues regarding the given phenomenon and the main goal is to gather evidence that can help answer a 'what' kind of research question (Becker, 2017. Moreover, the exploratory research involves the researcher and an interviewee to generate information by responding to questions posed by the interviewer (Gray, 2014). Since, this research is aimed at gaining an understanding about the stakeholders' perceptions about the key CSFs, i.e. to explore their perceptions which are considered vital in the successful implementation of the PPP housing sector projects in Kuwait, thus, the use of exploratory research is justified in this study.

# 4.5 Research strategies

Yin (2013), defines research design as the logical sequence that connects the empirical data of a study to its initial research questions and, to its conclusions. With this definition, Yin (2013) suggests that the research design plays a crucial role in ensuring the results of the research helps to answer the questions the research set out to achieve. Being the logical sequence between data and the conclusions of the research, it helps to determine the means to collect and analyse data which ultimately helps to answer the questions posed by the research (Glaeser, 2014). Furthermore, Yin (2013) states that there are numerous ways to perform research governed by the connection between the research questions and the research strategy. The three conditions under which one can define research strategy are the kinds of research question, the control of the research and the focus on contemporary events (Yin, 2013).

Table 12 below illustrates the commonly used research strategies:

Strategy	Form of research question	Requires control over Behavioural events?	Focuses on contemporary events?
Experiment	how, why	Yes	Yes
Survey	Who, what, where	No	Yes
Case study	how, why	No	Yes

Table 12: Commonly used research strategies (Source: Yin, 2013)

According to Yin (2014), a research study could use more than one strategy and that each strategy must be suitable for the specific conditions. The strategy for a given research is chosen based on the characteristics of the problem. Among research strategies, case study is one of the most appropriate research strategies where the researchers intend to collect rich, descriptive information and deep understanding of the situation (Cohen, 2014). It is a meaningful technique of exploring the existing theory as well as it enables the researchers to investigate into the real life that can deliver powerful ideas to better understand the reality (Gray, 2014). Furthermore, one of the key strengths of the case study strategy is that it permits the researchers to utilise a range of sources and types of data as part of the research study (Cohen, 2014). Besides this, the case study is a preferred research strategy for the researchers who conduct qualitative research (Saunders et al., 2016).

There are five different sources of evidence for the collection of data in the case study research strategy: documentation, interviews, archival records, physical artifacts, and observation (Yin, 2013; Saunders et al., 2016). Therefore, a case study must utilise several sources on a specific condition that these sources are interrelated to the research study (Saunders et al., 2016). Hence, the case study research strategy has been applied in this research because it is the most appropriate research strategy for this particular study that support researcher in gaining an in-

depth understanding which is essential to investigate the extent to which the multiple perspectives theory can help understand the development of PPP in Kuwait's Public Housing Projects. As, the researcher wants to answer what, why, and how questions and it is a contemporary phenomenon (PPPs in housing sector projects in Kuwait) which needs to be explored, thus, the use of case study research strategy is justified for this research.

#### 4.5.1 Case study

The strategy of the case study is applied on one organisation or more than one organisation which implies that a single or multiple case studies can be used in a research (Yin, 2013). is simply indicating that it is a single case study or multiple case studies. Figure 11 below illustrates types of case study designs.

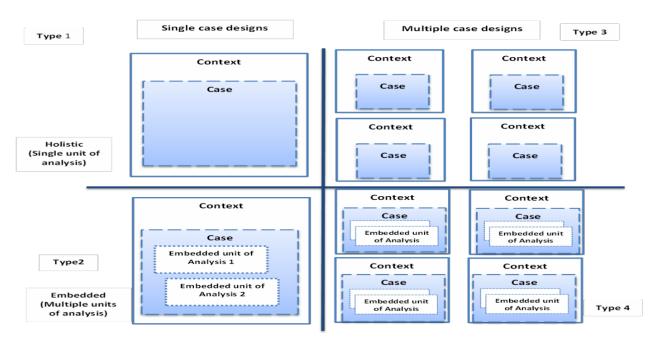


Figure 11: Types of Case Study Designs (Source: Yin, 2013, p.89)

Yin (2013) argues that the single case study can be used for achieving understanding about the complicated unique cases. The single case study offers an in-depth understanding of which the limitations of the study can be easily drawn in the form of the conclusions (Yin, 2013). Moreover, Yin (2013) states that the multiple case studies are found in common and are also generally used for replicating the findings for providing support to the theoretical justifications. The multiple case studies are found to be providing benefits in increasing the external validity as well as in helping to protect against bias characteristics of the observer (Glaeser, 2014). Accordingly, the researcher decided to adopt multiple case studies in the present study as it is the appropriate research design to develop deep understanding about the research question which is explored by the researcher.

Two organisations in Kuwait that deals with PPP projects are used as multiple case studies to serve as sources of data. These case studies are:

- Case study 1: Public Authority for Housing Welfare (PAHW)
- Case study 2: Kuwait Authority for Partnership Projects (KAPP)

The researcher had selected these two organisations for the collection of data as these organisations are a good representation of both PPP and housing projects and they both have shown their interest and provided access for data collection. The focus of this research is on the CSFs which partners apply to evaluate PPP projects implementation' success. This research, being exploratory has attempted to develop a common framework for successful PPP project implementation based upon stakeholders' perspectives by including the stakeholders in form of respondents from the both organisations, thus, the use of multiple case studies is justified. The two case studies, therefore, sought to determine what exactly constitutes CSFs of organisations that successfully implement PPP projects. Two case studies emphasise on the subjective as well as lived experience of organisations in Kuwait by aligning most critical project factors with solutions to improve PPP project delivery and performance.

## 4.5.1.1 Case study design protocol

This research seeks to develop a model for PPP project implementation in Kuwait. The case study design protocol (CSDP) (Yin, 2003) has three basic steps.

- *The first step:* developing the literature review and the conceptual framework. The data collection instruments are also developed during step one.
- The second step: preparing, collecting and analysing the data by exploring the case study organisations.
- The third step: reviewing and validating the conceptual framework in light of the findings of research, drawing conclusions and providing suggestions for future work.

This research has also utilised CSDP's steps of Yin (2009) to conduct this research. Aim of this research was the first step to conduct the literature review and to design the theoretical framework of this research. Then, the next step was to conduct the pilot study to check the feasibility of this research as a result of which two case-study organisations (KAPP & PAHW) were selected. Next, step involved conducting interviews, observations and focus group discussions in these two case-study organisations in order to generate the results of this research. The results of these interviews and focus group discussions were transcribed using template analysis and then these results were discussed in light of the arguments which were raised in the literature review. While, the last step of this research involved presenting the key conclusions, recommendations and suggestions for future researches.

#### 4.5.1.2 The unit of analysis

The vital element of the research design process is to define the unit of analysis. The unit of analysis is found to be surrounding the specific research questions (Yin, 2013). The unit of analysis refers to the investigation or who are being investigated and these could be individuals,

industry, groups, country, organisation, programs and the other subjects (Hammersley, 2013). The variation of strategies in multiple case studies represents two types of designs which are the embedded or the holistic case studies (Yin, 2013). The holistic case studies include the single unit of the analysis, and the embedded case studies include the multiple units of the analysis (Yin, 2013). The case in this research was classified as the Kuwait government's engagement in the PPP projects. The unit of analysis, bearing the research setting, was defined as the process of formulating key CSFs in PPP projects based upon stakeholders' perceptions. This analysis unit is chosen presumably to help draw the processes of CSFs to the local firms that partner with the government to implement PPP projects.

#### 4.5.1.3 Justification for the choice of case studies

There are several PPP projects in Kuwait; nonetheless, there is a dearth of research that has comprehensively examined how Kuwait has adapted PPPs (Sattout & Batwala, 2019). In selecting case studies, a number of factors are considered. However, the factors that informed case studies chosen for this research are given in Table 13 below.

Item	Criteria	Case Requirements	Research Requirements
1	The case should be related to Housing project in Kuwait.	1 0	1 3
2	Main contractor should be a Private consortium.		8 8
3	Local firms in collaboration with a foreign firm.	Indigenous Kuwaiti construction firms registered to do business in Kuwait under the laws of PPP 2014 collaboration with foreign firms on a specific project identified for the purposes of this research and the projects are in Kuwait.	

#### Table 13: Factors considered in selecting case studies

Table 13 above illustrates that the main criteria for selecting these case studies are that these relate to ongoing housing sector projects in the Kuwait in which the main contractor is a private consortium, a foreign firm which provides the required financial, technological and human expertise which are required to run the PPP housing sector projects in Kuwait. Moreover, the research requirements of this study due to which these case studies are selected are to provide a framework for the KAPP and PAHW to approach PPP in the housing sector. The expected outcome of the study is to inform the KAPP and PAHW about the factors that impact PPP, in particular by providing perceptions and expectations of different stakeholders which justifies the selection of these two case studies.

# 4.5.1.4 Background of case study organisations Case study 1: Public Authority for Housing Welfare (PAHW)

In 1974, the National Housing Authority, now the PAHW, was established as the body responsible for housing welfare. Specific regulations about house size, location and programs were intended to distinguish between low-income and middle-income housing. This income-based means testing was withdrawn in 1984, and housing welfare was provided for all, regardless of income. Subsequently, the laws of supply and demand have distorted the intention to bring equality in public housing. The PAHW operates under different rules to those for other public agencies and departments. The approval process is streamlined to bypass government bodies such as the Audit Bureau, the Central Tenders Committee and chose from its own list of approved international consultants. On its website, a translated document provides a basic description of PAHW's role; "a government organization established by Law No. 47 (1993) aimed at providing residential care for beneficiaries in any of the three alternatives (voucher, House or Apartment). It provides subsidised government land and built

homes or interest-free loans. PAHW aims to "revitalise the national economy through activating the role of private sector companies working in the field construction and housing to collaboration between the public and private sectors".

According to PAHW, housing demand increases at 8% annually. By 2020, it anticipates demand will have reached around 174,000 (Bhatia, 2017). Many hold the PAHW responsible for the shortcomings of the housing distribution mechanism. For example, many of those on the waiting list have rejected units allocated to them because they prefer to live in specific residential projects such as those areas near Kuwait City. Those who defer a choice retain priority when new units are cleared for distribution, suggesting, if they are in a position to pick units, according to location and therefore value, their needs are not immediate. The PAHW waits until they accept or reject the unit before it is given to the next applicant in line.

### **Case study 2: Kuwait Authority for Partnership Projects (KAPP)**

Both KAPP and PAHW are formed from merging government regulatory institutions, the Partnerships Technical Bureau and the National Housing Authority respectively. The constitutions, the personnel and the functions remain relatively unchanged, but their powers appear to increase. Sometimes broadening powers can slow rather than speed the process. A 2014 law established the Kuwait Authority for Partnership Projects (KAPP) to replace the failed 2008 Partnership Technical Bureau. The significant difference is that the Higher Committee under the PPP Law has higher approval authority/ chance over individual public entities to enter into PPP based projects (KAPP PTB, 2017).

To promote collaboration between the public and private sectors with the aim of developing its infrastructure, the Government has revised the legal and institutional aspects of its PPP strategy to clarify the regulatory framework around PPP's. This clarification has not involved a change of personnel but has involved a change in legislation to include more investor friendly

provisions, particularly in relation to attracting finance, and has added to the regulator's powers. Under the New PPP Law, the Partnerships Technical Bureau (PTB), previously responsible for PPP projects, is replaced by KAPP. The constitution of the PPP Higher Committee is relatively unchanged, but its powers are broader. KAPP is expected to have greater autonomy and authority than the PTB, but their responsibilities are largely similar (Oxford Business Group, 2016), Notably, KAPP will have the power to establish public joint stock companies for PPP projects. In addition, KAPP's powers include assessing feasibility studies for PPP projects; developing contract templates; drafting PPP agreements; submitting recommendations to the PPP Higher Committee; following up on the implementation of PPP projects.

The KAPP website states that the "Government of Kuwait has established a clear regulatory framework for implementing PPP projects". The laws and regulations establish high levels of transparency and certainty throughout the PPP process – both key to the success of a PPP program. The framework includes general laws and regulations as well as other relevant laws, but there are few if any detailed specific laws which describe concrete achievement rather than generalities such as identifying priorities. Article 3 of Law 116, 2014 is typical of the law's general and vague statements, setting the general policies for projects and initiatives of strategic importance to the national economy, identifying priorities and approving detailed documentation related thereto. The New PPP Law is intended to spread good practice and speed up the ambitious PPP program and to codify some of the techniques such as the warehousing' concept successfully applied in Azzour North Phase 1.

However, the previous 2008 BOT law No. 7 was seen as too restrictive because it prohibited the mortgage of project land and buildings, preventing lenders from effectively securing their material assets. The overly restrictive laws explain why, despite the availability of funds, 14 of the more ambitious and challenging projects have yet to be implemented. The New PPP Law has relaxed these restrictions and prohibitions and clarified what may be pledged as security

(Dikos, 2016).

It is yet to be seen whether this PPP Law does indeed make these projects attractive to the private sector. The Oxford Business Group's 2016 report on Kuwait refers to Laws 8 and 9, 2008 as restrictions on the private sector's ownership of residential land and their ability to invest in PPP projects. The outcome had been a surge in the "value of real estate across the entire country" (Oxford Business Group, 2016).

Article 23 of the New PPP Law gives the investor rights to grant security over the project contracts and assets to lenders. One of the principal reasons for the New PPP Law is to attract foreign investors. The 2014 PPP law therefore loosens restrictions on foreign ownership. The PPP Law provides a simpler approach for establishing the project company and addresses contentious aspects regarding the timing of the incorporation process (Bhatia, 2017). The law has removed some of the uncertainty surrounding share allocations and unsubscribed shares. The New PPP Law is similar to those under the Old Law. However, the definition of project cost has been amended from total cost of a project to the capital expenditure incurred for implementing a project which is intended to reduce the calculated value of a project to the KW\$60 million threshold. Another change intended to loosen the legal strait-jacket on foreign investment is the appointment of technical board members without having to be a shareholder for the construction period of the project term (Biygautane, 2017).

It is hoped that the new regime will open the door for the development and implementation of a greatly increased flow of PPP projects in Kuwait. It remains to be seen if the new regime will provide for a more investor-friendly and streamlined PPP regulatory framework. Although legal experts agree that KAPP has created a greater degree of certainty, reliability and flexibility for foreign contractors, investors and lenders, it will require further evolutionary change before the government funds available are securely invested in viable PPP projects backed by agreements (Sattout & Batwala, 2019).

#### 4.6 Time horizons

Levy & Lemeshow (2008) state that a significant factor which is found to influence the quality of data collection is the time frame. The time horizon is considered to be a short-term, cross-sectional research investigation process or longitudinal by which the research period is measured, and these also include the samples in the research process (Saunders et al., 2016). Cross-sectional research takes place at a single point in time, facilitates the researcher to evaluate various characteristics at once and it can provide information about a particular event in a given population (Saunders et al., 2016). On the basis of this, the cross-sectional time horizon is considered suitable for this research by which the reviewing and planning of the research becomes easier. Moreover, it was impractical to access all organisations in Kuwait for a longitudinal study. The attitudes, perceptions were evaluated for a specified time in this research. The study had employed cross-sectional research design technique because of provision of insights at a specified time (Gray, 2014) and it has provided the required data in form of the perceptions of the stakeholders which is required to address the objectives of this research.

# 4.7 Pilot study

In research work, pilot studies are very important. Van Teijlingen and Hundley (2001) define a pilot study as a mini version of a complete research and the pretesting of a specific research instrument (for instance, interview guidelines or questionnaires). Van Teijlingen and Hundley (2001) provided different reasons for carrying pilot studies in current social science research. De Vaus (2002) also states that pilot studies basically offer the starting point to assess the reliability of the respective data collection instrument. A pilot study also help improve the quality of the research using case study since the data gathering instruments are tested for sufficiency (Easterby-Smith et al., 2012). Yin (2009) suggests that the pilot studies usually help

researchers refine data collection procedures and protocol for effective data analysis.

This study used the pilot study to achieve the following: (i) evaluating the applicability of CSFs as per the stakeholders' perceptions as identified via the Zhang (2005)'s typology in the literature review chapter for the successful implementation of PPP projects in the context of Kuwait; (ii) analysing interviews and focus groups' interpretations; (iii) and classifying research population and PPP housing sector project case studies. The use of pilot study in the PPP housing sector projects is also validated by earlier researches such as Fellows & Liu (2008), Osei-Kyei & Chan (2017), Kang et al (2019). Saunders et al., (2016) suggest that the use of pilot study for qualitative interviews offer rich and detailed information in order to understand participant's experiences and conducting qualitative inquiry might be difficult for an inexperienced researcher. Hence, the use of pilot study emphasises the improvisation to the research study (Castillo-Montoya, 2016). The pilot interviews were conducted with the three professionals in the PPP housing sector projects who were experts from the public sector government organisation in Kuwait. The pilot study was vital since it provided the basis to trail and test the interview questions prepared to help garner research data. Based on this, the final research instrument was designed to reflect finding from the pilot study. The pilot study questions were aimed at asking the participants to answer four questions: (1) How would you describe the role of government in the PPP housing sector projects? (2) How would you explain the investment by the private partners in the PPP housing sector projects as a mean to address the financial shortage in the PPP projects? (3) How do you view the current risk sharing policy of the PPP housing sector projects between the public and private sector? (4) What are the key CSFs in your opinion which determine the success of PPP housing sector projects? These questions formed the basis both for the interviews and focus group discussions which are presented in the Appendix E.

## 4.8 Data collection

Various data collection methods are classified as the observations, questionnaires, archival material and the interviews (Easterby-Smith et al., 2012). Collis & Hussey, (2013); Bryman & Bell (2015) state there are two data collection processes, namely, secondary and primary data collections. The primary data are a data collected, particularly for the purpose of the conducted research. Secondary data refer to the use of already published data in order to explore a research question (Bryman & Bell, 2015). Examples of secondary sources of data are academic books, peer-reviewed journal articles, commercial and public reports, newspapers, magazines and websources. In this study both primary and secondary data were used, the researcher used secondary data to improve the understanding of the success factors in implementing PPP projects in Kuwait housing projects and used primary data in order to obtain first-hand information by using data collection methods of document review, observations, focus groups and interviews. The findings from the primary data were combined in this research to offer detailed insight into stakeholders' perspectives which were required to be explored in order to successfully implement the PPP projects.

#### **4.8.1 Semi-Structured Interview**

Collis and Hussey (2014) considers the process of interviews useful for gathering the data with selecting the participants for the continuation of the research process. Interviews as a method for collecting data are presented by both the interpretivism and positivism methodologies and are included in the form of face-to-face, voice-to-voice and by the help of the groups of individuals.it is one of the most important and useful data collecting tools. Table 14 below illustrates data sources which are used in this research.

Table 14: Data sources used in this research

Data sources		
Data source	Answering Why?	Answering How?
Interviews	To understand individuals view, opinion and interpretation of participants gain a focused and a deeper understanding.	The semi-structure interview questions were open-ended and focused to offer a better understanding of the quality, usage, impact, benefits and challenges from the various staff and academics.
Focus groups	View the ideas and perceptions of a large sample size and at the same time saving both time and money. Offer a better understanding of different interpretations of reality.	Combined sessions of decision makers, engineers, consultant focus group were held in KAPP & PAHW to get a broader view of the experience. A total of 3 focus groups were held, out of which Focus group -1 comprised personnel from KAPP, Focus group-2 comprised personnel from PAHW. Third Focus group comprised of 5 decision makers and this Focus group discussion was held in Iraq-Kuwait international conference for reconstruction of Iraq which was held in Kuwait on 12-14 February 2018.
Observations	To get a more in-depth meaning of the conversations and interviews while assessing the gesture, facial expressions, and voice tones at the interviewees.	interactions, and asked participants about
Documents	To gain an understanding of the various issues related to PPP such as laws, regulatory framework publications events and manually.	

According to Rubin and Rubin (2005), qualitative interviews allow researchers to make extraordinary observations and make extra findings or discoveries overlooked using other techniques. Face-to-face interviews are beneficial because the researchers can seek for response clarifications using follow-up questions. The research, while carrying out the interviews, gained detailed information from most participants regarding PPP used by the selected organizations and the key factors that affect PPP implementation.

According to Oates (2006), an interview is a useful technique because of a number of reasons: information on a particular topic can be acquired in detail and answers about complex issues can be obtained as well as sensitive information including the emotions of the

interviewes. However, the interviewer has to be aware of two things while conducting an interview i.e. follow the line of inquiry as the case study protocol requires and ask questions in an unbiased manner that will serve the needs of the researcher (Yin, 2003). in general, the interviews are classified into three types: structured, semi-structured and unstructured interviews (Saunders et al., 2016). In a structured interview there is a fixed format of the questions and they are mostly close ended. This type of interviews is mostly undertaken by trained interviewers and professionals in a standardised manner.

In the unstructured interview there is little, or no format of the session and the result is that the interviewer can get a lot of information, but the useful information may be very limited. The major disadvantage of the unstructured interview is the large amount of data which is gathered which would not necessarily be appropriate to the research questions; this format is not used often due to this disadvantage. Whereas, the semi-structured interviews provide advantages by which the flexibility of the study can be easily seen by providing the rich information (Easterby-Smith et al., 2012).

The main purpose of the interviews in this research is to achieve the study's aim, which is to investigate the critical success factors of PPP in the Kuwait housing projects based upon the stakeholders' perceptions, hence, the use of semi-structured interviews is justified in this research.

#### **Interviews' Sampling**

The participants chosen characterised a small section of the staff in the two case-study organisations, including key PPP managers, transaction's advisor, senior managers and administrative personnel. 30 interviews were carried in the two case-study organisations. The theoretical framework and the literature reviewed were combined to generate interview questions. Modification of the questions via pilot study helped the researcher to explore new information, thus offering suitable data that answer research questions. All questions used for interview were developed bearing in mind that participants had the basic understanding of the PPP projects. PPP project managers, engineers and the technical staff provided the technical viewpoints, administrators provided personal views and PPP project managers as well as organisation staff members in the two case-study organisations offered organisational views. The researcher followed these steps, before conducting the semi-structured interviews:

- 1. Made prior appointments for each of the interviewees by email or phone and sent the interview guide to the participants prior to allow them to prepare well for the interview.
- 2. Explained interview purpose.
- 3. Asked the participants on readiness to tape the interview.
- 4. The researcher talked about more general issues before starting the interview officially.

In interviewing, the researcher needs to concentrate primarily on the aim of the research and should not let irrelevant details deviate the focus research validity, reliability and reduction in bias. The researcher recorded all the interviews to capture all the comments of the interviewees. The audio recorded interviews were transcribed by the researcher then rechecked by the interviewees to ensure that there were no errors made. In addition to this all the un-recorded interviews comments of the participants were also written down by the researcher. The outcomes of the interviews helped better understand of the key factors and their aspirations for the future regarding the provision of housing project under PPP. A total of 30 participants were interviewed. Table 15 below presents the sample of interviewees of this research.

**Table 15: Sample of interviewees** 

Participants	KAPP	PAHW	Total	Average Duration (each)
PPP unit Managers	1	1	2	1 hour
Engineers, planner & Architects	4	5	9	1 hour
Head of Investment Department	1	1	2	1 hour
End users	3	5	8	45 min
Private Sector representative	3	3	6	50 min
Kuwait's National Assembly's MPs			3	1 hour
Total Interviews	12	15	30	

#### 4.8.2 Documentation

The document analysis is found to be providing the enhancement of the qualitative findings by which the advantages and the benefits can be appropriately gained from the case studies. The importance of the role of the research is found to be providing the documentary benefits by which the relevant explanation to the policies can be easily made by covering the objectives of the study.

Yin (2013) supposed that the documentary information by which the expectation of the relevant and the significant information can be presented.

The documents are depicted to be supporting the PPP aspects with the online reports and the PPP plans have been examined in the two case-study organisations. As well, official government reports and legislation, email correspondence, memoranda, letters, official publications, journals, branch literature and brochures and financial report. All these stated documents are reviewed in detail in the case study and have been examined to triangulate and support the statements made via the interviews. Using the organisation documents whenever possible gave the researcher an inside view of the PPP housing projects, and the details related to the research context. The gathering of such information from these organisations has not been an easy task as PPP contracts-related information is perceived as confidential and dispensing of it as a breach of PPP company privacy.

#### 4.8.3 Observations

The observation is one of the most effective techniques for collection of required data as it is considered as an important source of data collection. The required data can be collected by observation of the participants or direct observation process. In the anthropology or sociology studies, the observation of the participants often used where the researchers try to completely participate in the lives as well as activities of the subjects. On the other hand, the direct observation is a mean of collecting reliable and consistent evidence, while a field visit is carried out throughout the case study (Saunders et al, 2016).

According to Bryman & Bell (2015) observational studies can deliver rich data plus insights into the characteristics of the observed phenomenon. The direct observation technique can be beneficial for the researchers if the researchers can watch the practices in the diverse procedures. However, the scrutiny is also important in collecting credible data through observation technique. In this research, the direct observation technique has been applied so to understand the viewpoints of participants about the CSFs of PPP housing sector projects.

#### 4.8.4 Focus groups

According to Krueger and Casey (2009), focus groups are groups of people who are put into groups or invited to help plan, make decisions, brainstorm ideas, learn, help others, share and offer advice. In addition, these authors further classify that the function of the group is to suggest ideas, clarify potential options, react to ideas, recommend a course of action, and decide, plan or to evaluate. Furthermore, a focus group facilitates discussion amongst research participants. it is a very good source of data, especially in investigating multifaceted situations involving different stakeholders and several interpretations (Saunders et al, 2016).

In this study, the researcher has used three focus groups as one of the techniques to collect data to explore the perceptions, opinions, beliefs and attitudes towards PPP in KAPP and PAHW. Another benefit of this method is that a large sample size can be assessed at the same time and the results are very quick and at a low cost both in terms of time and money. The researcher carried out focus group discussions in both the organisations about the PPP housing projects. In all the focus groups participants were a combination of different PPP stakeholders. In the focus group the researcher engaged all the participants in conversation about their viewpoints regarding the current practice of PPP and its success factors in implementing PPP. The researcher introduced the topic to the group and facilitated the interchange.

Three focus groups were conducted in the case study organisations. Focus Group 1 comprised of 5 private sector senior representatives from the case-study organisation of KAPP; Focus Group 2 comprised of 4 public sector housing sector officers from the case-study organisation of PAHW. While, Focus Group 3 comprised of 5 decision makers, this focus group was done in Iraq- Kuwait international conference for reconstruction of Iraq which was held in Kuwait on 12-14 February 2018. The role of these focus groups was to have an informal discussion between PPP stakeholders regarding their viewpoints on enablers and barriers and to identify success factors as perceived by them. Although extensive information was obtained during the session only the key comments relating to the research study were taken into consideration by the researcher who was also the facilitator of the group. The details of focus groups are given in Table 16 below:

Table 16: Details of focus groups used in this research

	Focus Groups					
Groups	Location	Participants	Date	Duration		
Focus Groups 1	KAPP	5 (Private Sector senior representatives)	July 2017	1 hour		
Focus PAHW Groups 2		4 (Public sector housing sector officers)	July 2017	1 and a half hour		
Focus Groups 3	Iraq- Kuwait internationa I conference for reconstructi on of Iraq	5 Decision makers	12-14 February 2018	1 and a half hour		

The researcher initially prepared the questions for each of the focus groups and the participants were also informed. The researcher acted as the facilitator in conducting these focus groups in order to control and extract the significant information from the focus groups. The focus group discussions were all recorded on audio and later transcribed.

# 4.9 Conducting the Case Study

The researcher-initiated formal data collection on 2016 (August and September), 2017 (June and July) and on 2018 (12-14<sup>th</sup> February) by conducting semi-structured interviews, direct observation, focus group, and documentation reviews.

The researcher, before the commencing of data collection, had to have considered several factors given below:

- Access into the Case Study organisations: There were a series of discussions and meetings with the Head Mega Projects (HMP) of the PAHW (SITE 1) and the Head of the PPP Unit (HPPP) in KAPP (SITE 2) for getting access into the organisations. The researcher faced some difficulties in gaining access in one of the organisations but was able to overcome this challenge by explaining the importance of the research and also by showing his willingness to share the findings of the research study with the organisations. The researcher got formal approval from the organisations prior to conducting the field study from the Head Mega Projects (HMP) of the PAHW and the Head of the PPP Unit in KAPP who then became interested to know how the research findings would benefit their two organisations.
- Selection of interviewees: The researcher after meeting with senior

managers and holding discussions with them identified and selected the participants who were related to the PPP projects of these organisations. The interviews, accordingly, were carried out to provide multiple standpoints. The interview guide comprised of factors influencing organizations that use PPP to provide housing projects.

Table 17 below shows the details of the field study:

**Table 17: The Details of the Field Study** 

Location	Institutions	Dates
Kuwait	<ol> <li>KAPP</li> <li>PAHW</li> </ol>	August - September 2016 Jun –February 2017
	Iraq- Kuwait international conference for reconstruction of Iraq	12-14 <sup>th</sup> February, 2018
Place	Interviewees Offices for KAPP & PAHW's personnel and Iraq- Kuwait international conference for reconstruction of Iraq in Kuwait	
Participants	<ol> <li>Senior Managers</li> <li>PPP Unit Managers</li> <li>Engineering &amp; Architect Departments</li> <li>Managers/Heads/researcher</li> <li>Private representatives</li> <li>Decision makers</li> </ol>	

Each of the research questions has been answered using two or more methods as shown in the Table 18 below:

**Table 18: Research Question versus Research Methods** 

Research Question	Research Method
How do stakeholders perceive success factors of PPP implementation in housing projects from a Multi Perspective View?	<ul> <li>Case Studies, Literature Review</li> <li>Documents and Semi-Structure</li> <li>Interviews Focus Groups</li> </ul>
What are the key success factors in implementing the PPP in housing projects in Kuwait?	Literature review, Semi-Structure     Interviews, focus group and     Observations

# 4.10 Triangulation

The combination of research methods in the study of the similar phenomenon is recognised as triangulation (Collis & Hussey, 2013). Qualitative research findings can be used in this procedure in form of the observation of the participants, in form of interviews, by analysing documentary evidence and by conducting focus group discussions to synthesise data from the various sources (Collis and Hussey, 2013). Likewise, the findings of this research are strengthened by combining all the above methods. This research has analysed the existing PPP concept and its success factors in the housing sector projects, thus, the selection of a multiple data collection has enabled the researcher to confirm data triangulation.

A case study approach was chosen to provide multiple data sources to help comprehensively understand factors that impact the organisations related to PPP in the Kuwait housing projects. Literature reviewed, the theoretical framework developed, gaps identified in literature have formed the basis of the research design, which has justified the use of semi structured interviews, document analysis, focus groups and observations.

# 4.11 Ethical Approval

Ethics in research refers to the suitability of the researcher's behaviour in relation to the rights of those who are influenced by it (Saunders et al., 2016). At the time dealing with human as a subject, ethical clearance is required for the researcher for conducting research. Here the key issues, which are addressed are integrity, subsume anonymity and confidentiality. In this respect, the University of Salford's policy obligated the researcher to apply for ethical approval before conducting any field studies. Hence, the researcher applied for ethical approval before conducting this field study. Later, the Research Governance and Ethics Committee (RGEC) has granted the researcher with ethical approval for conducting the data collection procedures. Each participant in this study was informed of the interview purpose and the focus groups. During

participation, given the voluntary nature, any participant had permission to withdraw. The researcher took necessary precautions to ensure ethical adherence and professionalism practices. In line with Boeije (2010) recommendations, the participants, before partaking in the interview, were informed about their rights, confidential issues and freewill during withdrawal. Every participant signed the consent form before engaging in the research.

# 4.12 Reliability, Validity and the Ability to Generalise

Validity and reliability for qualitative studies play an important role because if exist; they confirm credibility to the results of the research (Patton, 2002). According to Silverman (2007) validity is linked with whether the researcher measures the exact concept, and reliability is linked with stability and consistency in measurements, meaning, if in such way anyone repeats the research, they should obtain the same findings. However, in the interpretivism research validity is often high as the researchers under this philosophy aim to find the core of the phenomena, and extract rich information, whereas the validity in the positivist research is low (Collis and Hussey, 2013). Yin (2013) suggests three ideas to increase the quality of empirical research:

- 1. **Construct validity**: to increase the construct validity, the researcher used many sources of evidence, the semi-structured interviews along with documentation, focus group and direct observations. After the transcripts of the interviews prepared it was showed to the participants to confirm what they had said through the interviews.
- 2. **Internal validity:** internal validity was achieved by using template analysis for collected data; as well the using the theoretical framework to increase the internal validity.
- 3. **External validity:** In this research, two case studies were implemented to achieving replication and generalisation.

The skills, sensitivity and training of the researcher are responsible for the validity and reliability of the data. Therefore, the reliability can be enhanced by training of the interviewers (Flick, 2007). In this study, the researcher attended many training sessions conducted in the University of Salford to learn how interviews are conducted in a research. Furthermore, Saunders et al., (2016) suggest that reliability of interviews is related to bias which can be avoided by allowing the participants to review the interpretations which are recorded by the participants to ensure that accurate responses are noted by the interviewer.

Also, the researcher has carefully chosen prior theories and literature review as the initial template is generated using training, theories and prior literature. As well Practice, background knowledge, experience and discipline are also essential to produce reliable and valid qualitative data assessed from document reviews, observation and interviews. Every endeavour has been made by the researcher to remain unbiased by reviewing experience and interpretation of data objectively to help understand personal assumptions and beliefs that affected the results. The searcher also minimised this effect by carrying out few follow-up interviews for participants to further validate and confirm the true data. All participants agreed that the analysis reflected their own accounts and experiences.

# 4.13 Data analysis

Various authors such as Boeije, (2010); Denzin & Lincoln (2011); Yin (2013); Saunders et al. (2016); mention that the selection of the data analysis technique depends on the research topic, the research questions, purpose of the research, the time constraints as well as the researcher understanding. All these factors influence the selection of the data analysis method. In qualitative data analysis there are two main approaches; deductive and inductive (Bryman, 2012). The deductive approach is a relationship between theory and research, in which the research is conducted according to the hypotheses and the ideas are

taken from the theories. While, in an inductive approach the theory is generated out of the research. Both types of qualitative analysis can be done in the same study (likewise this research). Generally, the analysis process mainly involves three sub processes as shown in Table 19 below.

Table 19: The sub analysis processes

	Qualitative Data Analysis Activity			
1	Data Reduction	Data reduction is mainly linked with coding, summarising, identifying themes and discerning patterns		
2	Data Display	Data display is linked with logical, relevant information to the audience. There are a number of different display format for qualitative data, which include: tables, graphs, charts and diagrams. etc.		
3	Conclusion/ Verification	The conclusions are concerned with interpreting data and answering research questions. The interpretation can be in the form of the identification of themes, emerging patterns and explanations, all of which were generated from the data. The verification stage of conclusions is concerned with testing their plausibility. And there are various methods of testing the findings		

However, Saunders et al. (2016) said that the carefully reading and re-reading of the transcripts or notes of qualitative interviews or observations is one of the methods to analysing this type of data. Whereas, Brooks et al., (2015), Bryman & Bell (2015) state that researchers can develop their own methods of analysing qualitative data. Overall, there are various qualitative data analysis techniques such as general analytical procedure, cognitive mapping, data displays and grounded theory and thematic analysis. Template Analysis is a form of thematic analysis used in qualitative data such; this method of analysis highlights the use of hierarchical coding but balances a relatively high degree of structure in the process of analysing textual data with the

flexibility to adapt it to the needs of a particular study (Brooks, et al., 2015). In this study, the researcher after reviewing all the potential approaches of data analysis selected the template analysis approach and the following section provides justification for selecting this analytical approach.

## 4.13.1 Rationale of data analysis technique

The template analysis has been selected in this study using priori codes which has facilitated the study goals by enabling the assessment of themes brought forth by the current data using the theoretical framework and the factors identified in the literature influencing them. This analysis complements the multi perspective stance of the study because it is useful where a researcher seeks to discover the various facets of the phenomena under investigation. Template analysis approach is a more flexible technique with less stated procedures, allowing researchers to modify it to match their needs relative to the research requirement (Yin, 2013). This approach helps to select key themes to explore and identify emergent issues that arise through the process of data collection and analysis that the researcher has not considered when the research process started. The template analysis can facilitate a more in-depth analysis rather than a simple examination of the frequency of codes. This approach can also be utilised to investigate the stakeholder's perspectives at the different levels which are affected by an organisational change i.e. for this research study PPP housing projects.

This approach is constructive because it enables paying `attention to interviews concerns and focus groups and can produce multiple interpretations of the final template (Yin, 2013). It is very useful for looking at developments and relationships in the data gathered which then subsequently assist in describing its meaning and comparing different viewpoints of various participants (Yin, 2013). Due to this reason the template analysis technique matches this research study as it enhances the process of determining relationships in data and assists the

researcher in clarifying and contrasting various interviewees' perspectives in relation to the main factors that influence PPP in the Kuwait housing projects context. The researcher has found that the Template analysis approach is the most appropriate analytical approach keeping in view the research nature, domain and time frame. The researcher transcribed all the interviews, read and re-read through all interview transcripts to make sure the familiarisation with the data and to compile the correct data. The researcher has than carried out the initial coding of the data to create prior codes through identified themes, modifying existing themes and developing new ones in order to create an initial template. Table 20 below shows all the priori codes found in the existing literature review based upon the Zhang (2005)'s CSFs typology.

Table 20: Priori codes based upon Zhang (2005)'s CSFs typology

#### **Priori Codes**

- Stable political system;
- Favourable economic system;
- Adequate local financial market;
- Predictable currency exchange risk;
- Predictable and reasonable legal framework;
- Government support;
- Supportive and understanding community;
- The project is in public interest;
- Predicable risk scenarios;
- The project is well suited for privatisation;
- Promising economy.
- Long-term demand for the products/services offered by the project;
- Limited competition from other projects;
- Sufficient project profitability to attract investors;
- Long-term cash flow that is attractive to lender;
- Long-term availability of suppliers needed for the normal operation of the project.

- Leading role by a key enterprise or entrepreneur;
- Effective project organisation structure;
- Strong and capable project team;
- Good relationship with host government authorities;
- Partnering skills;
- Rich experience in international PPP project management;
- Multidisciplinary participants;
- Sound technical solution;
- Innovative technical solution;
- Cost-effective technical solution;
- Low environmental impact; and
- Public safety and health considerations.
- Sound financial analysis;
- Investment, payment, and drawdown schedules;

- Sources and structure of main loans and standby facilities;
- Stable currencies of debts and equity finance;
- High equity/debt ratio;
- Low financial charges;
- Fixed and low interest rate financing;
- Long-term debt financing that minimises refinancing risk;
- Abilities to deal with fluctuations in interest/exchange rates;
- Appropriate toll/tariff level(s) and suitable adjustment formula.
- Appropriate and reliable risk allocation in:
- Concession agreement;
- Shareholder agreement;
- Design and construction contract;
- Loan agreement;
- Insurance agreement;
- Supply agreement;
- Operation agreement;
- Off take agreement; and
- Guarantees/support/comfort letters.

According to King (1994), three sources decide which topics are contained within in the interviews and the initial templates - the literature, the researcher's knowledge and experience and the structured discussion with key people in the research area. All the transcription has been carefully read before undertaking coding exercise. The data was further strengthened by carefully listening to audio recordings to identify an intonation of speech which could reveal distinct meanings that might be overlooked through simple reading. The initial template was developed with the help of all the transcripts and then reviewed to generate the final template. Thus, the initial templates were created by coding all the transcripts independently so to minimise missing or mislabelling themes. After all the transcripts were read and listened to notes were made in the margins so to ascertain that all relevant data to the research question or to the priori codes were obtained. The researcher repeatedly did this until a detailed data description was attained. The themes from all interviews were organised hierarchically into a number of general level codes having respective lower level codes. The first template was developed to ensure the themes are represented well.

In a template analysis the starting point is the construction of a template from the literature review of previous research theories. After the researcher has interpreted field notes and interview transcripts with the initial template, it is then amended during the analysis process to link with the related issues under consideration. Various other concepts have to also be investigated and new relationships explored before the final template (see chapter 6) is generated and described in the main findings of the research study. These categories emerged directly from the answers to all questions and comments made by the interviewees. The initial template is given in tables below. The design of the initial template emerging from the data is a combination of research questions, the research model and the relevant literature. The researcher has transformed and organised data from the transcribed interviews into main three perspective themes: technical, organisational and personal perspective. All the different participants related to PPP stakeholders such as National Assembly, end user (a housing group called, Natir Bait Group), KAPP and PAHW have provided information from their own perspectives.

## 4.13.2 Initial template

#### 4.13.2.1 PPP Public sector Perception

**Table 21: PPP Public sector Perception** 

PPP Public sector Perception						
perspectives Engineers & Top Management Individual PPP specialist						
	Architects					
	Technical organisational Personal					
Themes / Approach	Success factor					

investment environment	<ul> <li>Favourable economic system;</li> <li>Adequate local financial market;</li> <li>The project is in public interest;</li> <li>Predicable risk scenarios;</li> <li>Promising economy.</li> <li>The project is well suited for partnering</li> </ul>	<ul> <li>Stable political system;</li> <li>Government support;</li> <li>Supportive and understanding community;</li> <li>The project is well suited for partnering</li> </ul>	<ul> <li>The project is in public interest;</li> <li>Stable political system;</li> <li>Promising economy.</li> <li>The project is well suited for partnering</li> </ul>
Attractive project			
	<ul> <li>Sufficient project profitability to attract investors;</li> <li>Long-term cash flow that is attractive to lender;</li> <li>Long-term availability of</li> </ul>	<ul> <li>Long-term demand for the products/services offered by the project;</li> <li>Sufficient project profitability to attract investors;</li> </ul>	<ul> <li>Long-term         availability of         suppliers needed for         the normal         operation of the         project.</li> <li>Sufficient project         profitability to</li> </ul>

	suppliers needed for the normal operation of the project. • End user Satisfaction	• End user Satisfaction	attract investors;  ■ End user Satisfaction
Reliable consortium	Leading role by a key enterprise or entrepreneur;     Effective project organisation structure;     Strong and capable project team;     Sound technical solution;     Innovative technical solution;     Cost-effective technical solution;     Low environmental impact; and     Public safety and health considerations.	host government authorities; Partnering skills; Rich experience in international PPP project management;	<ul> <li>Good relationship with host government authorities;</li> <li>Sound technical solution;</li> <li>Cost-effective technical solution;</li> <li>Low environmental impact; and</li> <li>Public safety and health considerations.</li> <li>Innovative technical solution;</li> </ul>
Sound financial package	Sound financial analysis;     Investment, payment, and drawdown schedules;     Stable currencies of debts and equity finance;     High equity/debt ratio;     Low financial charges;     Fixed and low interest rate financing;	level(s) and suitable adjustment formula.  Abilities to deal with fluctuations in interest/exchange rates;  Sources and structure of main loans and standby facilities;	<ul> <li>Appropriate toll/tariff level(s) and suitable adjustment formula.</li> <li>Abilities to deal with fluctuations in interest/exchange rates;</li> </ul>
Risk allocation-	Optimal Risk Allocation	Optimal Risk Allocation	Optimal Risk Allocation

# **4.13.2.2 PPP Private sector Perception**

**Table 22: PPP Private sector Perception** 

PPP Private sector Perception					
perspectives	Engineers	&	Top Management	Individual PPP specialist	
	Architects				
	Technical		organisational	Personal	
Themes / Approach	Success factor				

investment environment	<ul> <li>Stable political system;</li> </ul>	<ul> <li>Stable political system;</li> </ul>	• Stable political system;
	<ul> <li>Favourable         economic system;</li> <li>Adequate local</li> </ul>	<ul> <li>Government support;</li> <li>Supportive and</li> </ul>	<ul> <li>The project is in public interest;</li> </ul>
	financial market;  • Predictable currency exchange	understanding community;  The project is well	• Promising economy.
	risk; • The project is in public interest;	suited for partnering	• The project is well suited for partnering
	<ul> <li>Predicable risk scenarios;</li> </ul>		
	<ul> <li>Promising economy.</li> </ul>		

	The project is well suited for partnering
Attractive project	<ul> <li>Limited competition from other projects;</li> <li>Long-term cash flow that is attractive to lender;</li> <li>Long-term availability of suppliers needed for the normal operation of the project.</li> <li>Sufficient project profitability to attract investors;</li> <li>Long-term demand the products/services of suppliers needed for the normal operation of the project.</li> <li>Long-term cash the normal operation of the project.</li> <li>Sufficient project profitability to attract investors;</li> </ul>
Reliable consortium	<ul> <li>Leading role by a key enterprise or entrepreneur;</li> <li>Effective project organisation structure;</li> <li>Strong and capable project team;</li> <li>Innovative technical solution;</li> <li>Cost-effective technical solution;</li> <li>Cost-effective technical solution;</li> <li>Low environmental impact; and</li> <li>Public safety and health considerations.</li> <li>Leading role by a key enterprise or entrepreneur;</li> <li>Good relationship with host government authorities;</li> <li>Good relationship with host government authorities;</li> <li>Partnering skills;</li> <li>Rich experience in international PPP project management;</li> <li>Multidisciplinary participants;</li> </ul>
Sound financial package	<ul> <li>Sound financial analysis;</li> <li>Investment, payment, and drawdown schedules;</li> <li>Stable currencies of debts and equity finance;</li> <li>High equity/debt ratio;</li> <li>Low financial charges;</li> <li>Fixed and low interest rate financing;</li> <li>Appropriate toll/tariff level(s) and suitable adjustment formula. Abilities to deal with fluctuations in interest/exchange rates;</li> <li>Sources and structure of main loans and standby facilities;</li> <li>Long-term debt financing that minimises refinancing risk;</li> </ul>
Risk allocation-	Optimal Risk Allocation

# 4.13.2.3 PPP National Assembly NA Perception

**Table 23: PPP National Assembly Perception** 

NA – MP Perception			
perspectives	Technical	organisational	Personal
Themes / Approach		Success factor	
investment environment	Stable political system;     Adequate local financial market;     The project is in public interest;     Predicable risk scenarios;     The project is well suited for partnering;	<ul> <li>Stable political system;</li> <li>Government support;</li> <li>Supportive and understanding community;</li> <li>The project is well suited for partnering;</li> </ul>	<ul> <li>The project is in public interest;</li> <li>Promising economy.</li> <li>The project is well suited for partnering</li> <li>Government support;</li> <li>Supportive and understanding community;</li> </ul>
Attractive project	<ul> <li>Mutual objectives</li> <li>New technology transfer</li> <li>End user Satisfaction</li> </ul>	<ul> <li>Mutual objectives</li> <li>New technology transfer</li> <li>End user Satisfaction</li> </ul>	<ul> <li>Mutual objectives</li> <li>New technology transfer</li> <li>End user Satisfaction</li> </ul>
Reliable consortium	Leading role by a key enterprise or entrepreneur;     Effective project organisation structure;     Strong and capable project team;     Sound technical solution;     Innovative technical solution;     Cost-effective technical solution;     Low environmental impact; and     Public safety and health considerations.	<ul> <li>Leading role by a key enterprise or entrepreneur;</li> <li>Effective project organisation structure;</li> <li>Good relationship with host government authorities;</li> <li>Partnering skills;</li> <li>Rich experience in international PPP project management;</li> <li>Multidisciplinary participants;</li> <li>Public safety and health considerations.</li> </ul>	<ul> <li>Good relationship with host government authorities;</li> <li>Sound technical solution;</li> <li>Cost-effective technical solution;</li> <li>Low environmental impact; and</li> <li>Public safety and health considerations.</li> </ul>
Sound financial package	<ul> <li>Sound financial analysis;</li> <li>Investment, payment, and drawdown schedules;</li> <li>High equity/debt ratio;</li> <li>Low financial charges;</li> <li>Fixed and low interest rate financing;</li> </ul>	level(s) and suitable adjustment formula.  • Abilities to deal with fluctuations in interest/exchange rates;	<ul> <li>Appropriate toll/tariff level(s) and suitable adjustment formula.</li> <li>Abilities to deal with fluctuations in interest/exchange rates;</li> <li>Sources and structure of main loans and standby facilities; Islamic loan</li> </ul>

Risk allocation

 Optimal Risk Allocation
 Optimal Risk Allocation
 Optimal Risk Allocation

# 4.13.2.4 End User / Natir Bait Group Perception

Table 24: PPP End User (Natir Bait Group)'s Perception

End User / Natir Bait Group Perception			
perspectives	Technical	organisational	Personal
Themes / Approach		Success factor	
investment environment	Stable political system;     The project is in public interest;     Predicable risk scenarios;     Government support;     Supportive and understanding community;	<ul> <li>Stable political system;</li> <li>Government support;</li> <li>Supportive and understanding community;</li> <li>The project is well suited for partnering;</li> </ul>	<ul> <li>The project is in public interest;</li> <li>Stable political system;</li> <li>The project is well suited for partnering;</li> <li>Government support;</li> <li>Supportive and understanding community;</li> </ul>
Attractive project	Sufficient project profitability to attract investors;     End user Satisfaction     Longterm availability of suppliers needed for the normal operation of the	Long-term demand for the products/services offered by the project;     Sufficient project profitability to attract investors  End user Satisfaction	<ul> <li>Long-term availability of suppliers needed for the normal operation of the project.</li> <li>End user Satisfaction</li> </ul>
Reliable consortium	project.  Leading role by a key enterprise or entrepreneur;  Effective project organisation structure;  Strong and capable project team;  Sound technical solution;  Innovative technical solution;  Cost-effective technical solution;  Low environmental impact; and  Public safety and health considerations.	<ul> <li>Leading role by a key enterprise or entrepreneur;</li> <li>Effective project organisation structure;</li> <li>Good relationship with host government authorities;</li> <li>Partnering skills;</li> <li>Rich experience in international PPP project management;</li> <li>Multidisciplinary participants;</li> </ul>	<ul> <li>Good relationship with host government authorities;</li> <li>Sound technical solution;</li> <li>Cost-effective technical solution;</li> <li>Low environmental impact; and</li> <li>Public safety and health considerations.</li> </ul>

Sound financial package	Appropriate toll/tariff level(s) and suitable adjustment formula.  Abilities to deal with fluctuations in interest/exchange rates;  Sources and structure of main loans and standby facilities; Islamic loan
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Appropriate toll/tariff • level(s) and suitable adjustment formula.

- Abilities to deal with fluctuations in interest/exchange rates;
- Sources and structure of main loans and standby facilities; **Islamic loan**
- Appropriate toll/tariff level(s) and suitable adjustment formula.
- Abilities to deal with fluctuations in interest/exchange rates;
- Sources and structure of main loans and standby facilities; **Islamic loan**

Now after developing the initial template the researcher has still further organised the themes identified in the transcripts into few higher-level codes to produce the final template. The researcher has modified the initial template further by looking at the data more closely and precisely (final template). The final template (as shown in the Chapter 6) for each PPP stakeholders has emerged by modifying the themes found in the interviews. The final template reflects the PPP multi stakeholder perceptions.

# 4.14 Summary

In this chapter a detailed description of the methodology used; the philosophy of the research, approaches, strategies and data gathering techniques are discussed. This research has utilised the interpretivism and inductive approach to explore the viewpoints of the participants of this research. Moreover, the justification behind using the case-study research approach was discussed. Furthermore, the rationale behind using the qualitative methodology and selected methods of data collection such as the semi-structured interview, observation, focus group and document review was provided. The researcher has also provided the explanation for the decisions that were taken in selecting the sampling method, primary participants, data collection sources and template analysis to analyse the key research findings which are presented in the following chapter.

# Chapter 5. Findings & Analysis

### 5.1 Introduction

The aim of this chapter is to present findings and analysis of findings in relation to interviews which were conducted with 12 personnel from KAPP, 15 personnel from PAHW & 3 Members of Parliament from the Kuwait National Assembly. The findings of interviews are analysed in relation to findings which are reported in literature review chapter of this research to confirm to which extent findings of interviews correspond or contradict with findings of literature review. The interviews in this research are conducted to answer sub-research question 1 and sub-research question 2 which aim to address what are the key CSFs in the PPP housing sector projects in Kuwait and how are these CSFs perceived technically, organisationally and personally by these key stakeholders. Hence, the viewpoints of stakeholders (public sector, private sector, National Assembly and end user about the key CSFs in light of TOP perspective is evaluated in this chapter. Thus, analysis of findings in this chapter have formed the basis to inform the final framework which is then tested via the focus groups in the subsequent Chapter 6 so to address the sub-research question 1 and subresearch question 2 which aim to address the current state of PPP housing sector projects in Kuwait and to identify who are the key stakeholders who affect the implementation of PPP housing sector projects in Kuwait.

# **5.2** Findings of interviews related to TOP perspective of the Public sector about the key CSFS

Interview questions 1-5 aimed at asking the participants to answer how did the investment environment contribute to the success of PPP housing sector projects implementation. A total of 13 interviews were conducted to answer this interview question. 2 planners & 2 architects from KAPP were interviewed, 1 civil engineer from KAPP & 1 civil engineer from PAHW were interviewed. While, 3 planners and 2 architects from PAHW were interviewed.

Whereas, 1 head of investment department from KAPP and 1 head of investment department from PAHW were interviewed. Findings of interviews are presented in form of excepts in this research and these findings are then analysed in light of findings of literature review. These findings are presented next:

# **5.3 Public TOP Perspective**

### 5.3.1Findings & Analysis in relation to investment environment

Participants were asked to answer how does investment environment contribute to the success of PPP housing sector project implementation. All participants agreed that the investment environment was a key success factor for the PPP housing sector project implementation. For example, planner from KAPP (PL-1) stated:

"Investment environment is a key success factor for effective public-private partnership. The technical characteristics within the investment environment which impact upon the PPP success are those projects which serve the greater interests of the general public".

Planner from PAHW (PL-2) agreed with the above mentioned view of PL-1 by stating:

"Investment environment clearly outlines the legal framework and possible risk scenarios so to balance both profitability of these PPP projects and to serve the public interest".

These findings match with the findings of Kwak et al. (2009) in literature review who state that as long as PPP housing sector project's investment decisions are based to capitalise upon profitability and at the same time, these projects should serve the public interest and such investment decisions, thus, contribute towards the success of PPP housing sector projects. These findings also align with the findings of Osei-Kyei & Chan (2017) who argue that a favourable investment environment ensures that there is a continuous cashflow being injected into the PPP projects as it denotes that these projects have sufficient cashflow to meet the projects' requirements which also improves stakeholders' perceptions about the investment in

PPP projects. These findings also match with the findings of Onyemaechi et al. (2015) in literature review who suggest that a favourable investment environment ensures that legal framework within which PPP projects are to be implemented is followed which is instrumental in developing strong control and monitoring mechanism in PPP projects. Similar findings are noted by Alteneiji et al. (2019) who state that a favourable investment environment in context of GCC countries including Kuwait would ensure that increased collaboration in terms of partnerships between public and private sector takes place and such partnerships can be vital in providing affordable housing for all.

Moreover, from the technical perspective, interviewees stated that if investment made in the PPP projects is sustainable, such investment is considered to be a key success factor in the PPP housing sector project implementation. For example, PL-3 from PAHW stated:

"From the technical perspective, there is a need to determine if the investment made is sustainable i.e. helps meet public interests through legal means and is yet profitable over a long period of time, such sustainable investment environment is the key towards success of PPP housing sector projects".

These findings match with the findings of Zhang (2005) in the literature review who has stated that a suitable investment environment is a key CSF in the PPP housing sector projects as such investment environment by outlining the projects which are suitable for privatisation, by identifying the capacity for predictable risk scenarios in these projects and by ensuring that these projects aim to serve the public interests contribute to the success of PPP housing sector projects. These findings also correspond with the findings of Ismail (2013) in literature review who suggest that technical feasibility of the project and relevant return on investment in form of sustainable revenues are the key CSFs in PPP arrangements. These findings also align with the findings of Hardcastle et al. (2006) in literature who state that feasibility of

investment in PPP projects mainly rely on sound economic policy of the government and provided that economic environment in the country is favourable, it would give increased confidence to the investors to invest in PPP projects. This highlights that the role of government and all stakeholders which have an impact upon the government's decision-making are important CSFs which are required to be taken into consideration in implementing PPP projects. Similar arguments are provided in literature by Taleb (2010), Rijkswaterstaat (2014) and Barton (2015) who observe that PPP projects are affected by the political decisions, hence, government's support, political parties' support is mandatory to boost the PPP projects in the country as these are the main stakeholders and their final approval determine the investment in PPP projects.

Participants were also asked to specify the organisational characteristics in the investment environment which contributed towards the success of PPP housing sector projects. Participants agreed that the investment environment characterised by the project suitable for partnership and the stability in the political and economic environment of the country were the organisational features of the investment environment which was vital in terms of contributing towards the success of PPP housing sector projects. For example, PL-1 from PAHW stated:

"Governments change and so do their policies. As long as stability in the PPP contracts is not provided via the enforcement of law and through relevant political support, investors view a significant political risk in such contracts and such risk is required to be mitigated in order to ensure that investment environment contributes towards the success of PPP project".

These findings are supported by the findings of Zhang (2005) in the literature review who has suggested that stabilising the investment of private sector with the government support leads

to the successful PPPs. This also illustrates the need to develop increased partnership between the public and private sector which according to Taleb (2010) and Barton (2015) are the key CSFs in PPP projects. A similar viewpoint is provided in literature by Okuwoga (1998), Ahadzie et al. (2007), Iossa et al. (2013) and Adinyira et al. (2014) who argue the importance of developing increased alliances in PPP projects via effective collaborations between the public and private sector as such collaborations ensure that these projects have adequate external financing which provides the opportunity to share the financial risks in the PPP projects which is an important CSF in the PPP projects. Furthermore, Alexandrou & Colpus (2001), Agus (2002), Cuorato (2002) and Zhang (2005), have also stated that role of public sector is vital in terms of contributing towards the success of PPP projects as the stability in the political and economic environment and providing relevant support to the investors result in a strong investment environment which are considered to be the key organisational factors which influence the successful implementation of PPP projects.

Participants also stated that in a PPP project, there is a conflict of interest between public and private sector and role of government in such projects is to minimise the conflict of interests between public and private sector. For example, architect-1 (AR-1) from KAPP stated:

"The interests of public and private sector are required to be aligned in the PPP projects.

Public sector strives to maximise the public interest by ensuring that PPP projects serve the welfare of public at large. While, the private sector has to ensure that projects are both financially feasible and generate profitable return on investment. Thus, interests of both public and private sector must be clearly outlined in the PPP contracts and government is responsible to outline those interests in the PPP contracts".

These findings are also confirmed by the findings of Sharma et al. (2010) who argue that investment environment is strengthened when government balances the conflict of interests

between public and private partners whilst designing the PPP contracts. These findings also align with the findings of Li et al. (2005), Cheung (2009) and Reeves & Ryan (2007) who argue that PPP projects are affected by the conflicts between the public and private sectors and to improve the investment environment, greater compatibility is needed between the public and private sector and both should strive to maximise the public welfare by providing affordable housing projects which is an important CSF in PPP housing projects.

Moreover, participants were also asked to identify the personal factors in the investment environment which served as success factors for PPPs. Participants agreed that key factors were the political stability, careful selection of projects which were suitable for partnering, favourable economic environment and involvement of community determined the success for PPP projects. For example, head of investment department from KAPP (HID-1) stated:

"To create a strong economy by providing required investment in the PPP projects is one of the vital goals of PPP projects. Within the context of housing sector projects, the role of investment environment is to have adequate support of government, to provide significant incentives such as subsidies to the private sector so it can readily invest in PPP projects and these steps on part of government can contribute to the success of PPP housing sector project implementation".

HID-2 from PAHW somewhat provided a similar response by stating that:

"A favourable investment environment is the one in which private sector readily invests in the PPP projects and government provides these private partners the required support and subsidies which encourage these investors to invest in the PPP projects. I also think that an understanding community which readily realises the need and significance to invest in PPP projects so to ensure that public interest is served are also the success factors of PPP housing sector project implementation. Poor contracting and lower rate of return on

investments discourage the investors from making such investments. Thus, stability in terms of investment should be provided by the government by ensuring investors that in case of any losses from the PPP projects, government would provide certain percentage of reimbursement to investors so to minimise the risks associated with investment in PPPs".

These findings are supported by Zhang (2005), Susilawati et al. (2005), Olander (2007) and Ng et al. (2010) in literature review who have suggested that a favourable investment environment which guarantees a successful PPP is illustrated by the supportive and understanding community who perceives the PPP projects as a mean to serve the public interest. This positive perception of general public about the PPP projects results in suitable partnering arrangements which contribute towards the profitability of these PPP projects. Thus, based on the participants' viewpoint, investment environment is identified as a CSF which positively contribute to the success of PPP housing project implementation.

Figure 12 shows that based upon Public's TOP perspective, technical factors in the investment environment which contribute to the success of PPP projects are presence of predictable and reasonable legal framework; project is to serve the public interest; project is suitable for partnering and possible risk scenarios are identified. While, the organisational factors in the investment environment which contribute to the success of PPP projects as per the participants are stable political and economic environment, support provided by government and PPP project is suitable for partnering. Whereas, the personal factors in the investment environment which contribute to the success of PPP projects as per the participants are stable political and economic environment, suitability of project for partnering and supportive and understanding community.

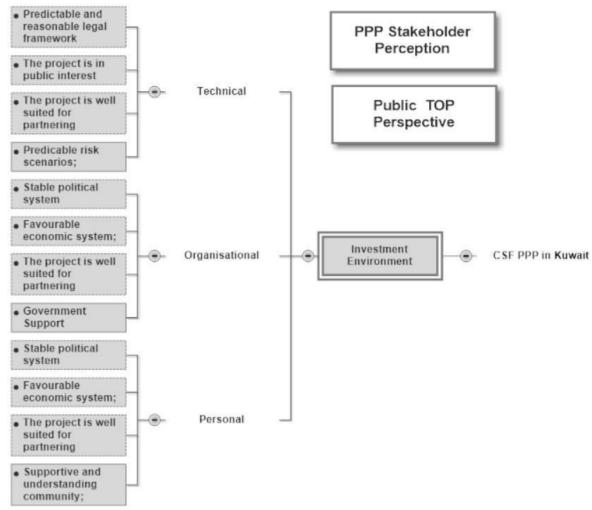


Figure 12: Public View of Investment Environment from TOP Perspective

#### **5.3.2** Findings & Analysis in relation to attractive project

Participants were asked to answer to what extent the perception of attractive project contribute to the success of PPP housing sector project implementation. Participants agreed that perception of a project as an attractive one is a key success factor in the PPP housing sector project implementation. Participants agreed that specification of quality output was a vital factor so to deliver successful PPP projects. For example, HID-1 from KAPP stated: "The specification of quality output is what makes a project an attractive one. To achieve the quality output, it is essential to involve all project stakeholders at various phases of project and taking their input based upon their understanding and needs about the project

specifications are likely to develop such project specifications which have the consensus of key stakeholders and such project specifications determine the quality output which in turn makes an attractive project".

These findings illustrate that attractive project as per the participants' responses is the one which specifies the quality output in the PPP projects, and which equally provide liberty to the private sector to decide how to deliver the output. These findings match with the findings of Bohsali et al. (2014) and Kavishe et al. (2018) who suggest that although public sector can specify the contractual specifications, private sector should be given the autonomy how to deliver the contractual specifications which is a vital CSF in PPP housing projects (Almarri, 2019; Alola, 2019). These findings also highlight that quality output is determined by obtaining consensus of all stakeholders which delivers an attractive project. These findings correspond with Checkland & Scholes (2009) and Dalkin et al. (2018) who suggest that transformation can occur in a project provided that project incorporates worldview, i.e. perspectives of different stakeholders who enable the transformation in a project. Hence, attractive project is the one which incorporates the perspectives of different stakeholders to specify the project specifications and to deliver the quality output (Yang et al., 2009; Brookings Institute, 2014).

Participants also stated that an attractive project is considered to be a one which has the adequate support of bank. For example, PPP Unit Manager (PPP UM-1) from KAPP stated:

"A bank issuing a guarantee, letter of credit or performance bond will fix the amount and obtain a counter indemnity from the customer, possibly secured against a fixed or floating charge or cash deposits. The issuer will be entitled to convert the counter indemnity payments into loans or demand immediate repayment. The issuers will enter into the intercreditor agreement to ensure sharing of rights over project assets."

These findings highlight the importance of financial support from the banks in the PPP projects and specification of sharing of rights of the PPP's assets (Cheung et al., 2012) as a result of which the investors get the financial security on their investments and the element of risk which may arise due to low return (Bhatia, 2017) on investment is likely to be reduced in case of presence of a financial guarantee from bank (Yuan et al., 2010). These findings of research correspond with the findings of Hodge & Greve (2007), Biygautane, (2017) in literature review who argue that financial guarantee by the banks in PPP projects is likely to reduce the risks in the PPP projects as sharing of rights over the project assets are specified as a result of which there is an equitable allocation of risk.

Participants when asked to state the technical perspectives which resulted in the perception of a project as an attractive one, most participants were of the view that as long as project had the sufficient profitability, it ensured that relevant return on investments were generated which was a vital factor that contributed towards the success of PPP projects. For example, PL-2 from PAHW stated:

"From the technical point of view, as long as project translates to profitable output, such project is an attractive project. It is also important that PPP projects have long-term demand which means that these projects are adequate enough to meet the needs of end users, i.e. the customers and as long as customer satisfaction is high, PPP projects are considered attractive from viewpoints of all stakeholders".

Participants also stressed upon the importance of having an effective project organisational structure which was essential in creating an attractive perception about the project. For example, PL-1 from KAPP stated:

"An effective project organisational structure is important in creating an attractive project as such project structure is developed based upon the relevant understanding of key stakeholders which involves extensive negotiation so to obtain consensus, thus, such project organisational structure develops a common understanding among key stakeholders about the PPP project which is essential to develop an attractive project."

Participants also stated that attractive projects were those which utilised robust technology as such technology facilitated in timely completion of projects and such projects were adequate to meet the client requirements. For example, PPP UM-2 from PAHW stated:

"Attractive projects are usually completed within the scheduled time, budgets and meet client requirements and utilise modern technology and all these factors are key technical factors which result in creating an attractive project".

These findings of research match with the findings of Zhang (2005), Ahadzie et al. (2007), Adinyira et al. (2014), Fung (2015) in the literature review who has stated that attractive projects utilise modern technology as a result of which these projects are completed in short span of time, such projects also offer innovative and cost-effective solutions to handle the complexity in various phases of PPP projects. Findings in this regard also correspond with the findings of Phang (2016) and Kang et al. (2019) in literature review who argue that an attractive project ensures that it is well suited for partnering, offer long-term cashflow/profitability to attract investors and offer long-term demand for project's products and services (Abdul-Aziz, 2010; Wettenhall, 2010). The role of technology in this regard is vital to maintain the attractiveness of project as use of technology ensure that

robust technology is used in project's design, operation, delivery which can be instrumental in improving the quality of housing projects (UNESCAP, 2017). Findings also confirm that an attractive project offers significant profitability and a similar argument is provided in the literature review by Abdul-Aziz (2010), Hwang et al. (2013) and Onyemaechi et al. (2015) who state that an attractive project in context of PPP projects are the ones which offer long-term profitability which is why these projects are utilised in PPP housing sector projects. Hence, from technical viewpoint of participants, attractive project had three main elements of adequate project profitability, long-term demand and end user (customer) satisfaction which contributed to the success of PPP housing sector project implementation.

From the organisational viewpoint, participants agreed that main concern of the organisations was that PPP project had to generate a satisfactory return on investment (Kwak et al., 2009) as the private sector was mainly interested in the projects which had the highest prospect of commercial profitability (Adair et al., 2011) as such projects had a long-term demand (Boles et al., 2013) and also had a high level of customer satisfaction (Davies, 2019). This viewpoint of participants correspond with the findings of Fung (2015), Babatunde (2015) and Biygautane (2017) who state that an attractive project is considered to be the one which offers highest return on investment as such return on investment is more likely to encourage both public and private sectors to engage in PPP projects.

Long-term demand for the products/services offered by the project was also identified an important factor from the organisational perspective. For example, HID-1 from KAPP stated:

"Long-term demand for the products/services offered by the project ensure that projects are financially viable to meet the long-term needs of all stakeholders including customers".

Participants also stated that from organisational viewpoint, it was also important to obtain complete financial assessment of projects to ensure that project was both affordable and profitable. For example, PPP UM-1 from PAHW stated:

"To gain insights into project's affordability and profitability, it is essential for organisations to undertake life cycle assessments including financial costs which would reveal the potential and economic benefits of a PPP project".

These findings of research are in line with the study of Morallos & Amekudzi, (2008), Tang et al. (2010), Takim et al. (2011), Gudiene et al (2014), Batra & Menz (2015) which state that the governing factors for selecting PPPs include financial benefits and economic impact of these projects. It is important to perform financial and economic assessment of projects to ensure PPP projects are financially feasible (Karim, 2011; Ram & Corkindale, 2014) as one reason PPP projects are unable to deliver the financially viable projects are that all costs which are to be incurred in the projects are not identified in a timely manner (Osei-Kyei and Chan, 2017; Babatunde & Perera, 2017) as a result of which significant cost-overruns are experienced in PPP projects (Kang et al., 2019).

Participants stated that from personal perspective, the profitability of the PPP projects was a vital factor which contributed towards the success of PPP projects. However, this required experienced project teams who were well-trained to execute the PPP projects. For example, Engineer-4 (EN-4) from KAPP stated:

"Rich experience in international PPP project management was vital factor to

successfully implement PPP projects, thus, organisations are required to invest in training and development of project managers to ensure they are fully capable to implement the PPP projects".

Overall, participants agreed that from personal perspective, three factors contributed towards success of PPP housing sector project implementation. These were reported by participants as profitability of PPP projects, satisfaction of customers and long-term demand for the products. For example, PPP UM-1 from KAPP stated:

"Long-term cash flow is attractive to the lender and payment is initiated through a contracted fee for service, or by collection of user fees and revenues are secured for as long as 15-20 years and this also ensures that there is a long-term demand for the PPP projects".

Overall participants agreed that from technical, organisational and personal perspective, the attractive project exhibited three CSFs of adequate project profitability, long-term demand and end user (customer) satisfaction. These findings illustrate that long-term demand for the PPP's projects and end user satisfaction are the important CSFs in an attractive project. Similar findings are noted by Jefferies (2006), Jacobson & Choi (2008), Jooste et al. (2011), Abdul-Aziz & Kassim (2011) and Onyemaechi et al. (2015) who observe that to ensure that PPP projects remain financially feasible, there must be long-term housing demand for these projects as sustainable demand by customers would give confidence to investors to invest (Sabry, 2015) as significant demand of these projects would ensure profitability which would also encourage investors to invest in the PPP projects (Sattout & Batwala, 2019).

Figure 13 shows the public perception of project attractiveness from TOP perspective. Figure 13 shows that based upon Public's TOP perspective, technical, organisational and organisational factors in the attractive projects which contribute towards the success of PPP

projects are sufficient project profitability, long-term demand for the products and end user satisfaction.

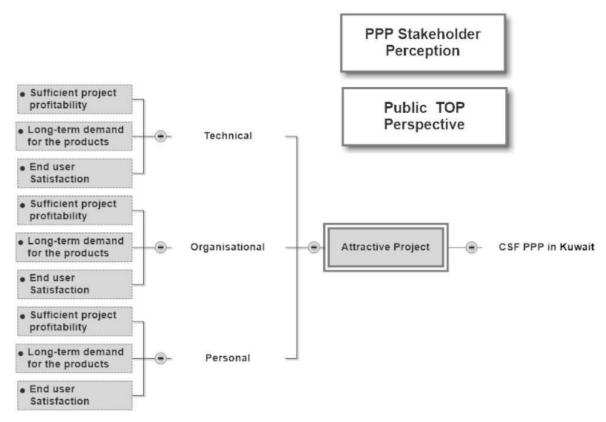


Figure 13: Public View of Project Attractiveness from TOP Perspective

#### **5.3.3 Findings & Analysis in relation to Reliable Consortium**

Participants were asked to answer to what extent public view of the consortium reliability contribute to the success of PPP housing sector project implementation. Participants agreed that a reliable consortium denoted perseverance and financial strength which was a vital success factor in PPP projects and inclusion of multidisciplinary stakeholders was important in order to develop a reliable consortium. For example, PL-3 from KAPP stated:

"Multidisciplinary participants such as the public sector, the private sector and the regulators are important to for PPP projects as the relationships and communication among them determine the success of PPP projects".

PL-3 from KAPP also highlighted the lead role of entrepreneur/enterprise which was vital in building a reliable consortium as such entrepreneur/enterprise was to negotiate the role and responsibilities of both public and private sector stakeholders and was responsible to maintain good relationship with host government. For example, HID-1 from PAHW stated:

"Role of leading enterprise or entrepreneur is important to develop and maintain good relationship with host government authorities. Private firms want to know the role and responsibilities of all stakeholders in the PPP projects and involvement of a leading entrepreneur/enterprise ensures that roles, responsibilities are well-documented and negotiated so to avoid any conflicts among the stakeholders. Role of entrepreneur/enterprise is also important in ensuring the level of control by various stakeholders over the operations of PPP projects and to establish the relevant risks which arise from such operations.

Thus, identification of role, responsibilities and risk by the leading entrepreneur/enterprise affect the consortium reliability in PPP projects".

These research findings correspond with the findings of Li et al (2005), Cheung et al. (2012) and Babatunde (2015) in literature review who state that a reliable consortium is denoted by the presence of a strong and reliable leading entrepreneur/enterprise in the PPP projects who can negotiate well with the host government and is strong enough to identify the role, responsibilities and risk sharing among stakeholders. These findings illustrate that the main reason why reliable consortium is an important CSF in PPP projects is due to the synergy (Hwang and Low, 2012) which it creates between the public and private sector and increased synergy means increased collaboration and trust which also improve

communication between all stakeholders in PPP projects (Iossa et al., 2013; Cruz and Marques, 2013; Babatunde & Perera, 2017). These findings also highlight the importance of developing a strong consortium via a leading entrepreneur/enterprise, so roles, responsibilities and tasks of all stakeholders are all clearly documented (Kavishe et al., 2018). Similar findings are reported in literature by Smith (2008), Kwak et al. (2009), Hodge et al. (2010) and Alford & O'Flynn (2012) who observe that consortium reliability is affected by how well the leading enterprise/entrepreneur manages risk, offer financial benefits by delivering quality services and offers skills, resources in managing PPP projects which collectively determine the consortium's reliability.

Participants also agreed upon the sustainable revenue which was vital for projects' operations and in generating a reliable consortium. For example, AR-3 from PAHW stated:

"Revenue sustainability is considered a critical factor in project operations. In most project management tasks, the primary goal usually aims at increasing economies of scales and generating more revenues".

PPP UM-1 from PAHW also highlighted the importance of sound return on investment in order to generate a reliable consortium. PPP UM-1 stated:

"Sound financial analysis is important in developing a reliable consortium as the role of private sector in PPP projects is to maximise the return on investments and increased return on investments result in providing quality and accessible service to the public".

Participants also highlighted the importance of having an effective project

organisational structure which was vital in developing a reliable consortium. For example, PL-3 from PAHW stated:

"Effective project organisational structure where certain degree of hierarchical control and flexibility is important in developing a strong consortium as such consortium enjoys the sound skills, capabilities of project managers as a result of which strong teamwork is evident which eventually determine the success of PPP projects. Such consortium based upon strong networking of relevant stakeholders enjoy trust which result in a reliable consortium. Such reliable consortium is also technically competent to deliver the PPP projects as project teams have the desired technological knowledge of developing and executing the PPP projects which determine the performance in PPP projects".

These research findings correspond with the findings of Zhang (2005), Babiak & Thibault (2009), Wettenhall (2010), Steijn et al. (2011), World Economic Forum (2017) who suggest that a reliable consortium is based upon effective project organisational structure which has competent project managers who are technologically competent to deliver successful PPP projects. These findings also suggest that a reliable consortium offers the flexibility to cope with changing situations and such flexibility results in a reliable consortium by developing good interpersonal relationships among stakeholders (Sun & Meng, 2009; Nysten-Haarala et al., 2010). These findings also correspond with the findings of Taleb (2010), Al Zarooni & Abdou (2011) who state that flexibility in PPP contracts denote a reliable consortium as such contracts involve all stakeholders in all stages of projects' lifecycle and changing relationships between stakeholders during different stages of projects are taken into

considerations as a result of which trust and confidence among stakeholders is improved which also strengthen the reliability of a consortium in PPP projects (Barton, 2015). These research findings also match with the findings of Ndonye et al (2014) who state that a reliable consortium has an effective team structure who achieves result via teamwork and trust and organisations with relevant experience, and expertise of project managers collective form a reliable consortium. Findings in this regard also suggest that a reliable consortium can develop an effective team structure by conducting a 'Strategic Needs Analysis' (SNA) approach (Smith et al. 2002; Deloitte, 2018) which involves identifying the needs and expectations of all stakeholders in the early phases of PPP projects (Sattout & Batwala, 2019) and a resultant project brief incorporates the feedback of all stakeholders which can provide unanimous guidance to all stakeholders and reduce conflicts which result in a reliable consortium (Acar & Durucasu, 2014; Almarri, 2019).

Participants also stated that BOT projects were able to create reliable consortium. For example, PL-1 from KAPP stated:

"BOT projects in Kuwait generate sound return on investment as private sector in such projects are more likely to expand their market share and since these projects are long-term projects so the project risks are carefully shared among the stakeholders and this factor of shared risk allocation determines the success of PPP projects. BOT projects also have sound technical assessment as a result of which project designs, their impact upon profitability, operations, health & safety and environment are readily evaluated as a result of which strong consortium is generated".

These research findings correspond with the findings of Tam et al. (1994), Walker & Hampson (2003) and Xu et al (2010) in literature review who argue that as long as projects' stakeholders can successfully share risks which arise during inception, operation and implementation of PPP projects, the eventual result of such projects is a reliable consortium which determine the quality and success in the PPP projects. Findings in this regard align with the findings of Jacobson & Choi (2008), Osei-Kyei and Chan (2019), Alola (2019), Alteneiji et al. (2019) who observe that consortium's reliability in PPP projects is affected by inadequate risk allocation in the PPP projects. Thus, a careful holistic risk allocation including, financial and operational risk management must be performed to improve the performance of PPP projects (Kang et al., 2019). Hence, risk allocation remains a strong CSF in order to develop a reliable consortium in PPP projects (Almarri, 2019).

The research findings also highlight the importance of BOT project in PPP projects in Kuwait. These findings correspond with the findings of Ndonye et al (2014) who suggest that BOT projects have sound technical expertise as a result of which projects' costs are reduced and profitability of projects are increased which result in reliable consortium. These findings also correspond with the findings of Mane & Pimplikar (2013) in literature who argue that BOT projects are preferred in PPPs as the sponsor (BOT entity) is responsible to finance, design, construct and operate the projects and client does not bear any direct risk as a result of which these BOT contracts form reliable consortium (Zhao et al., 2013). Although, these BOT contracts have a higher risk value, but these are preferred in PPP projects as such higher risk values are allocated to private partners (Ameyaw and Chan, 2016), hence, these are preferred by investors in PPP projects.

Figure 14 shows the TOP's perspective of Public about the consortium reliability. From technical perspective, five factors are identified by the participants which contribute towards a reliable consortium and towards the success of PPP projects, these factors include; leading role by a key enterprise or entrepreneur, partnering skills, strong & capable project team, innovative and cost effective technical solutions. Whereas, from organisational perspective, five factors are identified which result in a reliable consortium and towards the success of PPP projects, these factors include; effective project organisational structure, mutual trust and objectives with the host government, strong & capable project team, innovative and cost-effective technical solutions. While, from personal perspective, four factors are identified which result in a reliable consortium and towards the success of PPP projects, these factors include; environmental, health & safety issues, strong and capable project teams, innovative technical solutions and cost-effective technical solutions.

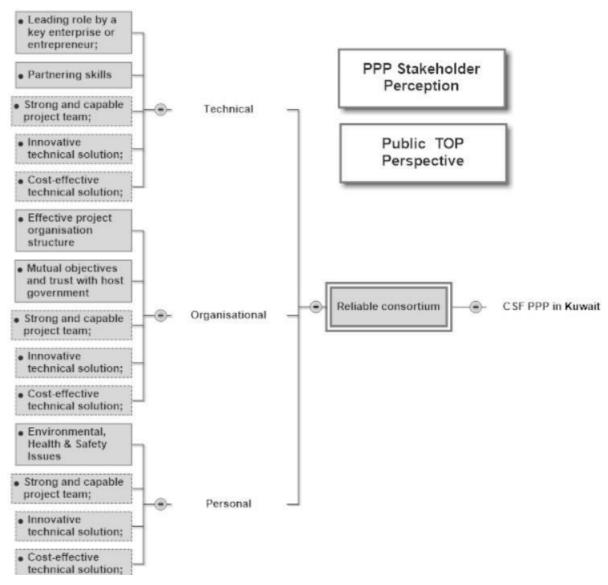


Figure 14: Public View of Consortium Reliability from TOP Perspectives

## 5.3.4 Findings & Analysis in relation to Financial Package

Participants were asked to answer how did the sound financial package contribute to the success of PPP housing sector project implementation. Participants stated that as long as they were provided clarity about the source of funds and expected revenues before the agreement, such financial package was instrumental in contributing towards the success of PPP projects. For example, HID-1 from PAHW stated:

"As long as projects have high debt/equity ratio and ministry of finance specifies

sources and structures of loans (Islamic loans), such financial package is sound enough to meet the PPP's project requirements. Nonetheless, PPP projects in Kuwait are the concession agreements in which users make the required payment, hence, concession agreement denotes sound financial package in PPP projects".

These research findings match with the findings of Merna and Smith (1994), Badu et al. (2012), Dada & Oladokun (2012) who state that the presence of concession agreement is a vital CSF in PPP projects as users make the required payments in the concession agreements as against the public authority as a result of which these projects offer sound profitability. These findings also highlight that since major PPP projects in context of Kuwait are based on concession agreements, so these contracts are mostly DBFO in which government provides the contracts to the private sector for a high share of the cost of the asset (Badu et al., 2012) and the private sector is delegated with the responsibility to operate and maintain the assets (Gupta et al., 2013). These findings also highlight that one reason why the concession agreements are preferred in the PPP projects is that apart from government funding these agreements recover the costs of projects via public funding (Chou & Pramudawardhani, 2015). Hence, it can be argued that sound financial package in PPP projects can be generated by utilising more of DBFO contracts as these projects offer better risk management as risks are shared between public and private sector (Liu et al., 2016) and increased return on investments as both government funding and charges levied on the use of assets by public, i.e. public funding can provide financial stability in these projects which can be vital in developing a favourable financial package in PPP projects (Osei-Kyei and Chan, 2017).

HID-1 from KAPP in this regard highlighted the importance of debt-financing packages and financial credibility of PPP projects. For example, HID-1 from KAPP stated:

"PPPs with robust long-term debt financing packages reduce financial risks, improve project performance and success. Companies by engaging in PPP projects usually raise their finances by combining debt (offered by financial instruments like bonds and lending institutions) with equity (offered by stakeholders so to use the organisation's projects). Lenders on the other hand, review the financial credibility of PPP projects before making the decision to lend and these factors collectively determine a sound financial package in PPP projects".

Participants also highlighted the effect of concession agreements on the financial package. For example, PL-3 from KAPP stated:

"Concession agreement gives a private concessionaire responsibility not only for operation and maintenance of the assets but also for financing and managing all required investment. A concession agreement is typically for a period of 25 to 30 years (i.e., long enough at least to fully amortise major initial investments). Where a private sector company provides a concession on behalf of a public authority, for which the public pays them."

These research findings match with the findings of Dada & Oladokun (2012) who argue that presence of concession agreement primarily determine the sound financial package in PPP projects by making private concessionaire responsible for financing and managing the operations in PPP projects. These findings also correspond with the findings of Kavishe et al. (2018) who observe

that concession agreements in the PPP projects offer sound financial package as public sector is only involved in developing the contractual requirements and private sector is provided the autonomy to offer solutions to address the output specification. These findings also correspond with the findings of Zhang et al. (2017) in literature who argue that use of concession agreements in the PPP projects based on increased public funding offer higher market demand and revenue as increased public funding denotes increased completeness of these projects (Kavishe et al., 2018), thus, providing suggestions to use PPPs based on concession agreements. Hence, project financing via concession agreement results in sound financial package in the PPP projects.

Participants also stated that sound financial package offers equitable risk allocation which is vital factor towards the success of PPP projects. For example, HID-1 from KAPP stated:

"A sound financial package denotes how risks from the project are shared by the stakeholders as a result of which lenders consider such projects bankable and these projects have high credibility and offer economic benefits".

These research findings illustrate a correlation between sound financial package and risk allocation techniques. These research findings match with the findings of Mane & Pimplikar (2013) and Ndonye et al (2014) who suggest that sound financial package offers extensive risk allocation techniques such as how project risks which may arise at any stage of project lifecycle are handled by the relevant stakeholders and presence of effective risk allocation techniques make the PPP projects credible in terms of investment from the lenders' viewpoint. These findings also highlight that concession agreements can offer a sound financial package in the PPP projects provided that the concession period must

be adequately long so to allow private partners to pay back the investment and obtain a satisfactory return on investment (Chan et al., 2010; Gao, 2018). An adequate concession period provides information to lenders about the timeline in which investment can offer pay back and better insight about the pay back timeline on investment can be vital in developing sound financial package (Yumurtaci and Erdem, 2007; Smith, 2008; Kang et al., 2019). However, these findings also suggest that government is required to make a choice between improved financial risk allocation or rigorous profit control for private investors before deciding the ideal length for the duration of concession agreements (Kavishe et al., 2018; Kang et al., 2019). The profit control for private investors by the government is an important parameter which ensures that profits are shared in ethical manner in PPP projects (Jin et al., 2019) and accordingly optimal length for the concession agreements is decided which can be significant in determining a sound financial package in PPP projects (Kang et al., 2019).

Thus, sound financial package offers financial and economic benefits in the PPP projects, however, effective risk allocation, selection of suitable concession agreements and optimal length of the duration of concession agreements are the main CSFs which deliver a strong financial package in the PPP projects (Kavishe et al., 2018). Hence, sound financial package is an important CSF from participants' perspective which contribute towards the success of PPP projects. Figure 15 shows the TOP's perspective of Public about the financial package. From technical, organisational and personal perspective, four factors of financial package, i.e. sound financial analysis, sources & structures of main loans (Islamic loans), high debt/equity ratio and suitable adjustable tariff

contribute towards the success of PPP projects.

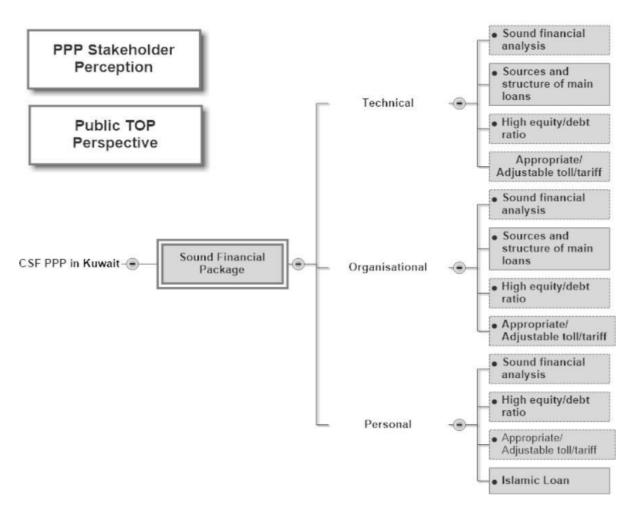


Figure 15: Public View of Financial Package from TOP Perspectives

## 5.3.5 Findings & Analysis in relation to Risk Allocation

Participants were asked to answer how did risk allocation contribute towards the success of PPP housing sector project implementation. Participants agreed that optimum risk allocation was a vital success factor which contributed towards the success of PPP housing sector project implementation. Participants stated that it was important to identify exchange rate fluctuations. For example, HID-1 from KAPP stated:

"It is essential to identify currency exchange risks which arise due to exchange

rate fluctuations. In order to avoid exposing the project to future fluctuations of interest rates, borrowing is either arranged at a fixed rate of interest, or exposure to risk due to variable interest rate is mitigated by entering into appropriate hedging arrangements. The role of a PPP regulatory framework is also important in terms of transferring risks from public agencies to private sectors as there are various risks which occur in the PPP projects such as risks in relation to delays in construction, long-term asset maintenance and cost overruns and transferring such risks to private sectors relieve public agencies from risk-sharing".

These research findings correspond with the findings of Adinyira et al. (2014) and Onyemaechi et al. (2015), Osei-Kyei and Chan (2017) who argue that exchange rate fluctuations affect the lending decisions of investors as investors need certainty that market instruments and regulatory help are available to better align the risk profile of investment with their own risk acceptance before investing in a PPP project specially the ones involving a cross-border project. Similar findings are reported in litearature by Burger & Hawkesworth (2011), Muhammad & Johar (2019) who argue that to deal with exchange rate fluctuations in the PPP projects, hedging agreements may be formed so to deal with exchange rate risks as these can provide a natural hedge against the exchange rate risks specifically in the projects which have project revenues and debt financing in the same currency. However, Sattout & Batwala (2019) disagree with findings that hedging agreements can provide protection against exchange rate risks in PPP projects as these do not offer cost-effective solution in various markets including Kuwait because of costs involved and the absence of sustainable hedging options for various local currencies. Moreover, Jin et al. (2019), Barker (2020) argue that while using hedging options, lenders will have to accept the maximum tenor the

local market will offer and accordingly renew the maturity of the hedge in due time, hence, hedging may not be considered a cost-effective solution in the PPP projects.

These research findings also match with the findings of Karim (2011), Onyemaechi et al. (2015), in literature review who state that role of a regulatory authority such as a public agency is vital in terms of efficiently allocating risks to private sector so to serve the public interest and in relieving the public sector from bearing any risks in PPP projects. These findings also align with the findings of Osei-Kyei and Chan (2017), Wang et al. (2018) who state that role of regulatory authority is vital in managing risks in PPP projects as regulatory authority provides the laws in relation to the risks originating from problems in financing due to irrational financing structure, credit or national policies, hence, offer effective risk management in PPP projects. Similarly, these findings correspond with the findings of World Bank (2015), Almarri (2019) who observe that regulatory authority in PPP projects by monitoring the performance of projects can track the performance and any risks which can surface due to poor performance may be streamlined by sub-contracting the operator. Hence, regulatory authority by monitoring the performance, tariffs and by taking corrective actions to address performance related issues and relevant financial obligations affecting the operators can improve performance in PPP projects (Alola, 2019).

Nonetheless, participants argued that it is difficult to allocate project risks as transferring risks to private sectors is not always considered feasible for two reasons, mainly, public agency is capable of managing risks and project risks

cannot be readily predicted as a result of which risk allocation may not be effective in PPP projects. For example, PPP UM-1 from PAHW stated:

"Inherently, it is difficult to allocate project risks. Transferring risks from public agencies to private sectors usually come with a price that must be paid. A public agency is mostly capable of managing risks, but it still transfer the risks to private entities which erode value for money. Secondly, it is difficult to predict risks projected to occur in future (in the next 30 to 40 years) with certainty".

These research findings match with the findings of Heravi & Hajihosseini (2012) who contend that since nature of risks is dynamic and keep changing throughout the project lifecycles so focus of organisations in PPP projects should be on improving the effectiveness of risk allocation techniques so to maximise value for money in PPP projects. Similar findings are reported by Irwin (2007), World Bank (2015) that effective risk allocation must be able to control the prospect of the risk occurring, be able to control the influence of the risk on project outcomes and be able to absorb the risk at the lowest cost if the prospect and impacts of risks cannot be controlled. Likewise, Alteneiji et al. (2019) argue that effective risk allocation techniques in the PPP projects provide improved value for money in the PPP projects. However, these findings also point out the limitation that risk allocation techniques may not be able to identify and mitigate risks as all risks cannot be identified in a timely manner (Alola, 2019) as nature of risks keep changing and some risks such as maintenance and operational risks may not occur till projects are operational and these risks can seriously impact upon both returns on investments and successful implementation of PPP projects (Fabre & Straub, 2019).

Participants also commented how effectively to allocate risks in PPP projects. AR-2 from KAPP, for example, stated:

"There is need to allocate risks to parties or teams capable of managing them at little costs. In PPP, optimum risk allocation is based upon the concept that risks should be allocated to organisation, individual or team who are capable of ensuring optimum risk management".

These findings correspond with the findings of Xu et al. (2010), Alteneiji et al. (2019), Almarri (2019) who state that optimum risk allocation in PPP projects is performed by allocating risks to the party who has the capacity to understand key risks, is competent enough to control the probability of risk occurrence and mitigate the impact of risks via suitable management. Hence, optimum risk allocation and lowest project costs in mitigating such risks are the guiding principles which devise both value for money and effective risk mitigation in PPP projects. Figure 16 shows the public view of risk allocation from TOP perspectives based upon participants' responses. From, technical, organisational and personal perspective, two factors of optimum risk allocation and appropriate & reliable risk allocation in the risk allocation contribute to the success of PPP housing sector project implementation.

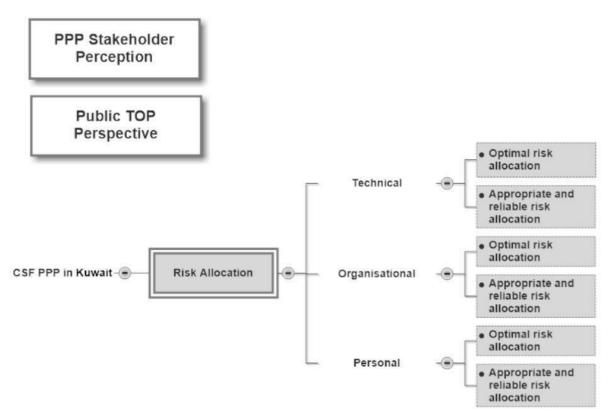


Figure 16: Public View of Project Risk Allocation from TOP Perspectives

# **5.4** Findings of interviews related to TOP perspectives of the Private sector about the key CSFS

Interview questions 6-10 were asked to obtain the TOP perspectives of the private sector about the key CSFS. A total of six interviews were conducted and 3 private sector representatives from KAPP and 3 private sector representatives from PAHW were interviewed. These findings and their analysis in light of literature review are presented next in this chapter:

# 5.5 Private TOP Perspective

#### 5.5.1 Findings & Analysis in relation to Investment environment

Participants were asked to answer how did the investment environment contribute to the success of PPP housing sector project implementation. Participants regarded the investment environment as a critical success factor which contributed to the success of PPP housing

sector project implementation. Participants were of the view that sound economic policy was essential in terms of providing the incentives to investors so to increase the participation of private sector in the PPP projects. For example, Representative (REP) 1 from KAPP stated:

"The role of sustainable economic policy is vital in creating a favourable investment environment and environment which is regarded positive for investment provides employment opportunities which contribute to overall economic development of the country. It is important to reduce risks in political and economic environment so to create a positive investment environment".

These research findings correspond with the findings of Hardcastle et al. (2006) in literature review who argue that sustainable economic policy is one of the critical success factors in implementing PPP projects as long-term policies of government are more likely to encourage investors to invest in PPP projects. These findings also match with the findings of Ram & Corkindale (2014), Zou et al., (2014) in literature review who note that the sustainable economic policy is vital in creating economic viability of PPP projects which is an important CSF as per the stakeholders in the PPP projects. Similar findings are noted by Barton (2015), Bock & Linner (2015) in literature review who suggest that sustainable economic policy plays a pivotal role in developing stable macroeconomic conditions which in return generate a favourable investment environment and therefor an important CSF in implementing PPP projects. Furthermore, the findings of this research align with the findings of Al-Saadi & Abdou (2016), Demirel et al., (2017), Gao (2018) in literature who argue that the sustainable economic policy is an important CSF which influences private sector to invest in the PPP projects as such economic policy outlines both the economic and social benefits of investment in PPP projects for the private investors which are important in generating a positive investment environment. Findings of this research also denote that low risks in economic and political environment is an important CSF from the private sector's perspective which generate a favourable investment environment. These empirical findings are confirmed in existing literature by Burger & Hawkesworth (2011), Muhammad & Johar (2019), Sattout & Batwala (2019) who identify that reduced risks in political and economic environment are essential in distributing risks which range from allocating responsibility, ownership and financial risks which are regarded as influential factors in impacting upon the investment environment in PPP projects (Barker, 2020). Therefore, lower the risks in economic and political environment, improved would be the investment environment which is likely to contribute to the success of PPP projects.

Participants also highlighted the importance of political stability in the macro-environment which was a critical factor from technical, organisational and personal perspective of participants. For example, REP-2 from KAPP stated:

"Stable political and economic environment provide relevant lending policies to the private sector and the role of government is important in terms of offering tax exemptions, additional guarantees and grants. So the government policies and relevant legal framework guarantee the successful implementation of PPP projects".

Participants also highlighted the importance of supportive and understanding community as a vital factor which contributed to the success of PPP projects. For example, REP-3 from KAPP stated:

"A favourable investment environment warrants investment due to acceptance of projects by all stakeholders. All stakeholder groups, including the society, needs to accept projects before they are undertaken. The private sector is driven by competition to sell goods and services at a price consumer are willing to pay and by the discipline of the capital market to make profits."

This means that stakeholders' acceptance require proper communication of positive gains associated with PPP projects and technical feasibility of projects should be well explained to all stakeholders. For example, REP-1 from PAHW stated:

"Technical feasibility of projects is important factor from the technical perspective. Private sector requires adequate technology to complete mega projects successfully within estimated budgets, time and as per the specified quality assurance measures. This calls for aligning financial conditions and project's requirements with suitable market capacities as well as private partnership capacities to deliver quality project products without increasing risk provisions or adding unnecessary requirements".

These findings highlight that the political stability and sound economic environment facilitate the government to offer lender-friendly lending policies which is identified as an important CSF in generating a favourable investment environment from the viewpoint of private sector (Adinyira et al., 2014; Onyemaechi et al., 2015; World Bank, 2015). Similar findings are reported in literature review by Yuan et al., (2010), Cheung et al., (2012), Bhatia (2017) who recommend that government policies and legal frameworks positively affect the cooperation in PPP projects in form of contractual guarantees, sponsorships, suitable allocation of adequate resources for the PPP projects and in developing and implementing a fiscal framework which promote investment in PPP projects. These findings also correspond with the findings of Zhang (2005), Wang (2007), Hwang and Low (2012), Iossa et al., (2013), Cruz and Marques (2013) in literature review who argue that the stakeholders' acceptance of PPP projects in

terms of benefits should be articulated by developing a sound communication strategy between the public and private partner in the PPP projects and roles and benefits such as financial, technical, improved expertise are required to be promptly communicated to all stakeholders so to develop synergy of outcomes in PPP projects.

These research findings also match with the findings of Hardcastle et al (2006) in literature review who state that a key CSF of PPP projects is suitable partnering opportunities as PPP projects are generated to capitalise on the financial, technical and human capabilities of private partner and such private partner is capable to deliver quality projects, hence, guaranteeing the desired return on investment. Similar findings are reported in literature review by Rijkswaterstaat (2014), Ismail (2017), Babatunde & Perera (2017) who illustrate that the technical feasibility of projects and technical knowledge of private partners, reliance on innovation so to tackle complications in PPP projects are the main CSFs from the private sector's perspective so to ensure that PPP projects are technologically robust so to add value and offer increased return on investment in PPP projects.

Thus, based upon participants' responses from private sector, figure 17 shows technical, organisational and personal perspectives in the investment environment which contributes towards the success of PPP projects. From technical perspective, five factors in the investment environment which contribute towards the success of PPP projects include; stable political system, favourable economic system, project is suitable for partnering, government support and predictable risk scenarios. While, from organisational perspective, four factors in the investment environment which contribute towards the success of PPP projects include; stable

political system, favourable economic system, project is suitable for partnering. Whereas, from personal perspectives of participants, three factors in the investment environment which contribute towards the success of PPP projects include; stable political system, favourable economic system and project is suitable for partnering.

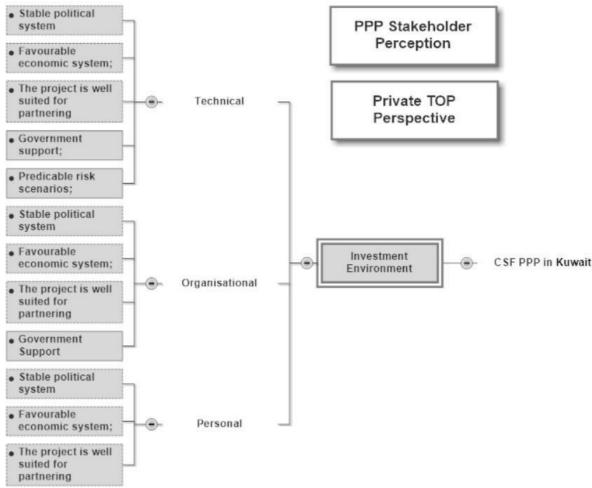


Figure 17: Private Sector View of Investment Environment from TOP Perspectives

### 5.5.2 Findings & Analysis in relation to Attractive project

Participants were asked to answer to what extent the perception of attractive project contributed to the success of PPP housing sector project implementation. Participants agreed that sufficient profitability of project was the vital factor which contributed towards the success of PPP projects. Participants also agreed that project had to serve the public interest which was a vital factor that contributed towards the success of PPP projects. For example, REP-1 from PAHW stated:

"Project should offer sufficient profitability so to ensure investors that desired return on investment will be generated. Investors seek protection against risks through guarantees, sometimes backed by a multilateral, international arbitration for dispute resolution and higher returns on equity. Project should also serve the public interest and in this manner PPPs can serve the public interest by creating job opportunities and by improving the service provision".

These research findings match with the findings of Van Gils et al. (2009), Eadie et al (2013) in literature review who state that significant project profitability is a vital CSF affecting the implementation of PPP projects as such projects are strong to generate desired return (Acar & Durucasu, 2014) within the stipulated timeline and involve minimum cost and such projects meet the end-user satisfaction in relation to time, cost and quality (Almarri, 2019), hence, contributing towards the success of PPP projects. These findings also correspond with the findings of Draxler (2008), Moskalyk (2011) who argue that profits generated by the PPP projects are one of the main reasons why PPP projects are implemented. Increased profitability is viewed as favourable by the private sector in terms of investment and offer protection to investors' money by generating higher return on investment which is one of the mains CSFs in implementing PPP projects in GCC countries including Kuwait (Deloitte, 2018). Similar findings are reported in literature review by UNESCAP (2017), World Economic Forum (2017) which suggest that the PPP projects are considered favourable for investment by private

sector as its involvement offers the required financial support which is a vital CSF as the inadequate budget can generate financial constraints and tensions among stakeholders in different phases of projects which hamper the effective implementation of the PPP projects (Biygautane, 2017; Aguinaldo, 2018). Empirical findings in this regard also confirm that apart from profitability, private sector views the public interest as one main CSF in the PPP projects. These findings are also confirmed by the Coates (2008), Abdul-Aziz (2010), Onyemaechi et al. (2015), Sattout & Batwala (2019) in literature review who note that PPP projects contribute towards public interest as due to the involvement of private sector, these projects are completed in a timely manner which also improve reputation of these projects among the general public.

Participants also highlighted the importance of competent project teams which was a vital factor that contributed towards the success of PPP projects. For example, REP-2 from KAPP stated:

"Competent personnel implement successful PPP projects. At all project stages, competent teams need to engage in activities such as planning, policy formulation and project implementation. Overall, team's competence guarantees end user satisfaction and ensure demand of final project's products in the long-run, thus resulting in project sustainability and project profitability".

Participants also stated that private sector also required clear and transparent project' evaluation policies to guarantee attractive projects. This involved taking into consideration needs and interest of all stakeholders whilst setting PPP's policy goals. For example, REP-2 from PAHW stated:

"To implement policies and goals regarding PPP, a thorough evaluation of costs and benefits linked to the projects being undertaken are required. This evaluation involves determining economic impacts of project's implementation, whether or not the implementation process satisfies the diverse needs of all stakeholders".

These research findings correspond with the findings of Hardcastle et al (2006) who state that stakeholders' involvement in PPP's project planning helps to reduce the evolution of unexpected factors which arise during project's implementation. Similar findings are reported in literature review by Freeman (2010), Jagosh et al. (2013), Freeman & Moutchnik (2013), Ribesse et al. (2015) who note that the involvement of all stakeholders in the projects ensure that needs and expectations of all stakeholders are taken into consideration which generate value for all stakeholders and ensure uninterrupted operations and sustainable projects which is a vital CSF in the PPP projects (Onyemaechi et al., 2015). These findings also correspond with the findings of Fung (2015), Kwofie et al. (2016), Zhang et al. (2017) who observe that stakeholders' involvement in the projects in a timely manner ensure that they have the relevant influence in making and facilitating the key decisions regarding the PPP projects which is a vital CSF in the PPP projects (Alola, 2019).

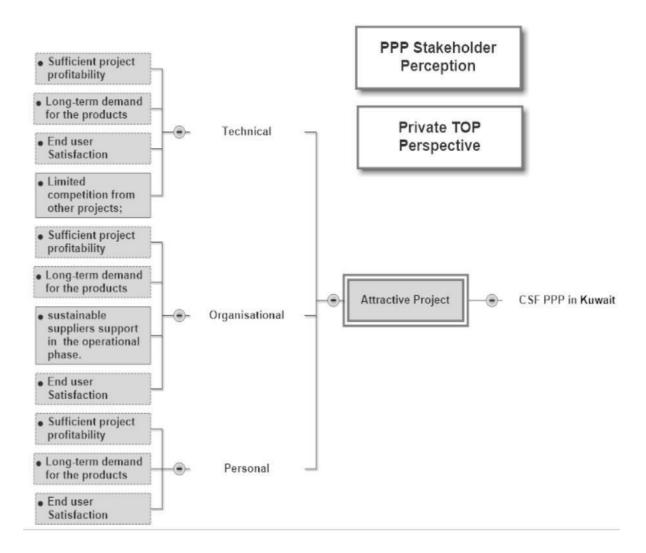
Lastly, participants also stated that PPP projects are carefully selected and implemented based upon the long-term demand for the products which PPP's project offer. For example, REP-3 from PAHW stated:

"PPP projects demand tendering for a wide variety of products/services to secure a high level of profit. Private sectors aim at resource minimisation and profit maximisation. With adequate project profitability, stakeholders can agree to undertake PPP projects, focusing more on end-user satisfaction. Hence, attractive project is both financially profitable and strong enough to meet end-users' expectations".

These research findings correspond with the findings of Dulaimi et al (2010), Abdul-Aziz (2010), Sabry (2015) who state that in selecting appropriate PPP organisations successfully projects, private conduct PPP's project implementation by carefully determining project's profitability and by determining long-term demand for the projects which ensure that PPP projects are sustainable over a long period of time (Onyemaechi et al., 2015). Similar findings are reported in literature review by Olander (2006), Chinyio & Akintoye (2008), Babatunde & Perera (2017) who argue that long-term demand for the PPP projects is a vital CSF which is taken into consideration by the private sector as long-term demand means that these projects are not only financially viable but are strong enough to meet the end-users' expectations which makes these projects socially viable as end-users' expectations are readily met by these projects which bring greater reputation among general public about these projects (Sattout & Batwala, 2019). Empirical findings in this regard also align with the findings of Babatunde & Perera (2017), Davies (2019), Sattout & Batwala (2019) who recommend that meeting end-user expectations and creating an adequate level of satisfaction among them is a vital CSF in the PPP projects as their satisfaction determines the general success in PPP housing projects.

Figure 18 shows the Private sector's view of project's attractiveness from TOP

perspective. Figure 18 shows that from technical, personal and organisational perspectives, three factors were identified in the attractive projects which contributed towards the success of PPP projects. These factors included sufficient project's profitability, long-term demand for products and end-user satisfaction.



# 5.5.3 Findings & Analysis in relation to Reliable consortium

Participants were asked to answer, how did the private sector's view of consortium reliability contribute to the success of PPP housing sector project implementation. Participants stated that role of special purpose vehicle (SPV) was important in devising cost-effective technical solutions which determined the

strength of a reliable consortium. For example, REP-2 from KAPP stated:

"A private venture sets up a special company called a 'special purpose vehicle'

(SPV), to build, develop, maintain and operate for the specified contract period and its role is important in providing cost-effective technical solutions. These cost-effective solutions are designed by capable and knowledgeable project teams who denote the strength of a reliable consortium. PPP project participation requires that the consortium deals with design, operation, construction, financing and maintenance of infrastructure in addition to transferring the facilities to customers. A suitable private consortium, thus, determines the success of any PPP project".

These empirical findings of the research are also supported by findings of Wettenhall (2010), UNECE (2014), The Government of UK (2013) and Al-Saadi & Abdou (2016) in literature review who demonstrate that the private sector views the reliable consortium a predominant CSF in PPP projects and the role of SPVs are considered instrumental in generating a reliable consortium as these are primarily established to perform fundamental tasks of designing, operating, constructing, financing, maintaining and transferring facilities to end-user, i.e. customers. Findings of this research also confirm that a reliable consortium is considered to be the one which offers cost-effective technical solutions. These research findings correspond with the findings of Dulaimi et al (2010), Grimsey & Lewis (2007), Hodge et al., (2010) who state that availability of cost-effective solutions which are developed by a knowledgeable and competent project team is considered a major success factor by the private sector in implementing a PPP project (Karim, 2011). Similar findings are also reported in literature review by

Leiringer (2006), Grimsey & Lewis (2007), Valdimarsson (2007), Jacobson & Choi (2008) who recommend that cost-effective technical solutions are one of the main benefits of implementing PPP projects as by having a private partner, these projects attract a higher capital investment as a result of which private sector in managing and implementing these projects devise robust, yet cost-effective technical solutions which result in forming a reliable consortium via PPP projects (Abdul-Aziz, 2010).

Participants also highlighted the importance of having a strong and professional operator who can ensure smooth execution of contracts as lack of a skilled and professional operator can hamper the smooth functioning of PPP projects. These empirical findings are also supported by the findings of Chan et al. (2010), Alford & O'Flynn (2012), Boles et al. (2013) who note that one reason behind forming PPP projects are the need to have a competent and an expert operator who can smoothly execute the contract and various PPP agreements are made to offer relevant skills, competencies via a private operator which is therefore viewed pivotal in generating a reliable consortium (Tharun, 2014). Similar arguments in literature review are provided by Sabry (2015), Osei-Kyei et al., (2017) and Sattout & Batwala (2019) who suggest that a reliable consortium is an important CSF which determines the success of PPP projects and such consortium can only be generated if the private partner has the required skills, competencies and technical know-how to implement the PPP projects (Barker, 2020).

Participants also stated the importance of setting mutual objective and trust with the host government as an important factor resulting in success of PPP projects. For example, REP-1 from PAHW stated:

"Good relationships are required to be maintained with the host government as it can set up regulations and objectives in relation to PPP's operations and implementation and having good relationships with host government ensures that government can readily intervene in PPP projects in order to resolve any conflicting interests among stakeholders. Private sector will do what it is paid to do, thus, incentives and performance requirements need to be clearly set out in the contract which is where the role of host government is important in setting up common objectives among the public and private sector".

These research findings conform with the findings of HM Treasury (2008), Saussier (2013), World Bank (2015) in literature review where it is noted that the host government plays a central role in setting up legislations which affect the implementation of PPP projects, thus, maintaining good relationships with the host government is an important CSF which determine the success of PPP projects (EIB, 2018). Maintaining good relationship with the host government is an important CSF which determines the success of a reliable consortium as government can monitor the legal compliance of the PPP projects (HM Treasury, 2008) and can intervene if any non-compliance with regulations is noted, hence, creating value for the public at large which is socially and legally compliant with the required PPP's regulations (Ram & Corkindale, 2014). Similar findings are reported in literature by HM Treasury (2016), Kwofie et al., (2016) where it is argued that PPP projects are implemented via an effective legal framework by the intervention of host government which also result in increased collaboration among stakeholders in the PPP projects. The empirical findings of this research

are also confirmed by the findings of HM Treasury (2016), Hodges & Dellacha (2017) in literature review who argue that the role of host government is significant in establishing common objectives among the public and private sector by documenting a clear policy regarding the implementation of PPP projects. Similar findings are also reported in literature review by Morano & Tajani (2017), UNDP (2017) in support of the role of host government in resolving conflicts among stakeholders by having extensive consultation with stakeholders in decision-making processes which not only resolve conflicts among stakeholders in the public and private sector but also offer effective stakeholder management in PPP projects which is an important CSF (Osei-kyei & Chan, 2017; Kang et al., 2019).

Figure 19 shows the private sector's view of consortium reliability from TOP perspective based upon participants' responses. From technical perspective, four factors in consortium reliability in terms of strong & capable project team, innovative & cost-effective technical solution and mutual objectives & trust with host government contribute to the success of PPP projects. While, from the organisational perspective, five factors in the consortium reliability which contribute towards the success of PPP projects include effective project organisational structure, strong & capable project team, innovative & cost-effective technical solutions, mutual objectives & trust with host government. Whereas, from personal perspective, four factors in the consortium reliability which contribute towards the success of PPP projects include environmental, health & safety issues, strong & capable project team, innovative technical solution and cost-effective technical solution.

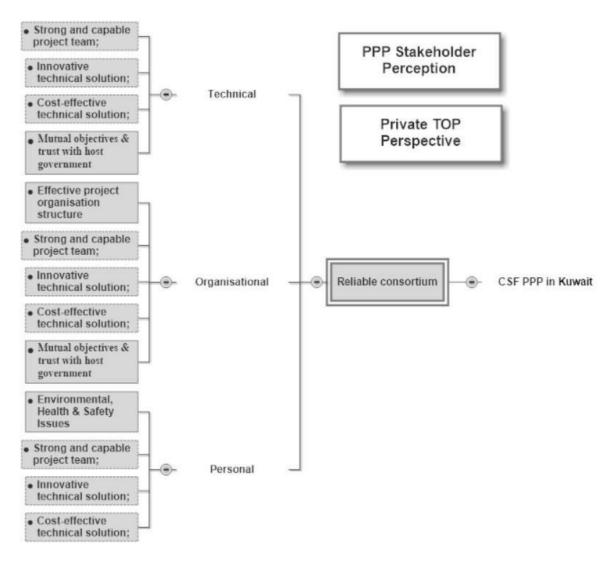


Figure 19: Private View of Consortium Reliability from TOP Perspectives

#### 5.5.4 Findings & Analysis in relation to Financial package

Participants were asked to answer, why was a sound financial package important for the success of PPP housing sector project implementation. Considering the financial packaging, the private sector ranked most factors as appropriate toll/tariff level, stable currencies, sound financial analysis, sources and structure of main loans and high equity/debt ratio. For example, REP-3 from KAPP highlighted the importance of appropriate toll/tariff level(s) and suitable adjustment formula. REP-3 stated:

"As tariffs in most cases are the major source of the cash flow with the help of which the private operator services its debt and equity, tariffs must be able recover the costs involved".

These research findings correspond with the findings of Dada and Oladokun (2012) who state that private sector considers financial package an important CSF in PPP projects as suitable toll/tariff level provide significant cashflow in the PPP projects, hence, suitable adjustment formula for toll/tariff should be based on recovering the costs. These empirical findings also match with the findings of Hodge et al., (2010), Public Works Financing (2011), Alford & O'Flynn (2012) in literature review who state that the financial package is an important CSF in the PPP projects as the toll/tariffs which are charged on these projects offer additional funds in the PPP projects which further improve the involvement of the private sector in these projects as extra cashflow which is generated by charging toll/tariffs enable the private sector to offer housing projects at a lower cost which is one of the main benefits of the PPP projects (Eadie et al., 2013). Similar findings are reported in literature review by Fung (2015), Babatunde (2015) who note that continuous cashflow which is generated by PPP projects both in terms of investment of private sector and toll/tariffs levied on these projects are the CSFs of the sound financial package (Greve, 2015). These findings are also confirmed by Iossa et al., (2013), Kwofie et al., (2016) in literature review who suggest that toll/tariffs inject much needed cashflow in the PPP projects, thus, relevant adjustment formula for toll/tariffs is needed to be based on recovering the costs. Likewise, Hwang et al., (2013) suggest that value for money which PPP housing projects offer is the reason these are used to finance housing sector projects, thus, toll/tariffs should be set in a way so to recover full cost including capital, financial and operational costs (Babatunde at al., 2015) to ensure these projects are viable as toll/tariffs are paid by the users as against the general taxpayers which makes these projects both lucrative and viable from financial viewpoint (Fung 2015, Kang et al., 2019).

Participants also highlighted the importance of addressing financial risks using strong and reliable financial strategies. For example, REP-1 from PAHW stated:

"Financial risks are caused by a shortfall in cashflow, inability to obtain sufficient project's resources, the volatility linked to prices, demand for products and services which cause shortage of revenue in PPP projects. Increased financing costs in PPP projects and insufficient hedging of cashflow cause financial risks in PPP projects. It is important for private sector to devise a strong financial package by capitalising on the financial capacity of partners involved in PPP projects as the sound financial capacity of partners is an important factor which determine the success of PPP projects".

#### REP-3 from KAPP stated:

"Private partners need to align their financial capacities with business needs to balance short-term needs and long-term commitments. The alignment of financial capacities with business needs enable the private partners to handle cashflow fluctuations in a successful manner so to meet the financial needs of PPP's projects in order to maintain service quality. It is important to conduct sound financial analysis so to develop a sound financial package by carefully performing cost-benefit analysis and by including the possible risks which can occur in the PPP projects".

Empirical findings of this research conform with the findings of Grimsey & Lewis (2007), Abdul-Aziz (2010), Burger & Hawkesworth (2011), The Government of UK (2013) in literature review where it is argued that sound financial package is an important determinant of the PPP projects provided that the financial risks which are linked with the PPP housing projects are detected in a timely manner (Zhao et al., 2013; Liu et al., 2016) and risk-sharing strategies between partners is required to be devised in such a manner so there is an equitable allocation of risks which are shared between the partners and such risk-sharing strategies can be vital in developing a sound financial package in the PPP projects (Kavishe at al., 2018). These findings also highlight the importance of developing a sound financial package by evaluating the financial capacity of the partners (Kavishe et al., 2018) as at times the full

assessment of the financial strength of the partners is not performed as a result of which the availability of cashflow is affected which hampers the success of PPP projects (Holt, 2014; Almarri, 2019). These research findings also correspond with the findings of Serrador & Turner (2015), Fung (2015), Kang et al., (2019) who state that sound financial package is an important CSF in PPP projects as financial package specifies the projects' financial requirements, costs involved, anticipated benefits of PPP projects and possible risks which may occur, hence, the financial options in the financial package should include these costs, benefits and risks in the financial analysis so to generate the financial feasibility in PPP projects (Sattout & Batwala, 2019).

Participants also highlighted the importance of project financing. For example, REP-1 from KAPP stated:

"The PPP projects are commonly financed on a limited recourse basis. In project finance, debt, mezzanine finance, equity, supplier, contractor, and purchaser credit and sureties are largely used as financial instruments. It is important to have sound revenue package of the PPP project which forms the starting point for project finance because investors and lenders have recourse to funds the project given that the revenue stream and project assets may or may not have residual values. So, the financial package typically has a larger influence on PPP project's feasibility compared to the costs associated with physical design and construction".

These empirical findings match with the findings of Zhao et al., (2013), Brookings Institute (2014), Ameyaw and Chan (2016) and Biygautane (2017) in literature review who argue that the need to develop a sound financial package based on inclusion of adequate project financing instruments is an important CSF in the PPP housing projects. Similar findings are reported in literature review by Badu et al., (2012), Gupta et al., (2013), Tharun (2014), Singewar & Deshmukh (2016)

who argue that sound project financing instruments ensure that PPP projects have continuous cashflow, are strong enough to generate required return on investment and in case if a partner is unable to pay back the funding, the lenders are entitled to get a share of equity as a result of which these projects offer both adequate financing and equity to be utilised as a security which collectively determine the sound financial package in the PPP projects (OECD, 2015; Biygautane, 2017; Osei-Kyei & Chan, 2017).

Hence, these research findings match with the findings of Zhang (2005), Osei-Kyei et al. (2018) in literature review who state that a sound financial package provides the required cashflow in PPP projects by providing the suitable combination of sources of finance, by providing stable currencies of debt and equity finance, by stabilising the fluctuations in interest and exchange rates, these factors collectively contribute towards the success of PPP projects.

Figure 20 shows the private sector's view of financial stability from TOP perspective based upon participants' responses. From, technical, organisational and personal perspective, factors in the financial package which contribute to the success of PPP projects include sound financial analysis, sources and structures of loans, high equity/debt ratio, stable currencies and appropriate toll/tariff.

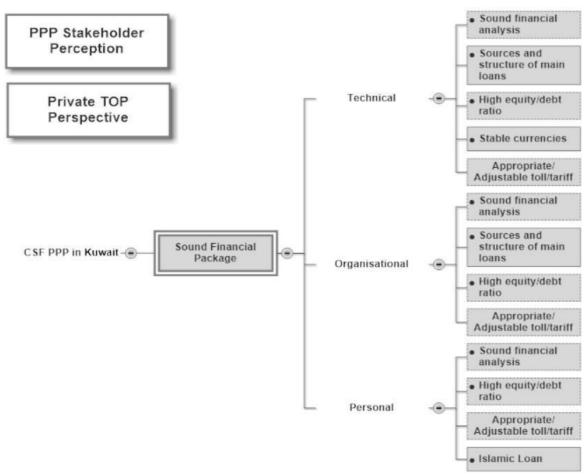


Figure 20: Private Sector's View of Financial Feasibility from TOP Perspectives

## 5.5.5 Findings & Analysis in relation to Risk allocation

Participants were asked to answer how did risk allocation contribute to the success of PPP housing sector project implementation. Participants stated that appropriate risk allocation through reliable contractual arrangements is a key CSF in PPP project. Participants were of the view that due to better capabilities of the private sector, risks are transferred from public to private sector in PPP projects. For example, REP-3 from KAPP stated:

"PPPs shift the risk from public to private sector which in most cases is better managed by the private sector, due to better expertise or area of specialization of private sector. However, it is ideal that risks are allocated in an equitable manner so to devise best practices in managing risks in PPPs. It is important for the

public sector to use all available resources to obtain a consensus of all stakeholders in relation to economic feasibility and expertise of private sector in managing risks".

Empirical findings in this regard correspond with the findings of Leiringer (2006), Grimsey and Lewis (2007), Smith (2008) in literature review who observe that appropriate risk allocation is an important CSF in the PPP projects as it transfers the risk from public to private sector and considering that private sector has competitive pressures to guarantee delivery of public services so private sector is better able to bear and allocate risks. These findings also align with the findings of HM Treasury (2008), Kwak et al., (2009), Ameyaw and Chan (2016) in literature review who suggest that since the private sector bears higher risks in the PPP projects and the PPP contracts are primarily the partnership contracts which are classified on the basis of the risk allocation, so the risk bearing capacity of the private partner both in terms of financial and technical capacity is better than the public sector. Findings of this research however point out that although the private sector may have the better risk bearing capacity, but risks must be allocated in an equitable manner between public and private sector (Wang et al., 2012). These findings however contradict with the findings of Yee (2013), Reynaers & De Graaf (2014) in literature review who note that private sector should be allocated higher risks as these risks are viewed as opportunities for investment by the private sector and by capitalising on these risks, private sector generate income which makes the PPP housing projects financially viable (Brookings Institute, 2014; Alola, 2019).

These research findings also match with the findings of Muller and Turner (2007) who state that private and public partners have to allocate and share risks equally

for PPP project implementation to succeed. These research findings also correspond with the findings of De Clerck et al (2012) in literature who state that public sector must use all available resources to reach the supreme beneficial effect, through the creation of the common understanding for all stakeholders in areas like economic viability and by carefully analysing the capabilities of private sector in managing risks in PPP projects.

Participants also stated that optimal risk allocation was an important factor from technical, organisational and personal perspective in order to contribute to the success of PPP projects However, participants highlighted that at times, unnecessary risks are transferred to private sector which hamper their ability to manage such risks. For example, REP-2 from PAHW stated:

"Any party involved in PPP projects has to be ready to handle any project and addressing the risks is vital for attaining successful and mutually acceptable results. At times, private sector undertakes some risks voluntarily and it happens that at times the public sector aggressively transfers most risks to the private sector, as a result of which unnecessary risk premiums and provisions result, and the private sector may be justified not to participate in PPP projects. This affects the successful implementation of PPP projects".

These findings highlight the significance of balancing the interests of all parties involved in PPP projects. Without proper and suitable risk allocation, unsatisfied parties walk away from large projects.

To emphasise on the need for predicable risk scenarios, REP-1 from KAPP stated: "Private firms (and their lenders) will be cautious about accepting major risks beyond their control, such as exchange rate risks/risk of existing assets. If they

bear these risks then their price for the service will reflect this. Private partners are usually not protected from increase in operational costs or cash flow cuts which can affect the funding of PPP projects. Yet, protection from major risks is vital for private sectors to settle some liabilities related to project finances.

Conventionally, providing proper tender documentation helps manage most risks.

Nonetheless, the parties involved need to have adequate skills and must be competent to balance risks by aligning the interests of both private and public sectors".

Empirical findings of this research also correspond with the findings of Sattout & Batwala (2019), Almarri (2019) who argue that excessive risk undertaking by the private sector in the PPP projects affect the risk management in these projects as lack of equitable risk allocation creates conflicts among stakeholders and affect the relationships which affect the quality of PPP housing projects. Findings of this research also highlight the importance of risk identification by the private sector well in advance so to determine which risks are worth retaining and which risks need to be transferred to the public sector so to improve the risk management in PPP projects (Alteneiji et al., 2019; Davies, 2019). Findings of this research also suggest the importance of developing best practice in risk allocation in PPP projects. Similar findings are reported in literature review by Ahadzie et al., (2007), Coates (2008). Adinyira et al., (2014) who state that best practice in terms of risk allocation in PPP projects is that risks are required to be allocated best to the partner who is better able to understand, manage, control the probability of the risk occurring and reduce the impact of the risk. Similar findings are reported in literature by Takim et al., (2011), Reeves (2013), Onyemaechi et al., (2015) who recommend that when the partner who takes the responsibility of managing the risk also accepts its financial cost, it will undertake initiatives to alleviate the risk and such risk practice develops the most effective risk allocation, result in lowering the project costs and the higher VFM (Fung, 2015; Kang et al., 2019).

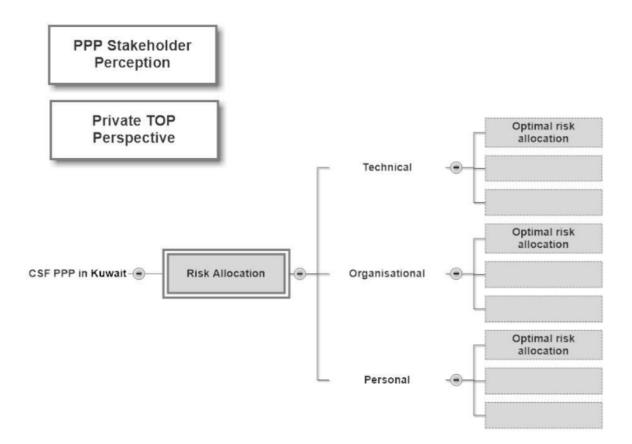
Research findings also illustrate that the contractual arrangement (risk allocation) is an important CSF in PPP project. REP-1 from PAHW stated:

"Identifying and allocating risks during project management are important concerns in a contractual arrangement, since the arrangement dictates the type and the content of the contract. It is vital to clearly document the objectives, rights and obligations of the contracting parties. In order to avoid risks in PPP projects, it is also important to define the appropriateness and clarity of project plans, accuracy of technical specifications, how to incentivise contracting parties and in case any dispute arises, how dispute resolution will be performed in these projects".

These research findings correspond with the findings of Thomson and Perry (2006), Jacobson & Choi (2008), Chan et al., (2010), Steijn et al., (2011) who acknowledge the importance of properly representing all stakeholders in PPP projects by clearly stipulating contractual role, responsibilities of all stakeholders and how best to resolve disputes by consulting all stakeholders which therefore result in mitigating risks in PPP projects. Similar findings are reported in literature review by Mouraviev & Kakabadse (20150, OECD (2015), APMG (2019) who argue that involving all stakeholders in risk management process by developing risk matrix in early stages of PPP projects and by including all risks which are known to the stakeholders at that point in time offer an effective approach to risk management in the PPP projects. These research findings also imply that contractual risks and any

conflicts which may arise in manging such risks can be reasonably controlled by allocating risks to such parties who have the required resources and capabilities to manage risks (Zhang, 2005; Osei-Kyei & Chan, 2017). This notion of optimum risk allocation corresponds with the findings of De Clerck et al (2012) who argue that allocating several risks optimally to the parties that have the resources to control them ensure adequate risk management. Likewise, Hovy (2015), Davies (2019) suggest that optimum risk allocation can be performed in PPP projects by avoiding the use of too sophisticated risk management strategies involving high monitoring, transaction, operational and management costs which can erode VFM.

Figure 21 shows private sector's view of project risk allocation from TOP perspective. Based upon participants' responses, Figure 21 shows that from technical, organisational and personal perspective, optimal risk allocation is the key factor in the risk allocation which contribute to the success of PPP housing sector project implementation.



# **5.6 National Assembly TOP Perspective**

Interview question 11-15 were asked to obtain the TOP perspectives of Members of Kuwait's National Assembly (KNA). 3 MPs were interviewed so to obtain their perspective. Findings and analysis in relation to these interviews are presented next in this chapter:

**5.6.1Findings & Analysis in relation to Investment environment** MPs were asked to answer from the KNA's perspective, how did the investment environment contribute to the success of PPP housing sector project implementation. MPs highlighted the importance of political stability and adequate legal framework documenting the rules and regulations in relation to operation and management of PPPs so to address conflicts among stakeholders. For example, MP-1 stated:

"A stable political and legal environment is the basis for sound investment environment. As stable political and legal environment provides the basis to design the PPP contracts in a way that it encourages private partner to earn significant return on investments and allows the public partner to ensure that PPP projects serve the public interest. Government in Kuwait is dedicated to support

PPP market which can encourage investors to invest in these projects".

These findings are confirmed by the findings of Osei-Kyei and Chan (2015), Bhatia (2017), Cui et al., (2018) in literature review who argue that political stability provides the foundation for developing and pursuing sound economic policy which is an important CSF in PPP housing projects. Similar findings are reported by Chan et al., (2010), Eadie et al., (2013), Holt (2014), in literature review who state that political stability and strategic intent is needed to develop and implement PPP housing projects as these projects may require the reform of

current processes, markets and long-term commitments which can be enforced by having sound political stability which is imperative in generating a favourable investment environment (Abdul-Aziz, 2010; Almarri, 2019). Empirical findings of this research are also confirmed by Alexandrou & Colpus (2001), Agus (2002) who recommend that since PPP housing projects involve strong political commitment and such commitment can be illustrated by seeking clarity on the basic policy drivers to use PPPs (Cuorato, 2002), generating PPP policy documents and particular PPP laws, developing and maintaining adequately resourced PPP unites to provide support with technically apt policy development (Susilawati et al., 2005) and reporting at higher government levels and pledging to realistic budgets which facilitate the development of high quality PPP housing projects and significant PPP processes (EIB, 2018). Thus, stable political environment attracts quality bids to finance the PPP projects as there is a consensus across the political ambit that PPP projects offer viable solution to deliver VFM housing projects (Gudiene et al., 2014; EIB, 2018; Kang et al., 2019).

These research findings signify that political and economic stability together create a favourable investment environment which increase investment in PPP projects. These research findings correspond with the findings of Page et al., (2008), Almarri (2019), Davies (2019) in literature review who note that the government's efforts in managing and supporting PPP market lead to the growth and development of highly stable and profitable financial market for investment opportunities (Kang et al., 2019). These research findings also state the importance of laws in relation to raising funds for PPP projects. These research findings match with the findings of Erhardt (2008), Abdul-Aziz (2010), EIB

(2018) who state that in presence of predictable and practical legal frameworks, the private sector gets motivated to strengthen PPP financing which create a positive investment environment that contributes to the success of PPP projects.

MPs also highlighted the importance of progressive regulatory and legal reforms in order enhance investments by the private sector in PPP projects. For example, MP-2 stated:

"Under favourable investment environments, it is easier to transfer the obligations and rights of investors, especially for projects that suit partnering". This highlights the importance of project partnering in PPPs and suitable project partnering is an important factor in the investment environment which contributes to the success of PPP projects. These research findings correspond with the findings of Zhang (2005), Grimsey & Lewis, (2007), Erhardt (2008), Wang et al., (2012) in literature review who state that suitable partnering in PPPs encourage the investment environment as such projects are readily prioritised by the government as these projects offer sound return on investment by devising equitable risk allocation among the public and private sector (Reeves, 2013). Similar findings are reported in literature review by Boles et al., (2013), Zhao et al., (2013), Ameyaw and Chan (2016) who note that suitable partnering arrangements are the key CSFs in PPP housing projects as these projects offer high return on investment by providing incentives to the private sector to deliver projects in a timely manner and within the specified budget. These findings are also supported by Acar & Durucasu, (2014), Biygautane (2017) in literature review who suggest that PPP housing projects offer better return on investment by imposing budgeting certainty by setting current and future costs of housing projects over time. These findings are also supported by the findings of Hodges & Dellacha (2017), Osei-Kyei & Chan (2017), Kavishe et al., (2018) who recommend that suitable partnering arrangements in the PPP housing projects are the vital CSFs in generating attractive investment environment as these suitable partnering arrangements provide the guarantee to lenders by providing realistic estimate in terms of return on investment and lenders provide the required investment which is important to deliver these projects as per allocated deadlines (Babatunde & Perera, 2017; Sattout & Batwala, 2019).

MPs also highlighted that a favourable investment environment has to ensure that rights and obligations of all stakeholders are contractually safeguarded throughout all stages of PPPs. For example, MP-3 stated:

"A suitable investment environment has to ensure that the investors make investment agreements to provide rights and obligations for all parties during implementation process of PPP project".

These research findings match with the findings of Page et al (2008) who state that a stable investment environment needs to protect the rights and obligations of all parties during PPPs' project implementation process. These research findings are also supported by the findings of OECD (2015), Al-Saadi & Abdou (2016), Ameyaw & Chan (2016), Deloitte (2016) who recommend that key CSF in the PPP housing projects is that rights and obligations of all stakeholders are protected in forming investment arrangements which can be imperative in delivering value for money visibly and carefully. Furthermore, Dikos (2016), Klijn & Koppenjan (2016), Kwofie et al., (2016) in literature review also state that active consultation and engagement with stakeholders ensure that their concerns about the PPP projects are taken into consideration and investment arrangements reflect understanding of those concerns which can be instrumental in generating a

favourable investment environment by implementing these projects (Bhatia, 2017; Demirel et al., 2017).

MPs also stated the importance of making capital contributions towards PPP projects so to strengthen investment environment. For example, MP-3 stated:

"The government plays a significant role in making capital contributions towards PPP projects. PPP regulations, in this context, should not limit the amount of total capital the government should incur, but allow appropriate government specialists to flexibly determine the amount of government contributions by considering the laws regarding public investments, by analysing the capacity of government to raise subsidy and by carefully assessing project's financial feasibility".

These research findings correspond with the findings of Page et al., (2008), Jacobson & Choi (2008), Alfen et al., (2009), Adair et al., (2011), Brookings Institute (2014) in the literature review who state that capital contributions are significant source of investment in PPP projects and no fixed amount of capital contribution should be specified by the government, rather flexible amount of capital contribution should be encouraged by the government by carefully evaluating financial feasibility of PPP projects and by analysing government's capacity to raise subsidy (Barton, 2015). Similar findings are reported in literature review by Chou & Pramudawardhani (2015), Mouraviev & Kakabadse (2015), Greve (2015) who contend that capital contributions are required to be aligned with the short-term and medium term macroeconomic stability targets and the role of Central Budget Authority is vital to align capital contributions with government's targets (OECD, 2015; Davies, 2019).

Thus, based upon participants' responses, figure 22 shows the KNA's view of project's investment environment from the TOP perspective. From, technical and

organisational perspectives, three factors in the investment environment which contributes to the success of PPP projects include stable political & legal system, favourable economic system and the suitability of project for partnering. While, from personal perspective, four factors are identified in the investment environment which contribute towards the success of PPP projects. These include stable political system, favourable economic system, projects' suitability for partnering and supportive & understanding community.

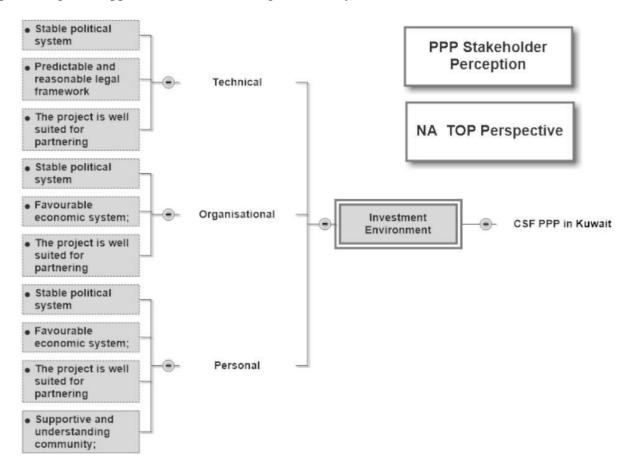


Figure 22: KNA's View of Project Investment Environment from TOP Perspectives

# 5.6.2 Findings & Analysis in relation to attractive project

Participants were asked to answer, how did the perception of an attractive project contribute to the success of PPP housing sector project implementation. Participants agreed that a project which was to serve the public interest was considered an attractive project. For example, MP-1 stated:

"Public interest is the main premise of PPP projects and a PPP model which has a built-in mechanism that ensures that concessionaire benefits if it serves the public interest and suffers if it does not serve the public interest".

These findings highlight that PPPs which have self-managing mechanisms to strengthen the public interest have long-term demand for their products which make these projects attractive. Similar findings are reported in literature review by Wang et al., (2012), Reeves (2013), Babatunde (2015), Kang et al., (2019) who note that the serving public interest is one of the main reasons behind forming the PPP housing projects and this primarily mean providing affordable and quality housing projects to the public which serves the public interest. Furthermore, according to OECD (2015), APMG (2019) all partners in the PPP projects are required to ensure that public interest is fully safeguarded and are required to develop and implement processes to ensure that waste and corruption do not creep into these projects and such processes not only serve the public interest but also make PPP housing projects attractive (Davies, 2019; Almarri, 2019; Sattout & Batwala, 2019). Empirical findings of this research also match with the findings of Reynaers, & De Graaf (2014), Bohsali et al., (2014), Holt (2014) who observe that having strong and self-managing mechanisms to serve the public interest in the PPP projects also result in long-term demand for these projects as such projects have the backing of all stakeholders ranging from public, private partners to general public which makes these projects attractive from investment viewpoint and increased investment in these projects address cashflow needs which are instrumental in generating long-term demand of these projects (Onyemaechi et al., 2015; Barton, 2015; Bock & Linner, 2015). Hence, notion of public interest is linked with generating long-term demand for PPP's products.

Participants also stated that as long as PPP projects offered sufficient project profitability,

these were viewed attractive projects both in terms of return on investment and in serving the public interest. For example, MP-2 stated:

"Most private sector organisations engage in projects which are profitable as these organisations cannot utilise their resources in unprofitable projects, specifically those which involve massive capital expenditure. PPP projects offer sufficient project profitability by ensuring end-user satisfaction and by providing tangible benefits to the public which automatically leads to long-term demand for the products which PPP's projects offer". These findings signify the importance of self-generating demand for PPP's products which in turn attract investment from the private sector. These research findings match with the findings of Rhee & Lee (2007) who state that a PPP project is considered successful if the project's product guarantees end-user satisfaction by providing tangible benefits which also lead to long-term demand for PPP's products. Similar findings are reported in litearature review by Grimsey & Lewis (2007), Valdimarsson (2007), Ahadzie et al., (2007) who illustrate that attractive project is considered to be the one which offers high return on investment as PPP housing projects are hampered by lack of required funds which are needed to construct, design, operate, maintain and implement PPP housing projects so projects with higher forecasted profits are considered attractive in terms of investment (Rhee & Lee, 2007). Empirical findings of this research also point out that attractiveness of PPP housing projects can be determined by ascertaining to which extent these projects are consistent with expectations of end-users as their satisfaction is one of the main CSFs in the PPP housing projects (Aaltonen et al., 2008; Chinyio & Akintoye, 2008; Draxler, 2008). Similar findings are reported in existing literature by Yang et al., (2009), Kwak et al., (2009), Cheung (2009) who state that an attractive project is one of the main CSFs in PPP projects. Likewise, Abdul-Aziz (2010), Chan et al., (2010), Custos & Reitz (2010) state that PPP projects are considered attractive as the involvement of private partner ensure that funding requirements of these projects are met by the private partner and government can use its capital in other sectors of the economy.

Participants also stated that government must endorse laws which aim to increase the growth in PPP's projects by creating an investment environment which strengthens the quality of output produced by the PPP projects. MP-2 for example stated:

"PPPs promote economic efficiencies, economic gains and investment opportunities. With suitable legislations, Kuwait can readily embrace PPPs and encourage private sectors to provide funds to develop projects which serve the general public. In such provisions, sufficient project profitability and long term demand for the products play a significant role, as they influence PPP's project success".

These research findings correspond with the findings of Rhee & Lee (2007), Erhardt (2008) who recommend that an attractive project is an important CSF in PPPs and these are regarded as suitable solutions if these projects derive substantial efficiencies following the participation of private sector and offer sustainable return on investments, these factors collectively determine the attributes of an attractive project which contributes towards the success of PPP housing sector project implementation.

Participants also stated that government must endorse laws which aim to increase the growth in PPP's projects by creating an investment environment which strengthens the quality of output produced by the PPP projects. Similar findings are reported in litearature review by Babiak & Thibault (2009), Saleh et al., (2009), Van Gils et al., (2009) who suggest that in order to create attractive PPP projects, role of governments is vital in terms of setting the laws and relevant regulations which justify the need for these projects and how these laws are required to be enforced so to safeguard the rights of all stakeholders which is an important CSF in the PPP housing sector projects. Empirical findings of this research are also supported by the findings of Dulaimi et al., (2010), Hodge et al., (2010), Moskalyk (2011), Steijn et al.,

(2011), Takim et al., (2011) that one reason why PPP projects are not readily used in the developing countries is due to the lack of relevant legislation which is required to be developed and enforced outlining rights, responsibilities of all stakeholders and offering the compensation to any stakeholders if their rights are violated. Hence, by implementing PPP housing projects by relevant legislation, these can be viewed as attractive projects both in terms of investment and serving the public interest (Sattout & Batwala, 2019).

Figure 23 shows the KNA's view of projects' attractiveness from TOP perspective based upon the participants' responses. From technical, organisational and personal perspective, three factors are identified in the attractive projects: sufficient project profitability, long-term demand for the products and end-user satisfaction which contribute to the success of PPP housing sector project implementation.

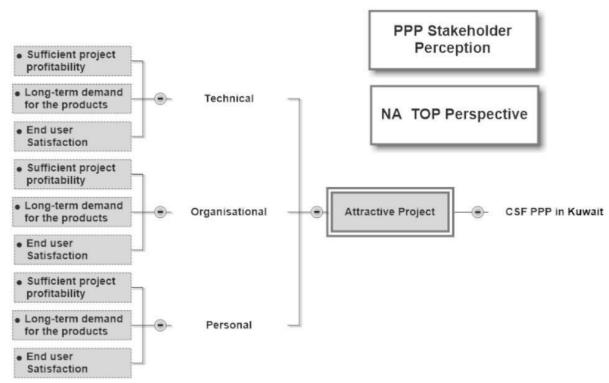


Figure 23: KNA's View of Project's Attractiveness from TOP Perspectives

#### 5.6.3 Findings & Analysis in relation to reliable consortium

Participants were asked to answer to what extent consortium reliability contributed to

the success of PPP housing sector project implementation. Participants highlighted the importance of an effective project organisational structure and emphasised on the importance of a special purpose vehicle (SPV). For example, MP-1 stated:

"The role of unbiased SPV to build, develop and maintain the projects for the specified contractual period is important in developing an effective project organisational structure as by delegating contractual obligations to a competent SPV, development and implementation of projects are performed in a timely manner which contribute towards success of PPP projects".

These research findings correspond with the findings of Ahadzie et al., (2007), Abdul-Aziz (2010), Ke et al., (2010) who state that by allocating contractual obligations to SPVs, the development, operation and implementation of PPPs are improved due to presence of financial and technical competencies which are required to implement PPPs in a timely manner. These findings are also supported by the findings of Moskalyk (2011), Karim (2011), Jooste et al., (2011), Burger & Hawkesworth (2011) in literature review who state that a reliable consortium is generated via an unbiased SPV whose role is to construct, develop, maintain the PPP projects which is considered an important CSF in delivering the PPP housing projects. These findings are also confirmed by Alford & O'Flynn (2012), Cheung et al., (2012), Wang et al., (2012) in literature review who suggest that SPV results in developing an effective project management in the PPP housing projects as contractual duties are tasked to the relevant stakeholders by analysing their strengths and weaknesses which reduce conflicts in these projects and allow the timely implementation of these projects which is an important CSF in PPP housing sector projects (Ismail, 2013; Gupta et al., 2013). Empirical findings of this research also illustrate that a reliable consortium in the PPP housing projects is generated when the private partner is both technically and

financially strong to deliver the objectives of these projects (Eadie et al., 2013; Engel et al., 2013). Thus, a reliable consortium is the one which offers required technical and financial support to achieve the goals of the PPP housing sector projects.

Participants also stated the importance of technical and innovative solutions which add towards the consortium's reliability. For example, MP-3 stated:

"Innovative and cost-effective technical solution in all stages of project lifecycle from initiation to implementation of projects provide two key benefits. Firstly, projects are technologically sound to meet the needs of end-users, secondly, the acquisition of cost-effective technical solutions ensure that financial costs are kept to minimum which also improve the operational efficiencies in the PPPs".

Empirical findings of this research align with the findings of Zou et al., (2014), UNECE (2014), Ram & Corkindale (2014), Reynaers, & De Graaf (2014) in literature review who state that a reliable consortium in a PPP project is generated when the technical and innovative solutions are offered by the private partner in implementing these projects. Similar findings are reported by Sabry (2015), Fung (2015), Babatunde (2015) in literature review who illustrate that such technical and innovative solutions are offered via the PPP projects which align with the needs and expectations of endusers.

The findings of this research also align with the findings of Greve (2015), Onyemaechi et al., (2015) in literature review who note that whilst offering technical and innovative solutions, cost required to offer these technologically robust solutions are needed to be kept low as these projects are required to be considered financially viable by the private partner and low cost is one factor which facilitate the involvement of private partner in the PPP projects (Barton, 2015; Osei-Kyei & Chan, 2015).

Participants also stated the importance of transparent bidding process to secure contracts which also contribute towards a reliable consortium. For example, MP-2 stated:

"Private sector is required to submit their proposals to competent government authorities in line with existing PPP legislations. The consortium of bidders in most PPP projects consist of maintenance operators, builders and financial institutions.

Such entities should be trusted and in case of any violations which affect the transparency in bidding process, such entities are required to be held accountable.

Hence, clarity on specifications should be provided in proposal requisition forms and bidding processes to maintain transparency in bidding process".

These research findings match with the findings of Ahadzie et al., (2007), Hodge et al., (2010), Yuan et al., (2010), Wettenhall (2010) who state that in a reliable consortium, transparent bidding process is followed which improve the credibility of consortium and such consortium can successfully implement PPP projects. Similar findings are provided in literature review by Dada & Oladokun (2012), Ng et al., (2012), Wang et al., (2012) who argue that the criteria for a reliable consortium is that it must have sound technical and financial competence, selected after a strict qualification process and pursue a transparent bidding process (Cheung et al., 2012). Thus, such consortium is considered both reliable and critical in successful implementation of the PPP housing sector projects (Engel et al., 2013).

Participants stated that from personal perspective, once contracts are awarded to the relevant organisation, it should ensure that it has strong and capable project teams to execute those contracts which is another important factor that contributes towards consortium's reliability. For example, MP-1 stated:

"From the personal standpoint, individual entities that get contracts should have

strong and capable project teams, and primarily seek to provide innovative and costeffective technological solutions as such solutions are strong enough to address
environmental, health and safety concerns which if not properly managed can
jeopardise consortium's reliability".

Empirical findings of this research correspond with the findings of Rwelamila et al., (2014), Rijkswaterstaat (2014), Adinyira et al., (2014) in literature review who suggest that a reliable consortium in the PPP projects is developed provided that private partner who get these contracts has the required skills and capabilities to design, operate, manage, implement and maintain these project which are instrumental in successful implementation of these projects (Onyemaechi et al., 2015; Kang et al., 2019).

Participants also stated the importance of relevant legislation in relation to involvement of private sector in PPP projects as poor regulations can affect the reliability of PPP projects. For example, MP-3 stated:

"Many privatised projects suffered disastrous consequences because of construction cost/duration overruns, changing market demand, depreciation of local currencies and/or reduction in tolls/tariffs by utilities. These occur due to poor regulations. As long as adequate regulations are in place specifying roles, responsibilities and operational duties of all stakeholders, organisations are bound to comply with such regulations, resulting in smooth operations which is a vital factor that contributes towards success of PPPs."

These research findings correspond with the findings of Ahadzie et al., (2007), Biygautane (2017), Babatunde & Perera (2017), Bhatia (2017) who suggest that organisations working under consortium's terms need to follow PPP's project

implementation guidelines to achieve their objectives. Similar findings are reported in literature review by Demirel et al., (2017), Gebrehiwet & Luo (2017), Hueskes et al., (2017) who state that a reliable consortium is the one which does not have conflicting stakeholders and which follow the implementation guidelines as outlined in the PPP's contract and this is a vital CSF in the PPP housing sector projects. Findings of this research also state that the availability of the relevant legislations specifying the requirements and domains within which organisations are required to function, guarantee reliable consortium's operations (Davies, 2019).

Figure 24 shows KNA's view of consortium reliability from TOP's perspective based upon the participants' responses. From technical perspective of participants, three factors are identified in the consortium's reliability which contribute to the success of PPP projects, these include: strong & capable project team, innovative technical solution and cost-effective solution. Whereas, from organisational perspective, four factors are identified in the consortium's reliability which contribute to the success of PPP projects, these include: effective project organisation structure, strong & capable project team, innovative and cost-effective technical solutions. While, from personal perspective of participants, four factors are identified in the consortium's reliability which contribute to the success of PPP projects, these include; environmental, health & safety issues, strong & capable project team, innovative technical solution and cost-effective solution.

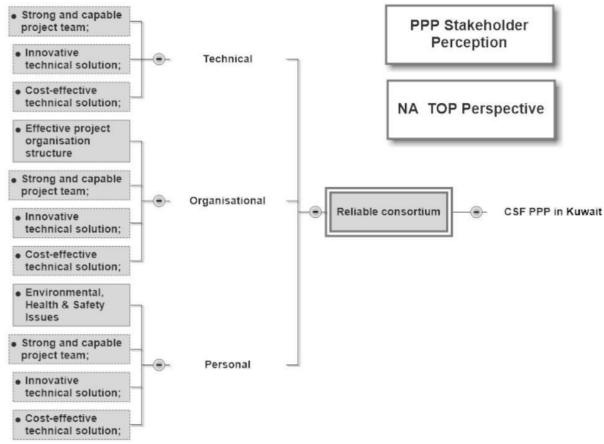


Figure 24: KNA's View of Consortium Reliability from TOP Perspectives

#### 5.6.4 Findings & Analysis in relation to Financial Package

Participants were asked to answer, why it was essential to have sound financial package for the success of PPP housing sector project implementation. Participants agreed that role of government was essential in establishing systems which can readily conduct sound financial analysis of PPP projects. For example, MP-1 stated:

"It is responsibility of government to develop fiscal guidelines which define appropriate private sector participation's level, suitable project selection criteria and investment percentage versus the existing budgets. These actions can help settle government funding between the private concessionaire & public sector authorities".

These research findings correspond with the findings of Grimsey & Lewis (2007),

Reeves & Ryan (2007), Vining & Boardman (2008) in literature review who state that by developing and implementing relevant legislations to link PPP investment plans and implementation to the available budget, sound financial analysis of PPP projects can be performed which is an important factor determining the success of PPP projects. These findings are also supported by the findings of Aaltonen et al., (2008), Akbiyikli & Eaton (2008) in literature review who suggest that role of governments is vital in setting up systems and in providing relevant policy guidance about financial issues which undermine the implementation of PPP projects. These initiatives include determining the investment percentage, setting the level of leverage, government support and guarantees, cost, term and source of financing (HM Treasury, 2008; World Bank, 2015; Alteneiji et al., 2019). Similar findings are reported in literature review by Tieman, (2003), Hodge et al., (2010) who recommend that a sound financial package is an important CSF in the PPP projects and government's support is needed in terms of settling various financial disputes between public and private partners. These findings also highlight that the government support (Saussier, 2013) is needed to implement PPP projects in Kuwait (Sattout & Batwala, 2019) and by outlining PPP's-specific law in terms of providing clarity on main clauses of contract including financial costs (Babatunde, 2015; Sabry, 2015), return on investments, allocating government funding between the private sector concessionaire and public sector (Kavishe et al., 2018; Muhammad & Johar, 2019) assigning the rights, responsibilities and termination procedures in the PPP's law can facilitate in developing a sound financial package in the PPP housing sector projects (Muhammad & Johar, 2019, Alola, 2019).

Participants also stated that sources and structures of loans should be sustainable enough to meet the long-term financial needs of PPP projects. For example, MP-3

stated:

"Increased subsidies should be offered to private sector so they can readily invest in PPP projects. Role of National Assembly is vital in terms of ensuring that legislation in relation to investment from private sectors is readily approved and significant subsidies are offered to investors in the legislation which can encourage investment in PPP projects".

These findings align with the findings of Walker and Hampson (2003), Zhang (2005), Zhao et al., (2013), Ameyaw & Chan (2016) in literature review who argue that a sound financial package in the PPP projects can be generated by developing various sources and structures of loans and offering equity share capital to investors, so they have sufficient incentives to invest in the PPP housing sector projects. Similar findings are provided in litearature review by Biygautane (2017), Bhatia (2017), Gao (2018) who argue that having different sources and structures of loans in the PPP projects suggest that the finance generated in the form of debt by the SPV is completely guaranteed by the equity investor and the funds are generated at the corporate level and are transferred through to the project totally as equity (APMG, 2019; Davies, 2019).

Participants also highlighted the importance of regulatory authority which can readily ensure that required investments are made in PPP projects and to ensure that interest of both private investor and end-user is served. For example, MP-2 stated:

"The regulatory authority can ensure that sources, structure of main loans and standby facilities are adequate to meet the financial requirements of PPP projects, its role is also vital in setting the appropriate/adjustable toll tariff to recover money from PPP projects so to serve the interest of private investor and end-user".

These findings align with the findings of OECD (2015), Onyemaechi et al., (2015),

Chou & Pramudawardhani (2015) in literature review who note that the role of regulatory authority is important in generating a sound financial package by determining the financial needs of the projects and ensuring that relevant investment is offered by the private investors (Liu et al., 2016; Osei-Kyei & Chan, 2017). Empirical findings of this research also highlight that the regulatory authority also set up the suitable toll/tariff to so to recover cost from the PPP projects in order to facilitate the private investors and this is also an important CSF in generating a sound financial package in the PPP projects (Zhang 2005; Hodges & Dellacha, 2017). Participants also stated that when government formulates policies which encourage the implementation of PPPs projects, the risks in PPP projects which may arise due to lack of government's involvement can be readily reduced. For example, MP-1 stated:

"When government clearly and comprehensively define the steps followed in procuring PPP projects, they secure value for taxpayers' money. Such laws and regulations help improve efficiency, consistency and reduce uncertainty during PPP's project implementation".

These research findings correspond with the findings of Akintoye et al., (2008), Liu et al., (2016), Bhatia (2017) who suggest that financing of PPP projects by formulating relevant legislations in terms of financing options can reduce the issues related to investment and financing options which can affect the implementation of PPP projects. Similar findings are reported in literature review by Hardcastle, et al. (2006), El-Gohary et al., (2006), Cheung et al., (2012) who recommend that the role of government is important in formulating laws regarding the implementation of PPP projects and how both the tax-payers' money and investors' money is safeguarded by having suitable legislation in place which is imperative in improving the effectiveness of the PPP projects (Sattout & Batwala, 2019; Davies, 2019).

Research findings also match with the findings of Page et al., (2008), Alola (2019), Sattout & Batwala (2019) who state that the national assembly can present laws on institutional arrangements for delivering PPP projects that meet national requirements. Similar findings are reported in literature review by Abdul-Aziz (2010), Chan et al., (2010), Custos & Reitz (2010) who recommend that role of national assembly is significant in approving the laws for delivering PPP projects so to meet both the public and private sector's regulatory needs. Similar findings are reported in literature review by Abdul-Aziz & Kassim (2011), Adair et al., (2011), Al-Saadi & Abdou (2016) who observe that the role of national assembly is important in terms of providing evidence on how to maximise value for money and the benefits of PPP projects which can significantly reduce risks in PPP projects which arise due to lack of relevant law supporting the implementation of PPP projects.

Figure 25 shows the KNA's view of financial feasibility from TOP perspective based upon participants' responses. From technical and organisational perspective, three factors are identified in the financial package which contribute to success of PPP projects. These factors include sound financial analysis, sources & structure of main loans and appropriate/adjustable toll/tariff. While, from personal perspective, four factors are identified in the financial package which contribute to the success of PPP projects. These factors include sound financial analysis, sources & structure of main loans, appropriate/adjustable toll/tariff and Islamic loan to finance PPP projects.

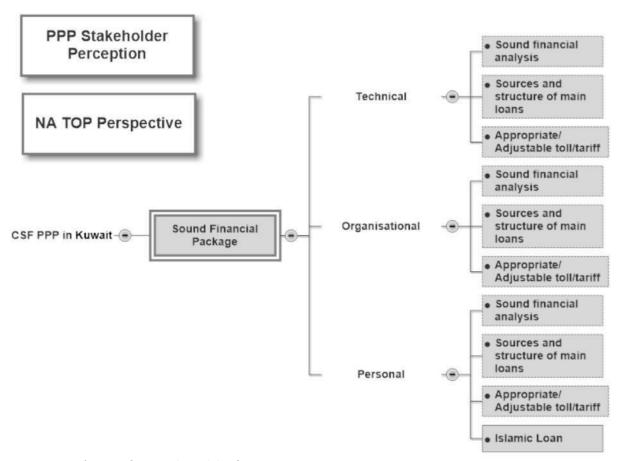


Figure 25: KNA's View of Financial Feasibility from TOP Perspectives

#### 5.6.5 Findings & Analysis in relation to Risk Allocation

Participants were asked to explain, how did risk allocation contribute to the success of PPP housing sector project implementation. Participants highlighted the importance of optimal risk allocation, for example, MP-1 stated:

"The government also needs to share investment risks. A suitable PPP plan is required to offer details concerning financing options, payment schemes for funding by the government, risk allocation mechanisms so to devise an effective PPP model. In the concession design stage, risks are effectively controlled through appropriate risk allocation and right selection of a PPP model."

These research findings correspond with the findings of Page et al., (2008), Abdul-Aziz (2010) Burger & Hawkesworth (2011), Muhammad & Johar (2019) who state

that government's willingness to strengthen PPP projects offer the relevant funding needed for PPP projects and government can also bear certain risks if costs of such risks outweigh benefits, however, certain risks should still be allocated to private sector so to ensure that PPP projects offer required benefits. These findings highlight the importance of government's intervention in devising an appropriate risk allocation strategy in PPP projects (Sattout & Batwala, 2019). Similar findings are presented in literature review by Abdul-Aziz (2010), UNECE (2017), Almarri (2019) who argue that although the criteria for risk allocation should be based on the risk-bearing capacity of the partners, i.e. the partner who is able to handle the risk should bear the cost of risk, (Deloitte, 2018; EIB, 2018; Kavishe et al., 2018) however, government should carefully evaluate the risks and can decide to retain the risks if the financial, technical, operational, maintenance cost of such risks offset the benefits which are to be derived from the implementation of the PPP projects (Alola, 2019; Davies, 2019).

Participants also stated that each stakeholder is required to bear certain risk as per the risk sharing scheme which is developed by National Assembly. For example, MP-2 stated:

"Each stakeholder (project's participant) need to take certain risks guided by a suitable risk sharing scheme developed by the national assembly. From the personal viewpoint, efficiency involves analysing user fee associated with PPP projects so to ensure that user fee generate the required return on investment and serve the public interest".

These findings are supported by the findings of Biygautane (2017), Babatunde & Perera (2017), Bhatia (2017) in literature review who note that there should be

equitable allocation of risk in the PPP projects which implies that all stakeholders should bear some form of risks and such risk sharing is considered an important CSF in the PPP housing sector projects (Cui et al., 2018; Gao, 2018). Empirical findings of this research also highlight that role of national assembly is vital in terms of devising the legislation regarding the equitable risk allocation in PPP (Osei-Kyei et al., 2018; Wang et al., 2018).

Participants also highlighted the importance of reducing financial and time-related risks so to improve the performance of PPP projects. For example, MP-2 stated:

"Government can only maintain fiscal stability of PPP projects by repaying compensations to reduce financial risks, and by temporarily executing projects within stipulated timeframe to avoid time related risks. Nonetheless, government needs agencies which set investment limits for projects for every fiscal year, then reports to the national assembly before annual budget submission and it is important to clearly specify risks and costs so to improve the performance of PPP projects. It is important for government to devise clear laws regarding risk allocation in PPP projects so to avoid conflicting stakeholders which may arise if some stakeholders bear more risk than others. It is important to devise equitable risk allocation and more importantly risk assessment should be performed by analysing skills and capabilities of all stakeholders to ensure that risks are distributed as per the competencies of stakeholders".

These research findings highlight the importance of equitable risk allocation and these findings match with the findings of Akintoye et al., (2008) Sattout & Batwala (2019), Alola (2019) who state that to avoid cases, whether the government claims economic ownership of PPP projects due to unequal risk allocation, there is a need

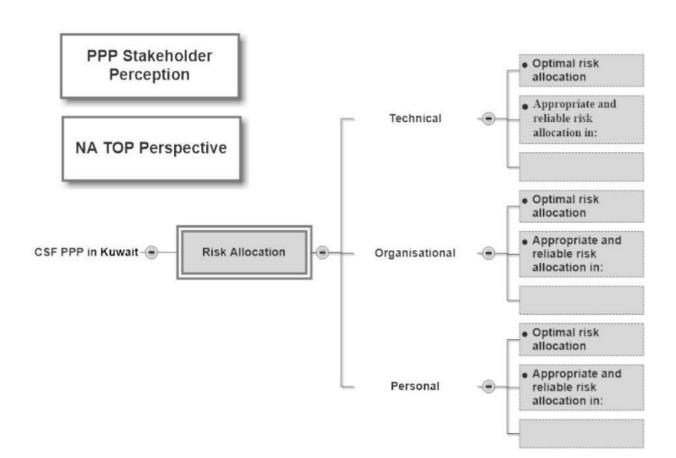
for law that guarantees appropriate and reliable risk allocation in all PPP project implementations. Similar findings are reported in existing literature by Gebrehiwet & Luo (2017), Hueskes et al., (2017), Kivila et al., (2017) who note that equitable risks allocation is the strategy which is required to be enforced in the PPP projects by developing laws regarding risk allocation in the national assembly (Sattout & Batwala, 2019). Empirical findings of this research also highlight that equitable risk allocation can only be performed only when a thorough risk assessment of all risks affecting all stakeholders is performed (Davies, 2019; Muhammad & Johar 2019). However, these findings also point a limitation in risk assessment as all risks are not identified well ahead of time as certain risks such as maintenance risks do not occur till the projects are fully operational (Wang, 2018; Chan, 2018; Kavishe et al., 2018). Nonetheless, a careful and optimal risk allocation strategy based on relevant legislation and a thorough risk assessment can facilitate the successful implementation of PPP housing sector projects.

The research findings also suggest that the government requires a suitable risk sharing approach while making new investments. With proper risk sharing mechanism, PPP's project structures can be improved. MP-3 for example stated the need for predictable risk scenarios by saying:

"In general, risks should be allocated to the party who is best positioned to manage them. Relevant legislation can be passed by the National Assembly to share investment risks with the private sector and where the shared investment risk is lower than the total project's cost, government can fund those projects, and this may result in optimum risk allocation as all parties can avoid risks which arise from project financing".

These research findings match with the findings of Akintoye et al., (2008), Kwak et al., (2009), Dulaimi et al., (2010), Babatunde (2015) who state that government can share investment risks in the projects where cost of risk is less than the total project cost and by doing so, it can devise optimal risk allocation practice by ensuring that relevant stakeholders do not experience project financing risk and such risks are solely borne by the government. These findings also highlight that although government can better manage legal and political risks, it can also share investment risks in the instances where sole bearing of those risks can hamper the successful functioning of private sector due to the high cost of investment and relevant risks (Deloitte, 2018; Almarri, 2019, Alteneiji et al., 2019). Hence, optimal risk allocation in an important factor which contribute to the success of PPP projects.

Figure 26 shows KNA's view of risk allocation from TOP perspective based upon participants' responses. From technical, organisational and personal perspective, optimal, reliable & appropriate risk allocation is an important factor in the risk allocation which contribute to the success of PPP projects.



# **5.7** End user TOP Perspective

Interview question 16-20 were asked to answer how did obtain the TOP perspectives of end users. 3 end users from KAPP were interviewed and 5 end users from PAHW were interviewed. Findings and analysis in relation to these interviews are presented next in this chapter:

# 5.7.1 Findings & Analysis in relation to Investment environment

Participants were asked to answer how did investment environment contribute to the success of PPP projects. Participants agreed that suitable investment environment characterised by technical capacities for undertaking projects, favourable economic systems, political stability and social support were important factor which contributed to the success of PPP projects. End user (EU)-1 from KAPP stated:

"Investment environment is useful in ensuring PPP implementation success, and can be measured using political stability, economic systems and suitability of projects for partnership formation".

These research findings correspond with the findings of Tola (2015), Osei-Kyei and Chan (2015), Sattout & Batwala (2019) who suggest that a stable political system, favourable economic system and a project that is suitable for partnering, influence the investment environment for PPP housing projects. Similar findings are reported in literature review by Abdul-Aziz (2010), Chan et al., (2010), Holt (2014) who argue the importance of sound political system which paves a way for generating stable economic policy, hence, political stability is linked with generating positive

investment environment in the PPP projects which is an important CSF in the PPP housing sector projects (Alola, 2019; Almarri, 2019). These findings are also supported by Agus (2002), Kang et al., (2019), Davies (2019) in literature review who state that a stable political system is the basis of generating a positive investment environment in the PPP projects and form the basis for suitable partnering arrangements which is an important CSF in the PPP housing sector projects (Deloitte, 2018; EIB, 2018; Sattout & Batwala, 2019).

This research reveals how the investment environment influences PPP project implementation's success. For example, EU-1 from PAHW stated:

"Role of government is important in involving citizens as by convincing the citizens that PPP projects are to provide the cost-effective yet quality housing, citizens can develop a positive perception towards these projects. It is important that government should define roles, responsibilities of stakeholders, mutual understanding of projects' results, sharing of risks & transparency and accountability which serve as key to successful PPPs implementation".

These findings are also confirmed by the findings of Cuorato (2002), Susilawati et al., (2005), Gudiene et al., (2014) in literature review who highlight the role of government in creating a positive perception among the general public about the PPP projects. Such perception can be developed by ensuring that government create PPP's specific laws which ensure the provision of cost-effective and quality housing for the general public which can be significant in creating a positive perception about the PPPs (Davies, 2019; Barker, 2020).

Participants also highlighted the importance of sound economic and political systems in the country so to develop a favourable investment environment. For example, EU-3 from KAPP stated:

"To investigate PPP housing projects in Kuwait and determine the current status of PPP housing projects in Kuwait, there is a need to explore economic and political systems in the country. The political and economic situation is favourable for organizations to initiate practical change as well as foster partnering success in housing projects in Kuwait. Political stability guarantees improved public sector governance as well as improved allocation and distribution of fiscal resources which result in forming a favourable investment environment".

These research findings correspond with the findings of Zhang (2005), Wang et al., (2012), Tola (2015), who confirm that the economic stability is characterised by long-term investment perspective of government, innovative private sector, available financing and incentives from partnerships. Similar findings are reported in literature review by Almarri (2019), Kang et al., (2019) who suggest that sound political stability in the country encourage the development of PPP initiatives as government is dedicated to implement PPP projects via relevant laws and regulations and it illustrates government's initiatives in managing and supporting PPP projects which also result in attracting the suitable investment needed to implement these projects (Biygautane, 2017; Hodges & Dellacha, 2017; Kavishe et al., 2018). Hence, the role of political and economic stability is imperative in creating a favourable investment environment by attracting right partnering agreements which is an important CSF in the PPP projects (Deloitte, 2018; APMG, 2019).

These research findings correspond with the findings of Page et al., (2008), Almarri (2019), Davies (2019) in literature review who note that the government's efforts in managing and supporting PPP market lead to the growth and development of highly stable and profitable financial market for investment opportunities (Kang et al., 2019). Participants also highlighted the importance of end user's role in determining which

projects are suitable for the formation of partnerships during PPP projects' implementation. To illustrate the significance of partnering skills, EU-5 from PAHW stated:

"Adequate partnering skills in PPP require active consultation and engagement with stakeholders as well as involving end-users in defining the project and subsequently with monitoring service quality. From the personal standpoint, individuals need to benefit from the partnerships formed. From the organisational standpoint, the partnership need to ensure organisations achieve their goals following project completion. Overall, without a favourable investment environment, end users cannot benefit from PPP projects."

Empirical findings of this research are supported by the findings of Ameyaw & Chan (2016), Kwofie et al., (2016), Demirel et al., (2017) in literature review who note that active consultation with all stakeholders including end-users and their engagement in the PPP projects by taking their input to define the projects and to evaluate the service quality is an important CSF from end-users' perspective (Bhatia, 2017). Likewise, Barton (2015), Klijn & Koppenjan (2016), EIB (2018) recommend that by developing effective partnerships with end-users in the PPP projects and by incorporating their feedback about the PPP projects in various phases of project delivery, a positive perception is built in the general public which is important in creating a favourable investment environment (Osei-Kyei & Chan, 2017; Muhammad & Johar, 2019).

Figure 27 shows end user's view of project investment environment from TOP's perspective based upon participants' responses. From technical, organisational and personal perspective, three factors are identified in the investment environment which contribute to the success of PPP projects and these include stable political system, favourable economic system and suitability of project for partnering.

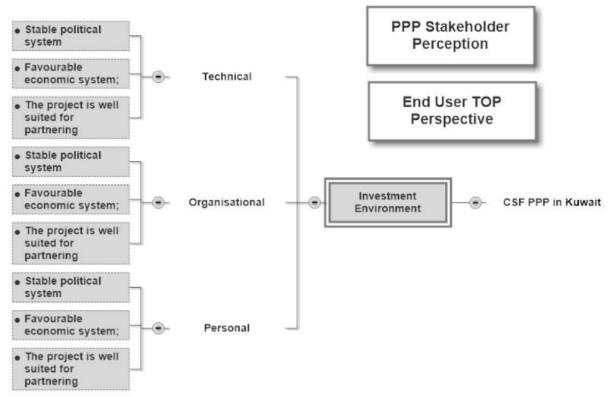


Figure 27: End user's View of Project Investment Environment from TOP Perspectives

### 5.7.2 Findings & Analysis in relation to Attractive project

Participants were asked to answer, how did attractive project contribute to the success of PPP projects. Participants identified three main factors of sufficient project profitability, long-term demand for the products and end user satisfaction which resulted in successful implementation of PPP projects. For example, EU-2 from KAPP stated:

"Attractive project is regarded to be the one which offer both significant return on investment and is sound enough to meet the end user's expectations. End user's satisfaction determines the quality of an attractive project. The input of most end users is always minimal, however, a project must be derived from the needs or wants of the end user".

These findings are also supported by the findings of Moskalyk (2011), Eadie et al., (2013), Acar & Durucasu (2014) in literature review who contend that an attractive project is an important CSF in the PPP projects and a project is considered attractive by end-users if it offers expected return on investment to the private partners and also fulfil needs and expectations of end-users. Similar findings are reported in literature review by Draxler (2008), Almarri (2019) in literature review who suggest that such projects are considered attractive by the end-users which meet their expectations about the PPP projects in terms of time, cost, quality which is an important CSF in the PPP housing sector projects (Aguinaldo, 2018). Thus, PPP housing sector projects should be carefully planned and implemented by taking into consideration end-users' needs and expectations.

From the technical point of view, participants highlighted that:

"PPP project should address their technical needs. This involves ensuring that housing projects are cost-effective yet offer innovative design which are important from end user's perspective. Private entity in PPP projects is comprised of participants largely vested to collaborate and offer main competencies in funding, technology, technical expertise and operations. From the organisational point of view, end user satisfaction means that the project, after implementation, helps meet organisational goals which were established during project initiation".

These research findings correspond with the findings of Zhang (2005) and Grasman et al (2008) in literature review who state that identification of technical needs of customers offer opportunities for improved technological innovation in PPP projects which result in customer satisfaction. Similar findings are reported in literature review by Chinyio & Akintoye (2008), Onyemaechi et al., (2015), Babatunde & Perera (2017) who suggest that if PPP projects are technically sound

and offer innovative and robust designs, involve low-cost and fulfil needs and expectations of end-users, such projects are considered attractive by the end-users. These findings also correspond with the findings of Davies (2019), Sattout & Batwala (2019) who observe that technically sound PPP projects can be offered with the help of private partner who has relevant technical skills and knowledge to implement the PPP projects. Thus, addressing the technical needs of PPP projects and delivering technologically robust solutions to the end-users is an important CSF which determine the successful implementation of PPP housing sector projects.

From the personal standpoint, end user satisfaction implies personal work improvement and growth following PPP project completion.

Participants also stated that sufficient project profitability was significant from the end user's perspective. The following comment was made EU-2 from PAHW:

"Sufficient project profitability is required to attract investors so to ensure that there are well funded profits which are involved. From the technical standpoint, end users require involvement in business process definition, a move that ensures adequate project requirement adherence which ultimately leads to more profits. Users seek for end products that actually meet their needs which translate into profitability of projects. As end users define requirements, they expect project managers to provide the appropriate solutions, thus, suitable solutions from end user's perspective result in project's profitability."

These research findings correspond with the findings of Zhang (2005), UNESCAP (2017), APMG (2019) who suggest that private sector organisations provide technical support in PPP projects so to ensure profitability during procurement,

project identification, project evaluation and contract management. Participants also stated the long-term demand for products as the key element of an attractive project. The end user, being the main customer, actually use the products provided by the PPP projects, it is important that these projects equally serve the public interest and health & safety concerns. These findings are confirmed by the findings of Chinyio & Akintoye (2008), Babatunde & Perera (2017), Alola (2019), Muhammad & Johar (2019) who recommend the importance of meeting end-users' expectations which can be instrumental in creating a long-term demand which is an important CSF in the PPP projects (Barker, 2020).

Participants also highlighted the need to address both end-users' and environmental requirements and considered it an important CSF in delivering an attractive project. For example, EU-4 from PAHW stated:

"The end users want what's in their best interest and for the environment, although they have little or no control over the determinants of this criteria, but PPP projects need to serve customer satisfaction by serving the public interest and by addressing health, safety and environmental issues so to successfully implement PPP projects"

These findings are also supported by the findings of Babatunde & Perera (2017), Muhammad & Johar (2019) in literature review who observe that addressing both end-users' and environmental concerns create a favourable perception among the end-users about the PPP projects which is an important CSF that determines the attractiveness of PPP projects.

Figure 28 shows the user's view of project attractiveness from TOP perspective based upon participants' responses. From technical, organisational and personal

perspective, three factors were identified in the attractive projects which contributed to the success of PPP projects. These factors included sufficient project profitability, long-term demand for the projects and end user satisfaction.

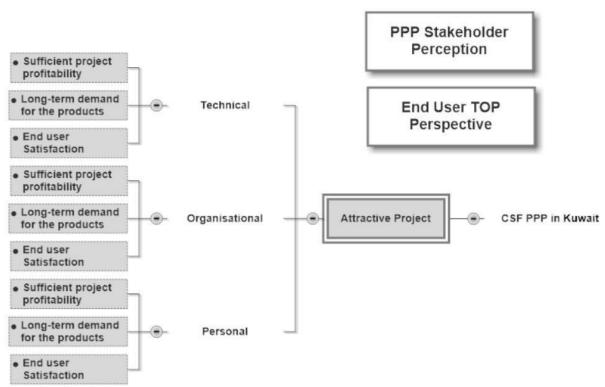


Figure 28: User's View of Project's Attractiveness from TOP Perspectives

# 5.7.3 Findings & Analysis in relation to Reliable Consortium

Participants were asked to answer, how did reliable consortium contribute to the success of PPP projects. Participants stated that a reliable consortium was generated with the help of competent project teams who had the right expertise to implement these projects. For example, EU-2 from KAPP stated:

"Organisations implement PPP projects with help of different partners and stakeholders. Reliability is an important factor in this case, given the different roles played by different stakeholders before and after project completion. The role of

strong and capable project team is important in generating a reliable consortium

Strong project teams generally improve project effectiveness. Stakeholder

management, in project execution, is vital to ensure effective project teams. An

organisation with a cohesive and strong project team successfully deliver required

project deliverables. With suitable competencies, the team can provide technical

solutions in line with PPP project objectives".

These research findings correspond with the findings of Dada & Oladokun (2012), Wang et al., (2012), Engel et al., (2013) who suggest that a reliable consortium is mainly developed by strong and capable project teams who have the right skills and competencies to implement PPP projects. Similar findings are reported in literature review by Zou et al., (2014), Reynaers, & De Graaf (2014), Greve (2015), Onyemaechi et al., (2015) who argue the importance of having a strong project team with right skills and capabilities who can offer technical expertise as per the PPP's goals. These findings are also supported by Sabry (2015), Fung (2015) who suggest that a qualified team in a PPP project offers the robust and innovative technical solutions as per the needs and expectations of end-users, so its role is vital in generating a reliable consortium. These findings are also supported by the findings of Barton (2015), Sabry (2015) who also highlight that a reliable consortium is developed by having a reliable private partner who builds trust between the public and private sector which also improves synergy between the public and private sector (Babatunde & Perera, 2017). Hence, private partner with qualified and technologically sound team is the main CSF which generate a reliable consortium.

Participants also stated that in order to develop a reliable consortium, private sector should be given autonomy throughout the projects' lifecycle. For example, EU-4 from PAHW stated:

"In most projects, the private sector is usually restricted in terms of PPP project participation; project planning, project design and construction contracts. It is suggested that role of private sector should be expanded in PPP projects as public agencies can capitalise on the financial, technical and managerial expertise of the private sector to make project improvements. This expertise can be linked to innovative application of technology, accessibility to private capital, cost certainty and specialised expertise in developing and implementing PPP projects".

These research findings correspond with the findings of Grasman et al., (2008), Zhang et al., (2017), Almarri (2019), Alola (2019) in literature who suggest that private sector should be given autonomy in PPP projects and public sector should capitalise on the technical, financial and human skills of private sectors in order to generate a reliable consortium. These findings also highlight that a reliable consortium can also be developed as long as public sector in the PPP projects focus on resolving legal and political issues Wang et al., (2012), Osei-Kyei & Chan (2017), Zhang et al., (2017) and private sector should be entrusted responsibility to deal with commercial issues in the PPP projects ranging from inception, design, project management, operation, maintenance and service delivery of the PPP projects (Davies, 2019). Similar findings are reported in literature review by Kavishe et al., (2018), Kang et al., (2019), who suggest that PPP projects are mainly formed so public sector can rely on the competencies of private sector in implementing these projects so by providing autonomy to private sector to execute these projects, a reliable consortium can be generated (Muhammad & Johar, 2019). Therefore, by giving greater autonomy to private partner and ensuring that project teams are qualified to undertake the PPP projects, a reliable consortium can be generated which is an important CSF in the PPP projects.

Participants also highlighted the importance of effective project organisation structure as a vital factor in the reliable consortium which resulted in successful implementation of PPP projects. For example, EU-2 from KAPP stated:

"Effective project organisation structure facilitates easy design, coordination, organisation and management of PPP projects, leading to maximisation of project effectiveness. The role of managerial planning and managerial action in line with stakeholders' goals result in generating a reliable consortium".

These findings are supported by the findings of Chan et al., (2010), Steijn et al., (2011), Mouraviev & Kakabadse (2015) in literature review who recommend that a reliable consortium is generated via an effective project organisational structure which improves communication and management of the PPP projects which is a vital CSF in the PPP housing sector projects.

Participants also highlighted the role of innovative technical solution in generating a reliable consortium. For example, EU-1 from PAHW stated:

"From the technical point of view, organisations which implement diverse tools and technologies in managing and implementing PPP projects successfully complete these projects and are better capable of generating a reliable consortium".

Figure 29 shows the end user's view of consortium reliability from TOP perspective based upon participants' responses. From technical and organisational perspective, strong & capable project team, innovative & cost effective technical solution and strong & capable project team were identified as the main factors in the reliable consortium which resulted in successful implementation of PPP projects. While, from personal perspective, four factors were identified in the consortium reliability which

resulted in successful implementation of PPP projects. These factors were identified as environmental, health & safety issues, strong & capable project team, innovative & cost-effective technical solutions.

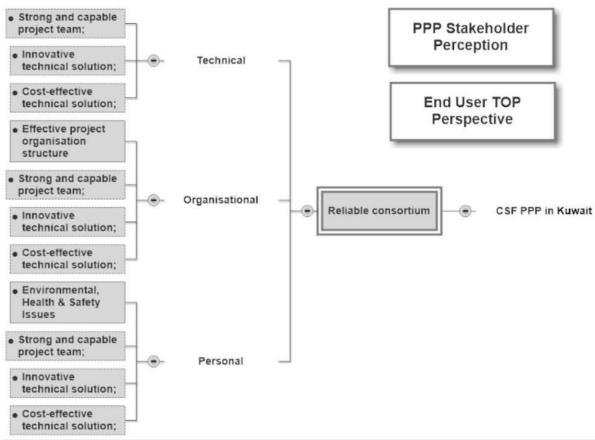


Figure 29: End User's View of Consortium Reliability from TOP Perspectives

#### 5.7.4 Findings & Analysis in relation to Financial Package

Participants were asked to answer how did the financial package contribute to the success of PPP projects. Participants were of the view that the financial capability was a significant construct which influenced the successful implementation of PPP projects. For example, EU-1 from PAHW stated:

"The implementation of PPP projects in any company usually has profound impact on several stakeholders. Failure to proactively involve stakeholders including end users, is likely to translate to project failure with serious financial losses."

These findings are also confirmed by the findings of Hodge et al., (2011), Alford & O'Flynn (2012), Eadie et al., (2013), Fung (2015) in literature review who state that sound financial capacity of the private partner is one of the important CSF in the PPP projects. These findings also highlight that from end-users' perspective, the effectiveness of financial package is affected if all stakeholders including end-users are not actively engaged in the PPP projects. Similar findings are also reported in literature review by Babatunde (2015), Greve (2015) who state that lack of involvement of end-users in the PPP projects result in developing such projects which are not compliant with the end-users' needs and this causes not only financial loss but also hamper the overall success of the PPP projects (Liu et al., 2016). Thus, creating the PPP projects as per the end-users' requirements are imperative in devising a sound financial package so to successfully implement the PPP projects.

Participants also stated that a sound financial package should have following features as stated by EU-3 from KAPP:

"High equity-debt ratio although is often linked with high risk as it means that a PPP project has been extensively utilising debt for the financial growth. However, in PPP projects, high equity-debt ratio could be used to generate more earnings than it would have generated without that financing. Islamic loans which offer zero interest should be used as a part of financing options. It is also important that an independent authority should set appropriate tariff/toll so to ensure that PPP projects serve both public interest and offer sound financial profitability".

These findings correspond with the findings of Zhao et al., (2013), Hwang et al., (2013), Babatunde (2015) in literature review who contend that different structures of loans, high equity/debt (Zhang, 2005) can be used to address the cashflow requirements in the PPP projects as the utilisation of these debt instruments signify

that a PPP project is not based on limited sources of finance and this is an important CSF in the PPP projects (Kwofie et al., 2016; Ameyaw & Chan, 2016).

EU-2 from KAPP also highlighted the importance of Islamic loans in order to develop sound financial package in PPP projects by stating:

"Given that most end users cannot raise intensive capital required for PPP projects (these projects require huge capital), loans are majorly used to finance such projects. A sound financial analysis is significant in developing a credible financial package in PPP projects. As sound financial analysis enables a company to accurately perform cost-benefit analysis as a result of which companies can undertake PPP projects. In this regard, Islamic loan is a key factor that constitutes the financial package in housing projects. Islamic finance has been responsible for numerous PPP opportunities in Kuwait".

These findings are also supported by the findings of Gupta et al., (2013), Tharun (2014), Osei-Kyei & Chan (2017) who argue that availability of different project financing options in the PPP projects ensure that cashflow shortage does not affect the implementation of the PPP projects. Islamic financing as per the participants is argued to be an important CSF which can deliver a sound financial package in the PPP projects. Similar findings are reported in literature review by Alteneiji et al., (2019), Muhammad & Johar (2019), Alola (2019) who argue that Islamic finance being Sharia (Islamic law) compliant follows the purpose of asset-backed redistribution of funds which is why it can be readily used in the PPP projects. Similar findings are presented in existing literature by Al-Saadi & Abdou (2016), Alola (2019), Almarri (2019) in support of use of Islamic financing in the PPP projects considering the fact that Islamic financial market, the relevant supervisory organisations controlling

Islamic finance practices have developed considerably (Muhammad & Johar, 2019) and its risk-sharing approach strengthens equitable allocation of risks, so these can be readily used to finance the PPP projects (Alola, 2019; Sattout & Batwala, 2019).

Empirical findings of this research correspond with the findings of Biygautane (2017), Sattout & Batwala (2019) in literature who state that thee strong performance of PPP projects in Kuwait largely depends on the strong regulatory support and strong financial profile linked to Islamic loans. To ensure continuous operation of banks in Kuwait (this translates to increase in Islamic loans to support end user companies involved in PPP project implementation), government support with respect to Islamic finance legislation in Kuwait has improved (Biygautane, 2017; Sattout & Batwala, 2019).

Figure 30 shows end user's view of financial feasibility from the TOP perspective based upon participants' responses. From technical, organisational and personal perspective, three factors of sound financial analysis, high debt-equity ratio and appropriate toll/tariff were identified as the key factors in the financial package which contributed to the success of PPP projects.

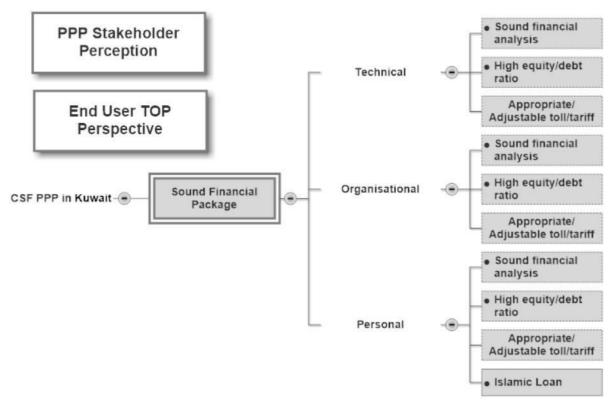


Figure 30: End User's View of Financial Feasibility from TOP Perspectives

# 5.7.5 Findings & Analysis in relation to Risk Allocation

Lastly, participants were asked how did risk allocation contribute to the success of PPP projects. Participants agreed that optimal risk allocation was a vital factor which resulted in successful implementation of PPP projects. For example, EU-2 from KAPP stated:

"It is advisable to examine risk allocation as perceived by end user companies. Risk allocation is a key consideration for stakeholders who participate in the PPP project's implementation, so end users put their focus on optimum risk allocation.

Optimal risk sharing offers cohesion in sharing risks among projects' stakeholders as a result of which it is considered an effective factor in contributing to the success of PPP projects".

These research findings correspond with the findings of Gudiene et al., (2014),

Babatunde (2015), Deloitte (2018) who state that optimal risk allocation is a vital factor because of commonality in sharing project risk among the stakeholders. Similar findings are reported in literature review by Biygautane (2017), Babatunde & Perera (2017), Bhatia (2017) in literature review who argue that optimum risk allocation in PPP projects is an important CSF and it should be based on equitable allocation of risk among the public and private partners (Gao, 2018; Wang et al., 2018). These findings also suggest the importance of conducting thorough risk assessment as deemed appropriate by the end-user companies. Likewise, findings of Kivila et al., (2017), Muhammad & Johar (2019) state that an equitable risk allocation strategy in the PPP projects is required to be enforced with the help of relevant laws which can be vital in successful implementation of PPP projects.

Participants also highlighted on the importance of risk allocation and mitigating project's risks in PPP projects. For example, EU-3 from KAPP stated:

"The benefits of allocating risks appropriately seem to outweigh the drawbacks and project uncertainties as PPP projects offer increased opportunities for proficient risk management. Suitable risk allocation means that individuals in organisations are shielded from risks related to PPP project's execution. Insufficient risk management in PPP construction projects and inappropriate risk transfer cause project delays in PPP'S project implementation."

These findings are supported by the findings of EIB (2018), Kavishe et al., (2018), Almarri (2019) in literature review who note that a diligent risk assessment in PPP projects is required to be performed so to ensure that projects do not suffer from unexpected risks which can be financially costly, can cause delays and hamper the overall implementation of PPP projects (Davies, 2019; Barker, 2020). These findings

also highlight that ineffective risk allocation can be one reason why PPP projects may have poor performance in context of GCC countries including Kuwait (Sattout & Batwala, 2019). Thus, risk identification is required to be performed as early as possible to avoid undue risks in the later stages of the PPP projects (Alola, 2019).

#### Moreover, EU-1 from PAHW stated:

"The private sector, in comparison with the public one, operates more efficiently. So, cost efficiency is guaranteed when end users transfer risks mostly to private partners. Since the private agencies largely focus on outputs, they apply management principles which translate to innovation, advancement in technology, improved project quality and better risk allocation".

These research findings also match with the findings of Gudiene et al., (2014), Burger & Hawkesworth (2011), Deloitte (2018), Cui et al., (2018) who suggest that projects which can be successfully executed through a PPP typically exhibit the characteristics of long-term association between the partners and base optimal risk allocation on negotiated procedures made by the private and the public agencies so to avoid conflicting stakeholders and devise equitable risk allocation which is a vital factor that contributes to the success of PPP projects. (Osei-Kyei et al., 2018; Davies, 2019; Barker, 2020).

Figure 31 shows the end user's view of project's risk allocation from TOP perspective based upon participants' responses. From technical, organisation and personal perspectives of participants, optimal risk allocation was identified as the vital factor in risk allocation that contributed to the success of PPP projects.

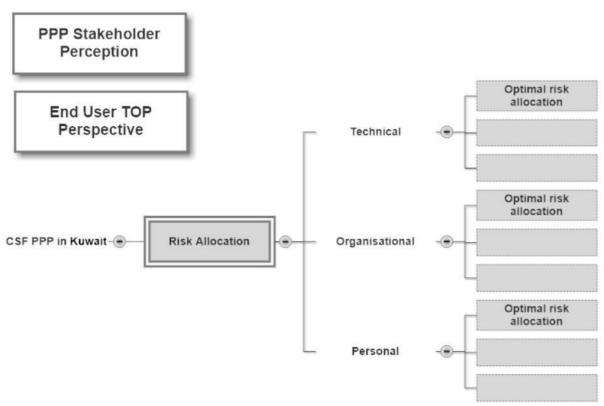


Figure 31: End User's View of Project Risk Allocation from TOP Perspectives

# **Chapter 6.** Framework operationalisation

### **6.1 Introduction**

The aim of this chapter is to present the operationalisation of the framework via the focus group discussions to make this framework applicable in the context of PPP housing sector projects in Kuwait. The answer to this question makes the framework presented applicable to PPP professionals that serve in different stakeholder groups. In doing so, the researcher conducted three focus group discussions, of which two focus groups were held in the KAPP and PAHW, whereas the third focus group was held at the Iraq-Kuwait international conference for the reconstruction of Iraq to evaluate the developed framework that could be operationalised in a detailed manner (Figure 32). Then all CSFs were elaborated in terms of practice and how each stakeholder group can enhance and shape each factor. These factors are identified as sub-factors (SFs) in this research.

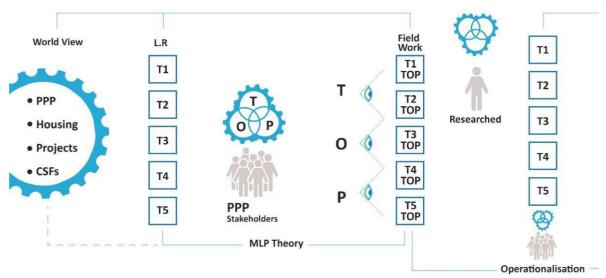


Figure 32: Operationalisation of CSFs from TOP Perspectives

#### **6.2** Investment environment

Stable political system: Political commitment is a pre-requisite for successful governance, which decreases the political long-term risk for the private sector and gives a strategic focus

for the government to increase its expertise in evaluating the costs and benefits associated with the PPP projects in Kuwait. These findings are supported by the findings of Chan et al., (2010), Abdul-Aziz (2010), Osei-Kyei and Chan (2015) in literature review who advocate the importance of political stability and strategic focus to develop and implement PPP housing projects as these projects need reorganisations of current processes, markets and long-term commitment from the government is needed to implement these projects (Cui et al., 2018: Almarri, 2019). Empirical findings of this research also align with the findings of Cuorato (2002), Susilawati et al., (2005), Holt (2014), EIB (2018) in literature who argue that political stability is instrumental in generating a sound economic policy which provides various incentives to the investors such as tax incentives, protection against exchange rate fluctuations (Sattout & Batwala, 2019) as a result of which PPP projects can attract higher investments (Barker, 2020). Hence, a general consensus is noted in the responses of focus group discussions that a stable political environment is the basis for generating a favourable investment environment which is an important CSF for the PPP housing sector projects.

Favourable economic system: Sound economic policy is required by the government to maintain a stable, growing economic environment which is favourable for new projects and gives confidence to investors to invest in PPP projects. These findings are also supported by the findings of Zhang (2005), Onyemaechi et al., (2015), Bock & Linner (2015), Demirel et al., (2017) in literature review who highlight the importance of developing a sound economic policy which contains investor-friendly investment policies which are significant in developing a positive investment environment in the PPP projects. Likewise, these findings also correspond with the findings of Tola (2015), APMG (2019) in literature review who support the importance of sound economic system as it offers a good financial environment to facilitate the private sector to invest in the PPP projects by making suitable partnering arrangements which offer higher VFM to the private partners (Almarri, 2019). Therefore,

empirical findings in this regard demonstrate that the favourable economic system is an important CSF which affects the implementation of PPP housing sector projects. Table 25 illustrates the operationalisation for investment environment of PPP projects in Kuwait as identified by the focus group discussions.

Table 25: Operationalisation for Investment Environment of PPP projects in Kuwait.

CSF		Sub Factors	
		(SFs)	
Investment	• Stable political • The stable political	he Housing project •	The Housing project is
Environment	system; is	well suited for	in public interest;
	• Favourable pa	artnering •	Predicable risk scenarios;
	economic	•	Promising
	system; • G	overnment	economy.
	• Predictable su	ipport;	
	&reasonable • Su	upportive and	
	legal framework ur	nderstanding	
	co	ommunity;	

Predictable and reasonable legal framework: PPPs' project implementation depend mostly on a favourable legal framework that allows the project to be developed without unnecessary legal restriction on private sector engagement. The legal status of the project implementation should be guaranteed by an appropriate legal framework which also helps to attract financing for the project. The legal framework for Kuwait's PPP projects is mainly in line with international standards but better legislation is still needed to implement the PPP projects. The private sector should have an opportunity to participate and that happens by changing the laws and regulations for land use rights. These findings highlight the importance of a foreseeable and rational legal framework which is an important CSF as per the participants of the focus group discussions. Empirical findings of this research match with the findings of Kwofie et al., (2016), HM Treasury (2016), Hodges & Dellacha (2017) in literature review

who suggest that the legal framework in form of government's policy directives about the adoption of PPP policy and clear documentation of rights and responsibilities of all stakeholders can encourage better cooperation among the public and private sector which is an important CSF in the PPP projects. Empirical findings of this research confirm that better legislation is still needed to strengthen the implementation of PPP projects in Kuwait. Similar findings are provided in literature by Onyemaechi et al., (2015), Sattout & Batwala (2019), Alola (2019) who recommend that a suitable legal framework in terms of PPPs related laws such as contractual obligations of stakeholders, ownership and equity issues, profit-sharing benchmark are needed in context of developing countries to generate a better investment environment in the PPP projects.

The housing project is well suited for partnering: Compatibility of skills among key project parties help determine whether or not a project is suitable for partnering. Under favourable investment environments, it is easier to transfer the obligations and rights of investors, especially for projects that suit partnering. A project that is suitable for partnering in Kuwait is the one which has a strong private partner which influences the investment environment for PPP housing projects. Empirical findings of this research align with the findings of Hardcastle et al., (2006), Grimsey & Lewis (2007), Karim (2011), Phang (2016), Kang et al., (2019) in literature review who state that a suitable partnering arrangement is an important CSF in the PPP housing sector projects as these projects are used due to strong skills of the private partner who is better able to provide the required financial support, technical and human skills which can better deliver quality and higher return on investment. Similarly, Babatunde & Perera (2017), Ismail (2017) in literature review state that a particular CSF in the PPP projects is their technical viability and using relevant technical knowledge by in various phases of the housing projects such as design, construction, operation, delivery and maintenance which affects the implementation of these projects (Muhammad & Johar, 2019;

Alteneiji et al., 2019). Hence, a suitable housing project and sound partnering skills of the private partner are the important CSFs which create a positive investment environment in the PPP housing sector projects.

Government support: The parliament has limited powers. As such, the government often does not require a majority in parliament to adopt a new legislation. Clearly, the government and the parliament have an adversarial relationship. In parliament, legislative initiatives are based on ad hoc coalitions of parliamentarians. As the private sector requires strong incentives, the public sector needs to consider the contractor's business objectives. With the help of PPPs the government should provide not only direct benefits to the public, but also the involved businesses. If necessary, government guarantees can be used to secure investments from the financial sector or revenue streams for the contractor. The government needs to change the stereotypes about the low participation of private sector in PPP projects in Kuwait. These research findings state that in order to successfully implement PPP housing sector projects in Kuwait, extensive support by the government is needed as parliament cannot solely approve legislation regarding PPPs laws unless those laws are vetted by the government. These research findings are supported by the findings of Zhang (2005), Hwang et al., (2013), Zou et al., (2014), Ameyaw & Chan (2016), Gao (2018) in literature review who argue the importance of government support in implementing PPPs as role of government is crucial in providing guarantees, preparing financial policy to assist investors, controlling exchange rate fluctuations and offering tax incentives which are all important determinants in successful implementation of PPP projects (Ismail, 2013; Bhatia, 2017; Kavishe et al., 2018, Alola, 2019). Therefore, continuous support of government is needed which is an important CSF in creating a positive investment environment.

Supportive and understanding community: The most well-structured projects are scrapped or delayed due to obstacles created by various stakeholders including general public. Project

procurement and project development proceeds smoothly when social support is evident. A concession only succeeds when the project serves the public interest, meaning little or no opposition at all. Failing to assess the public's willingness or ability to pay for PPP projects can doom a PPP project even if otherwise justified. This lack of social support can lead to public dissatisfaction, and even violent protests. Empirical findings of this research match with the findings of Zhang (2005), Olander (2006), Chinyio & Akintoye (2008), Gebrehiwet & Luo (2017) in literature review who highlight the significance of social support for the PPP projects in order for their successful implementation. These findings are also supported by the findings of Abdul-Aziz (2010), Sandhu (2015), Badewi & Shehab (2016) in literature review who note that social support is an important CSF as stakeholders including the general public who is the end-user of the PPP housing sector projects have different concerns and needs and are governed by various social forces which shape their cultural, norms, beliefs and values. Likewise, these findings are supported by the findings of Bhatia (2017), Aguinaldo (2018), Kavishe & Chileshe, (2019) in litearature review that general public is less receptive towards PPP housing sector projects as these projects are considered costlier which are not considered favourable in terms of serving the public interest. Therefore, a favourable perception about the PPP projects is required to be developed in the general public which is an important CSF in implementing the PPP housing sector projects.

The housing project is in the public interest: Since PPP projects are complex, there are various interests of stakeholders. An important way of understanding stakeholders is by identifying their interests and stakeholders' interests include product safety, the truthfulness of financial reporting for new product services and financial returns. These findings highlight the importance of addressing the stakeholders' needs and expectations which is an important CSF in the PPP housing sector projects (Zhang, 2005; Muhammad & Johar, 2019). These findings are also supported by the findings of Olander (2006), Chinyio & Akintoye (2008) in

literature review who state that PPP projects are required to be analysed from a social perspective due to their impact on various stakeholders. These findings are also supported by the findings of Alvesson et al., (2017), Demirel et al., (2017) who highlight the importance of using multiple perspective theory so to better understand the needs and expectations of various stakeholders and to better serve the public interest by incorporating both social contract (socially viable PPP projects) and economic value concept (higher return on investment generated by PPP projects).

Predicable risk scenarios: Risk scenarios are recognised as powerful tools that help risk professionals to ask the right questions and prepare for the unexpected risks. Scenarios may improve the reliability and understanding of uncertain projects. The government needs to take the responsibility to ensure optimal risk allocation. Empirical findings of this research align with the findings of Zhang (2005), Wang (2018), Kavishe et al., (2018), Davies (2019), Muhammad & Johar (2019) in literature review who argue that evaluating different scenarios which can pose risks in the PPP projects are required to be carefully analysed in the early stages of projects so unexpected risks are not faced in the later stages which can hamper the effectiveness of these projects. Similar findings are also reported in literature review by Li et al., (2005), Jacobson & Choi (2008), Ke et al., (2010), Osei-Kyei & Chan (2017) who state that optimal risk allocation strategy in the PPP projects is the equitable allocation of risks in the public and private sector which is an important CSF in generating a positive investment environment in the PPP projects.

**Promising economy:** More transparency in the economy and reduced political bias in terms of allocating PPP projects are significant CSFs in implementing the PPP projects. The role of economy is vital in developing the PPP projects as suitable economic policy highlights how the implementation of PPP projects would add value for money which is an important determinant in PPP projects in Kuwait. These findings are also supported by the findings of

Zhang (2005), Tola (2015), Alteneiji et al., (2019) in literature review who state that a stable economy by creating favourable initiatives such as tax incentives for investors, hedging them against uncontrollable risks such as exchange rates can be imperative in flourishing the financial value of PPPs.

Table 26 shows operationalisation of attractive PPP projects in Kuwait as identified by the focus group discussions.

Table 26: Operationalisation of attractive PPP projects in Kuwait.

CSF		Sub Factors (SFs)	
Attractive project	Limited competition	• End User • <b>Long-term availability</b>	
	from other housing	Satisfaction of suppliers needed for the	
	projects;	• Sufficient Housing normal operation of the project	ct.
	Long-term demand	project profitability	
	for the housing	to attract investors	
	units.		

Limited competition: There is a limited competition from other housing projects; Uncompetitive procurement gives a strong position to the negotiating private party and can lead to long delays and excessive cost to the government. Similar findings are supported by the findings of Zhang (2005), Abdul-Aziz (2010), Hodges & Dellacha (2017) in literature review who observe that a limited competition from other housing projects result in having a selective number of private partners who can charge higher prices which are not deemed suitable as affordable housing at low cost is one of the main benefits of PPP housing sector projects (Almarri, 209; APMG, 2019). Hence, a limited competition may not be considered helpful in effective implementation of PPP projects as high costs to the industry and to the end-users (Kang et al., 2019) is not considered suitable to implement PPP projects.

Long-term demand for the housing units: There should be long-term demand for the housing units by creating a favourable perception about these projects in general public. Main factors which can create such positive perception include ensure the end-users that housing units are both low-priced but are high quality projects. All the due financial and technical support should be provided by the private partner to develop long-term demand. These findings are supported by the findings of Jooste et al., (2011), Onyemaechi et al., (2015), Sabry (2015), Sattout & Batwala (2019) in literature review who state that long-term demand of these projects are established by developing end-users' satisfaction and sustainable demand would give confidence to investors to invest in these projects which is an important CSF in the PPP housing sector projects.

End-user satisfaction: The main issue addressed by PPPs is producing quality service which is an important CSF in these projects. A PPP project should be meet its objectives of cost, time, scope and quality and be accepted by the customer. In the context of Kuwait, end-user satisfaction means compliance with end-user specifications as far as PPP projects are concerned. This means that end-user specifications about the PPPs should be readily incorporated in the initial stages of these projects to deliver end-user satisfaction as unsatisfied end-users can cause financial loss which can affect the implementation of PPP housing sector projects. These findings are also supported by the findings of Olander (2007), Ng et al., (2010) in literature review who note that the government or private consortium perceive the project on the basis of needs of end-users who are the main stakeholders in the PPP projects. Likewise, Ram & Corkindale (2014), Sattout & Batwala (2019) suggest that end-user satisfaction is achieved by consulting with end-users and their satisfaction is what determines the overall success in PPP housing projects in Kuwait.

Sufficient housing projects' profitability to attract investors: Most of the local real estate investors are investing abroad and there is low interest in investing any more in the Kuwaiti

real estate market due to the bureaucracy of different government's ministries that slows down any investment opportunity. PPP projects should be promoted through a highly qualified administrative entity to promote possible projects in a way that can attract local investors by offering them guarantees and financial support. These findings are also supported by the findings of Bhatia (2017), Aguinaldo (2018), Kavishe & Chileshe, (2019) who state that low investment in the PPP projects is due to the fact that Kuwaiti investors prefer to own properties in foreign countries which offer better value for money than investing in Kuwait's housing sector as general public perceive the PPP housing sector projects expensive. Another reason for low profitability of these projects is that local construction companies remain short of financial and technical capabilities needed to implement these projects as a result of which completion of these projects is affected (Sattout & Batwala, 2019, Alteneiji et al., 2019).

Long-term availability of supplies needed for the normal operation of the project: In the public sector, expertise is required for initiating the project, needs assessment, options appraisal and developing a business case. The private sector is traditionally responsible for resolving technical issues and attracting financing for the PPP. The government should assign companies for supervising and monitoring the progress of the housing projects to assure the quality of the construction procedures and all the technical requirements needed. Empirical findings of this research are supported by the findings of Chan et al., (2010), Al-Saadi & Abdou (2016), Gao (2018), Muhammad & Johar (2019) in literature review who argue that projects are affected if there is a lack of material which is needed to perform a day-to-day operation of the projects. Thus, private sector is required to better utilise operational efficiencies to reduce cost, improve quality by offering technical solutions and government should monitor any lapses in performance and should have a dedicated monitoring agency to track the development of the PPP projects so to reduce financial burden of the government

(Chan et al., 2010; Alola, 2019, Almarri, 2019).

### **6.3 Reliable consortium**

Leading role by a key enterprise or entrepreneur: A strong consortium of partners involved in PPPs is crucial in the design of the project. Mutual strength is also of utmost importance to ensure that all parties are well informed of their roles and responsibilities and are well equipped to perform them so to avoid conflicting stakeholders in the PPP projects.

Table 27 shows operationalisation of a reliable consortium for PPP projects in Kuwait:

Table 27: Operationalisation of a reliable consortium for PPP projects in Kuwait

CSF	Sub Factors (SFs)
Reliable consortium	<ul> <li>Leading role by a key enterprise or entrepreneur;</li> <li>Effective project organisation structure;</li> <li>Strong and capable project team;</li> <li>Partnering skills;</li> <li>Innovative technical solution;</li> <li>Cost-effective technical solution;</li> <li>Strong and environmental impact; and</li> <li>Public safety and health considerations.</li> </ul>

Effective project organisation structure: Apart from financial strength, the strength of private sector lies in the management team they deploy so a capable team should have extensive experience in the project. Suitable organisational structures that lead to effective project management are required for housing projects in Kuwait. Similar findings are provided in literature review by Zhang (2005), Babiak & Thibault (2009), Wettenhall (2010), Steijn et al. (2011) who note that suitable organisational structure in PPP projects generate a reliable consortium with the help of competent project managers who are technologically competent to deliver successful PPP projects. Similar findings are provided in literature review by Sun & Meng (2009), Chan et al., (2010), Mouraviev & Kakabadse (2015) who

illustrate that a suitable organisational structure in the PPP projects provide the flexibility to address changing situations and such flexibility generates a reliable consortium by developing good interpersonal relationships among stakeholders which is a significant CSF in the PPP housing sector projects.

Strong and capable project team: It is important that a project team has the knowledge of whether or not they are successfully managing the project and its stakeholders. The project manager affects the success of the project team by ensuring that capable team is selected. Participation of multiple teams with varying skills and competencies in PPP projects lead to effective project management. Empirical findings of this research are also confirmed by the findings of Dada & Oladokun (2012), Wang et al., (2012), Engel et al., (2013) in literature review who argue that a strong and competent project team with right skills and capabilities result in developing a reliable consortium which is pivotal to ensure the success of PPP projects. These findings are also supported by the findings of Reynaers, & De Graaf (2014), Onyemaechi et al., (2015) who state the need to develop a strong project team with right skills and capabilities who can offer technical expertise as per the PPP's goals which is an important CSF in the PPP projects (Fung, 2015; Sabry, 2015).

Partnering skills: One of the biggest gaps in partnering skills for leaders is the ability to know when and how to dissolve a partnership effectively while maintaining respectful relationships and the potential to work together in the future. As key partners, private and public entities need to work closely with their project implementers. Similar findings are reported in literature review by Grimsey & Lewis (2007), Phang (2016), Kang et al., (2019) who argue that partnering skills remain weak in the PPP projects and these projects are mainly formed so to capitalise on the strong partnering skills of the private partner who can better offer financial support, technical and human resources needed to deliver the PPP projects. These findings correspond with the findings of Babatunde & Perera (2017), Kang et

al., (2019), Alteneiji et al., (2019) in literature review who demonstrate that strong partnering skills make PPP projects technically and financially viable as project teams have strong skillset to manage all stages of the projects from inception to implementation which is avital CSF in the PPP housing sector projects.

Innovative technical solution: Innovative solutions means broader opportunities and incentives to offer innovative solutions that help deliver as per services' requirements. Innovative solutions that meet the required specification is one of the main goals to implement the PPP projects. Technical innovation geared towards overcoming projects' complications is vital when considering PPP projects in Kuwait. These findings match with the findings of Zhang (2005), Chan et al., (2011), APMG (2019) in literature review who suggest that technical innovations offered via PPP projects result in the long-term demand for these projects which is vital CSF in generating a reliable consortium. These findings also correspond with the findings of Chinyio & Akintoye (2008), Babatunde & Perera (2017), Almarri (2019) who argue that innovative technical solutions result in addressing the endusers expectations which is an important CSF in the PPP housing sector projects.

Cost-effective technical solution: A PPP project is considered to bring a reduction in life-cycle costs. The PPP arrangement is preferred because of lower project costs. PPPs are able to initiate the delivery of high-quality services at reduced costs compared to those obtained through public investment for similar services. Private sector's involvement in Kuwait can better offer these cost-effective technical solutions. These findings are supported by the findings of Dulaimi et al (2010), Grimsey & Lewis (2007), Hodge et al., (2010), Karim (2011) who note that cost-effective technical solutions are developed by skilled project team who is instrumental in generating a reliable consortium. Likewise, findings of Valdimarsson (2007), Jacobson & Choi (2008), Abdul-Aziz (2010) in literature review suggest that cost-effective technical solutions is one of the main reasons to develop in the PPP projects as these

enable the private sector to acquire a higher capital investment so to develop robust, yet costeffective technical solutions in the PPP housing sector projects.

Low environmental impact: Environmental impact involves assessment of the possible effects that a proposed project may have on the environment including and this involves assessment of the social and economic aspects of the project. The purpose is to ensure that decision-makers consider the environmental impact when deciding whether or not to proceed with a project. To minimise negative environmental impact, it is important to understand the link between various project activities and the potential of these activities in terms of impacting the environment. Low environmental impact requires careful planning of the activities before commencing the work on the project-site. Similar findings are reported in literature review by Zhang (2005), Tola (2015), Kavishe & Chileshe (2019) in literature review who advocate the importance of conducting the environmental assessment before initiating the PPP projects as any possible hazard in terms of construction waste or any other health and safety waste create a negative perception for the end-users which can affect the implementation of PPP projects (Babatunde & Perera, 2017; Muhammad & Johar, 2019).

Public safety and health considerations: The health and safety of the public are important in PPP arrangements. Public safety has been considered as the first-ranked factor by government and end-users in PPP projects. These findings are supported by the findings of Zhang (2005), Babatunde & Perera (2017), Alteneiji et al., (2019) who state that if public's health and safety concerns about the PPP projects are not addressed, long-term demand of these projects is affected which do not attract the required investment and can hamper the implementation of the PPP projects.

Mutual objectives and trust between stakeholders: The attitude and relationships between the stakeholders will affect the quality of the project outcomes, therefore careful management has to be carried out because mutual trust and benevolence is very important. PPP thrives on

the expertise of the public and private sector's consortiums. The common goals of these stakeholders create strong synergies successfully implement the PPP projects. These findings are supported by the findings of Hardcastle et al., (2006), Wang (2007), Abdul-Aziz (2010) in literature review who state that mutual objectives and trust between stakeholders enable transparent communication of exchange of information between them which is an important CSF in the PPP projects. These findings are also supported by the findings of Bourne (2005), Karlsen et al., (2008) in literature review who state that with mutual objectives and trust, effective stakeholder management can be performed in the PPP projects so to identify relevant stakeholders, to evaluate their needs, to assess how these would impact upon the projects (Ward & Chapman, 2008).

## 6.4 Financial Package

Table 28 shows operationalisation for financial package of PPP projects in Kuwait:

Table 28: Operationalisation for Financial Package of PPP projects in Kuwait

CSF	SFs
Sound financial package	<ul> <li>Sound financial analysis;</li> <li>Islamic financial tools</li> <li>High equity/debt ratio</li> <li>Sources and standby facilities;</li> <li>Sound financial tool/debt and suitable and suitable finance;</li> <li>Sources and standby facilities;</li> </ul>

The critical success factor for financing a PPP is the availability of well-established financial markets. The external financing gives the opportunity to share the financial risks and can give extra incentives for the private contractor by setting up repayment plan. It is important for PPP projects to be financially independent to the greatest extent possible and minimise

reliance on such grants (Burger & Hawkesworth, 2011; Muhammad & Johar, 2019). There is a need for innovative financing structures that not only reduce the cost of funds but also explore new sources of funding (Almarri, 2019). However, a fine balance needs to be maintained to ensure that such innovations in financing do not result in speculative bids during the procurement stage. Strong emphasis should be placed on forecasting revenues and costs as part of the feasibility study (Sattout & Batwala, 2019, Davies, 2019).

Islamic financial tools: Islamic financing is applied widely in manufacturing, trade, banking, real estate and infrastructure. Islamic financial tools include Musharakah (equity financing), Mudarabah (trust financing), Istisna'a (work-in-progress financing) and Ijara (lease financing). All these tools need to serve as sources of new funding for projects that need large capital outlay, long construction period and long repayment periods. High equity/debt ratio should be offered by the government to the private sector contractors to provide assets in the PPP projects. Empirical findings of this research math with the findings of Tharun (2014), Osei-Kyei & Chan (2017), Muhammad & Johar (2019) in literature review who argue that Islamic financing can deliver a sound financial package in the PPP projects as it complies with principles of Islam, offer equitable risk allocation and is based on the asset-backed redistribution of funds which can adequately address the financial requirements of the PPP projects (Alola, 2019: Almarri, 2019).

Appropriate toll/tariff level(s) and a suitable adjustment formula: The host government is the regulator that is responsible for granting permits, authorisation and project's licenses or concessions (Hodge et al., 2010; Alford & O'Flynn, 2012). The regulator usually has a control on the tariffs, tolls and other vital aspects of the project and budget restrictions. The tariff is a key determinant of returns for the private entity (Eadie et al., 2013; Fung, 2015). It is important to have a clear understanding of the tariff determination process which should be fair to enable the private operator to earn a reasonable return. Lack of clarity can result in

potential disputes between the private and public entity (Babatunde, 2015; Kang et al., 2019).

Sources and structure of main loans and standby facilities: The sponsors of the project source the necessary funds needed for the implementation of the project using loans and equity contributions (Zhao et al., 2013; Singewar & Deshmukh, 2016). The government, in most cases, undertakes explicit and implicit contingent liabilities from loan guarantees and sub-loans provided for the financing of the project (Biygautane, 2017; Bhatia, 2017; Gao, 2018). Other sources are financial institutions, especially banks. In the context of Kuwait, the public concessionaire needs to repay its loan facilities and obtain its marginal profit on such investments (Sattout & Batwala, 2019).

Stable currencies of debts and equity finance: Local currency financing is an important part of sustainable development projects (Burger & Hawkesworth, 2011; Muhammad & Johar (2019). Currency debt obligations of the corporate sector are of particular concern. Equity financing plays a crucial role in supporting investment and productivity of PPP projects (Zhang, 2005; Alteneiji et al., 2019). Currencies for financing housing projects in Kuwait thus need to be stable (Sattout & Batwala, 2019).

#### 6.5 Risk allocation

PPP projects call for the initial allocation of key risks across public and private partners. Risk identification is done by examining the contracts' conditions, their prescriptions and omissions together with the environment in which the project will be implemented (Jacobson & Choi, 2008; Ke et al., 2010; Osei-Kyei & Chan, 2017). This is necessary to correctly allocate and share the risks between the PPP stakeholders. For effective risk mitigation and reduction, strong commitment from both the private and public sectors is required in Kuwait (Sattout & Batwala, 2019).

Appropriate and reliable risk allocation: Understanding the needs, challenges and risks associated with the PPP projects is an important area of concern. The construction companies require guarantees for sharing possible risks with the government during the course of these projects (Deloitte, 2018; APMG, 2019). Risk mitigation necessitates strong political will. Strong political will is crucial to the success of such projects as these require intense public scrutiny and opposition from local stakeholders (Zhang, 2005; Wang, 2007). In the context of Kuwait, successful PPP projects necessitate appropriate risk allocation and risk-sharing between the public and private sectors.

Table 29 shows operationalisation of risk allocation of PPP projects in Kuwait:

Table 29: Operationalisation of Risk Allocation of PPP projects in Kuwait

CSF	Sub Factors (SFs)
Risk allocation	Optimal Risk     Appropriate and     Allocation     reliable Risk     Allocation

# **Chapter 7.** Conclusions

### 7.1 Introduction

This chapter presents the main conclusions of this research. This chapter firstly presents how this research has achieved its objectives. Next, the key findings are presented. Finally, the main contributions of this research, its limitations and recommendations for future research are presented.

# 7.2 Achieving the research aim and objectives

The aim of this research was to evaluate the key CSFs from the perspectives of various stakeholders in PPP housing projects in Kuwait to determine which combination of factors led to successful implementation. This aim was achieved by addressing the research objectives.

The first objective of this research was to undertake a comprehensive critical review of the literature to identify the key CSFs in the housing sector projects. To achieve this objective, the literature review identified five CSFs based on stakeholders' perceptions (Zhang, 2005). The first CSF was identified as the role of government in forming its commitment and policies in building the investment environment which was a crucial CSF from stakeholders' perspectives to successfully implement PPP projects (Adair et al., 2011; Boles et al., 2013; Onyemaechi et al., 2015). The second CSF was identified as a reliable consortium in the form of competence of private sector (Li et al., 2005; Cheung et al., 2012; Babatunde, 2015). The expertise of workmanship offered by the private sector was considered vital CSF from stakeholders' perspective (Babatunde & Perera, 2017). The third CSF was identified as an attractive project and the role of transparent and consistent communication between parties (Ram & Corkindale, 2014). Consistent monitoring, feasible proposals by private developers were the notable attributes of attractive projects (Fung, 2015, Kang et al., 2019; Alola, 2019). The fourth CSF was identified as the financial package in the form of good profit margins (Hwang et al., 2013; Reynaers & De Graaf, 2014; Onyemaechi et al., 2015). Value for money and cost-versus-benefit analysis were

important from stakeholders' perspectives in developing an attractive project (Takim et al., 2011; Reeves, 2013; Gudiene et al., 2014). The fifth CSF was identified as the risk allocation and optimum risk allocation by developing equitable risk allocation processes which were regarded as an important CSF from the stakeholders' perspectives (Adinyira et al., 2014; Onyemaechi et al., 2015).

The second objective of this research was to define and draw the theoretical framework of this research which included multiple perspectives of stakeholders (Linstone, 1989; Mohamad et al., 2015; Scolobig & Lilliestam, 2016) in PPP housing sector projects. This was achieved by developing the theoretical framework of this research. This theoretical framework was based on systemic thinking and it was argued in this framework that the worldview was the problem; i.e. the lack of integration of stakeholders' perspectives in the PPP housing sector projects (Dalkin et al., 2018). It was then suggested that this problem could be solved by exploring the perspectives of stakeholders which involved evaluating the stakeholders' experiences and understandings of the realities in the PPP housing sector projects in Kuwait (Osei-Kyei et al., 2018, Alola, 2019). It was argued in the theoretical framework that the stakeholders in PPP projects did not operate in a vacuum; instead the stakeholders' actions were influenced by the key CSFs (Zhang, 2005; Alteneiji et al., 2019, Davies, 2019) which in this case were identified in the review of literature as the five CSFs of: the investment environment, attractive project, reliable consortium, financial package and risk allocation. These five factors were identified as the key CSFs from the stakeholders' perspectives; nonetheless, there was a lack of systemic understanding of how the stakeholders in PPP projects interacted and how their perceptions affected the successful implementation of PPP projects in the context of Kuwait. Thus, this theoretical framework argued for the inclusion of the multiple perspective theory (MLP) (Hall & Davis, 2007; Linstone, 2010) of stakeholders by specifically evaluating the TOP perspectives (Linstone, 1989; 2010; Mohamad et al., 2014) which were vital in illustrating the key CSFs from the stakeholders' perspectives which led to PPP project success. Thus, the theoretical framework of this research argued that the worldview, identification of five CSFs from the literature review and using TOP perspectives

from multiple perspective theory could collectively provide a thorough understanding of the key CSFs from the stakeholders' perspectives which were to affect how these stakeholders implemented these CSFs to contribute to the success of PPP housing sector projects (Muller & Turner, 2007; Cui et al., 2018).

The third objective of this research was to identify the key CSFs from stakeholders' perspectives which contributed to the success of PPP housing sector projects. This was achieved by conducting 30 semi-structured interviews in the two case-study organisations, KAPP and PAHW. These interviews were conducted with PPP unit managers, engineers, planners, architects, heads of investment departments, end-users, private sector representatives and MPs from Kuwait's National Assembly. The findings of the interviews confirmed that five CSFs – investment environment, reliable consortium, attractive project, financial package – important from stakeholders' (public sector, private sector, National Assembly and end-user) technical, organisational and personal perspectives (Deloitte, 2018; Kavishe et al., 2018; Alola, 2019: Alteneiji et al., 2019).

The fourth objective of this research was to evaluate the operationalisation of the final framework. This was achieved by conducting three focus group discussions to offer a tactical guide to all stakeholders on how to manage PPP projects successfully. The third and fourth objectives were also linked with the research question of this research. Hence, it is important to present these objectives in light of the research questions of this study which are presented next in this chapter.

# 7.3 Findings of the research

This research was conducted to answer the following:

What are the key Critical Success Factors (CSFs) in PPP housing projects in Kuwait?

How are the CSFs perceived (technically, organisationally or personally) by the key stakeholders in PPP housing projects in Kuwait?

The findings of both interviews and focus groups confirmed that the investment environment was the

most important CSF from stakeholders' perspectives (Biygautane, 2017; Osei-Kyei & Chan, 2017; Onyemaechi et al., 2015; Kavishe et al., 2018). Findings in this regard confirmed that the private sector was willing to invest in PPP projects provided that the public sector could improve the investment environment to enable PPP implementation. The participants described CSFs in terms of political, technical, construction, procurement, project environment and legal-related factors. In describing the investment environment, most participants revealed factors such as a favourable economic system, a stable political environment and suitability of projects for partnering (Osei-Kyei & Chan, 2015; Sattout & Batwala, 2019; Alola, 2019).

From the end-user standpoint, PPP projects require a suitable environment. This involved a sound political and economic system that encouraged PPP project implementation (Biygautane, 2017; APMG, 2019). From the public's viewpoint, most participants said that political stability in the host country provided room for the private sector to undertake PPP projects (Deloitte, 2018; Kavishe et al., 2018). From the private TOP perspective, the majority of respondents agreed that a stable political system, a stable economic system, suitability of the project for privatisation, government support and predictable risk scenarios formed a suitable investment environment (Chan et al., 2010; Alteneiji et al., 2019; Almarri, 2019). From Kuwait's National Assembly's TOP perspective, the findings revealed that a predictable and reasonable framework and investment environment ensured the success of PPP projects (Aaltonen et al., 2008; Osei-Kyei & Chan, 2017; Kang et al., 2019).

Findings from focus group discussions highlighted the importance of the legal and regulatory framework for PPPs to enhance the implementation process (Zhang, 2005; Muhammad & Johar, 2019). Moreover, the government's support and commitment were found to be essential from stakeholders' perspectives. Findings confirmed that both favourable economic conditions and political support complemented the implementation of regulatory frameworks which were essential to developing a sound investment environment in implementing PPP projects (HM Treasury, 2008; World Bank, 2015; Alteneiji et al., 2019).

The second CSF which was identified via the findings of this research was the attractive project which contributed to the success of PPP housing projects as per the participants of this research. Findings confirmed that an attractive project meant a project which offered sufficient project profitability, a project which had long-term demand for the products and a project which offered end-user satisfaction (Bohsali et al., 2014; Kavishe et al., 2018). Considering the end-user's perspective, most participants were convinced that attractive projects met end-users' needs based on initial project specifications (Alola, 2019; Almarri, 2019). From the public viewpoint, the majority of participants agreed that an attractive project facilitated a commitment to undertake PPP projects. While, as per the private sector's TOP perspective, participants stated that attractive project had to affect customer satisfaction and it had to ensure the project's efficiency and profitability (Abdul-Aziz, 2010; Osei-Kyei & Chan, 2017, Babatunde & Perera, 2017). Whereas, from the KNA's TOP perspective, the legislation and implementation of relevant laws regarding partnership and investment were vital factors in implementing PPP projects successfully (Kang et al., 2018; Barker, 2020). The findings from the focus group discussions confirmed that implementation of the correct project value management systems throughout the project lifecycle enhanced the project's attractiveness for potential partners (Tang et al., 2010; Gudiene et al., 2014).

Participants also highlighted the importance of having a pre-set project brief which clarified customer requirements to generate an attractive project (Zhang, 2005; Sattout & Batwala, 2019). Findings also confirmed that involving private partners who had a talented workforce and better capacity added to the project's attractiveness (Muhammad & Johar, 2019). Good rapport, monitoring the transfer of resources and skills between partners were also found to be prominent factors for the success of PPP projects (Brookings Institute, 2014; World Bank, 2015). The findings also confirmed that the comprehensive and realistic valuation of project costs and benefits and prioritising project goals resulted in attractive projects (Alvesson & Spicer, 2019; Sattout & Batwala, 2019). The findings also confirmed that end-user involvement in the design and implementation of PPP housing projects

enhanced the market demand for the project and its overall attractiveness (Olander, 2007; Ng et al., 2010; Almarri, 2019).

The findings of this research identified the third CSF as a reliable consortium which contributed to the success of PPP housing sector projects. Findings in this regard confirmed that a reliable consortium from the public sector TOP's perspective was comprised of a strong and capable project team which offered innovative and cost-effective technical solutions, had effective project organisational structure and was able to efficiently address environmental health and safety issues (Li et al, 2005; Cheung et al., 2012; Babatunde, 2015). The findings confirmed that as per the end-users' perspective, the majority of the participants indicated that a strong and capable project team, cost-effective technical solution, effective project organisational structure and environmental, health and safety issues characterised a reliable consortium that guaranteed success in PPP project implementation (Abdul-Aziz, 2010, Tharun, 2014; Phang, 2016). The findings in relation to the private sector's TOP perspective stated that a reliable consortium was crucial for a PPP project implementation to succeed (Kavishe et al., 2018; Alola, 2019; Sattout & Batwala, 2019).

The findings of the focus group discussions stated that strong community relationship and robust private consortium resulted in a reliable consortium (Bohsali et al., 2014). Findings of focus group discussions also confirmed that transparency in selecting partners, including selection and monitoring criteria were vital to building a reliable consortium in PPP housing projects (Ahadzie et al., 2007; Wang, 2007; Coates 2008; Abdul-Aziz, 2010). Findings of focus group discussions also confirmed that periodic evaluation of service delivery and quality tailored to different stakeholders' specifications were vital in building a reliable consortium (Onyemaechi et al., 2015).

The findings of this research identified the fourth CSF as a sound financial package which contributes to the success of PPP housing sector projects. The findings confirmed that sound financial analysis, appropriate tariffs/tolls, high equity/debt ratio and Islamic loans were key features of a sound financial package in PPP projects (Zhang, 2005; Chou & Pramudawardhani, 2015; Liu et al., 2016). From the

end-users' viewpoint, most participants were convinced that successful PPP project implementation was based on the proper specification of the project's budget to avoid cost overruns (Babatunde & Perera, 2017; Kavishe et al., 2018; Alteneiji et al., 2019). From the public viewpoint, most participants showed that robust long-term debt financing packages which reduced financial risk to improve project performance resulted in a sound financial package in PPP housing projects (Alola, 2019; Davies, 2019). From the private sector's TOP perspective, the majority of study participants showed that a financial package which addressed financial risk using strong and reliable financial strategies enhanced PPP project implementation success (Deloitte, 2018; Barker, 2020). From the KNA's TOP perspective, the findings confirmed that the availability of public financial resources for investment influenced the success of PPP housing projects (Davies, 2019). The findings of focus group discussions confirmed that liquidity level among the project partners and credibility were found to be essential for a sound financial package in PPP projects (Mane & Pimplikar, 2013; Ndonye et al., 2014). Participants also confirmed high rates of return and compliance with Sharia law enhanced the customer's acceptance of the proposed financial packaging (Al-Saadi & Abdou, 2016; Alola, 2019; Almarri, 2019).

The findings of this research identified risk allocation as the fifth CSF which contributed to the success of PPP housing sector projects. The findings in this regard confirmed that optimal risk allocation was one of the underlying reasons for implementing PPP projects (Heravi & Hajihosseini, 2012; Chou & Pramudawardhani,2015; Hovy, 2015). From the end-user's perspective, risk transfer and risk-sharing were the main practices which resulted in optimal risk allocation (Osei-Kyei & Chan, 2017; Wang, 2018; Chan, 2018; Kavishe et al., 2018). The findings of this research confirmed that optimal risk allocation generally reduced transaction costs and improved efficiencies in PPP projects (Alola, 2019; APMG, 2019). From the private sector's TOP perspective, the findings stated that a reliable and suitable risk allocation was the crucial factor for PPP project success (EIB, 2018; Davies 2019; Barker, 2020). From the KNA's TOP perspective, most participants demonstrated that the PPP plan had to provide details about financing options, payment schemes for funding by the government,

documentation instructions and risk allocation mechanisms to allocate risks effectively (Biygautane, 2017; Babatunde & Perera, 2017; Bhatia, 2017). The findings of the focus group discussions confirmed the importance of appointing a competent project manager who should be authorised to allocate tasks to engaged partners and to monitor overall performance.

### 7.4 Research contribution

This section discusses the research contribution of this study. This research makes both theoretical and practical contributions which are presented next.

#### 7.4.1 Theoretical contribution

Both empirical findings and theory contribute to the development of PPP in Kuwait's public housing projects; in particular, the key success factors in the implementation of housing projects under PPPs. In addition, the research contributes to how we understand the question of what the key CSF for PPP projects in Kuwait are from three viewpoints, namely technical, organisational and personal perspectives. The multiple perspective theory has not been used in the building environment, and PPP has not been systemically theorised. One of the important contributions of this research is that it proposes an updated theoretical framework that could be used as a tool to understand the key factors that affect PPP implementation in housing and their correlation to stakeholders. So, the study provides an innovative methodical and analytical approach in PPP implementation of housing projects in Kuwait.

Although various research investigations have had different perspectives on the success factors of PPP implementation in housing projects, scholars have undertaken little research on Kuwait (Freeman et al, 2007; Aaltonen et al, 2008; Kwak et al., 2009). Understanding the needs and expectations of stakeholders is a part of the success factors. Evidently, little is known about the current status of PPP housing projects in Kuwait. No study has used multiple perspectives to study this area. In addition, scholars present different key success factors for PPP project implementation (Aaltonen et al, 2008). Hence, by analysing the CSFs from a different perception of PPP's stakeholders in a systematic

manner, the importance of Multiple Perspective Theory was highlighted in this research.

The multiple perspectives considered encompass heterogeneous representations, roles and viewpoints which can be adopted during PPP project implementation. The multiple perspective theory in this study is presented as a model for evaluating PPP implementation in housing projects. In the context of PPP project implementation, the study envisions the application of various perspectives, particularly in housing construction projects. Moreover, the noticeable contribution of this research is that it combines both the CSFs and multiple perspectives (TOP) of four key stakeholders of PPP projects, which are members of the public sector, the private sector, KNA and end-users. Despite the importance of CSF in housing sector projects in providing economic benefits, the researcher identified a gap in organising and incorporating CSFs within PPP projects in Kuwait specifically from the stakeholders' perspectives. This research concludes that PPP projects in Kuwait have been able to introduce another way of adding profitability in PPP projects by incorporating technical, organisational and personal perspectives of relevance in each of the identified CSFs. Since there is hardly any evidence of such a practice globally, this contributes to knowledge and provides an opportunity for further research.

In this research, a finding was reported that the unbiased role of the government in terms of encouraging the investment environment was an important CSF from the public sector's and KNA's perspectives. Nonetheless, the National Assembly has unrestricted power in the PPPs' procurement and implementation process. This is the exact opposite of good governance, as it can lead to administrative misuse in PPP projects. Thus, with the lack of impartiality in the PPP's procurement and implementation process, liability is a major concern. Hence, findings made here are a notable contribution to the accountability and transparency policy in PPP projects.

#### 7.4.2 Practical contribution

The findings presented in this study make practical contributions. One of the main practical contributions in this investigation is the comprehensive insight into CSFs for the implementation of PPP housing projects in Kuwait considering the two case studies used (KAPP and PAHW). With the

help of these two case studies, it is revealed that technical, organisational and personal standpoints help explain PPP housing project implementation. The implication is that to ensure effective PPP implementation, the five identified CSFs of investment environment, reliable consortiums, attractive projects, financial package and risk allocation must be emphasised considering technical, organisational and personal factors. This helps increase the proper understanding of CSFs influencing housing project implementation.

The findings of this research which are identified as the five CSFs of investment environment, reliable consortium, attractive project, financial package and risk allocation can assist the practitioners in charge of PPP projects to better anticipate the future challenges and to subsequently manage them. The utilisation of the TOP perspective in each of the five reported CSFs has provided a practical framework by highlighting further sub-factors in each of the five CSFs which should be used by practitioners in the KAPP and PAHW to measure the performance of PPP projects. Furthermore, it can also help practitioners to monitor and understand PPP projects in challenging environments for acquiring benefits and making continuous improvements to support key activities efficiently and effectively. Using the findings presented, the KAPP and PAHW team can outline an action plan to manage PPP projects by gaining a better understanding of the requirements of the various stakeholders, empowering the TOP perspective by adding value from the stakeholders' perception as a means to adding economic value and long-term success to PPP housing sector projects.

### 7.5 Research limitations

Despite the anticipated importance of the multiple perspectives of stakeholders and the inclusion of TOP perspectives in the CSFs, this research has certain limitations which are as follows:

1. Since this study was a case study analysis, access to various documents such as project files in relation to PPP was essential to answer the research question of this study. However, the researcher was not allowed to view all the internal documents and access to such documents

was restricted as a result of which extensive, cross-comparison of information between the two case-study organisations of KAPP and PAHW was not possible. Although relevant information in relation to PPPs during various phases of project lifecycle was still provided, information regarding current PPP projects was not disclosed to the researcher due to it being commercially confidential material. Nonetheless, adequate information was provided based on participants' experiences which enabled the researcher to answer the research questions of this study.

- 2. Participants tried to avoid the personal bias in answering the interview questions, but the participants were more interested in sharing the successful PPP projects and did not provide extensive information regarding failed PPP projects which could be another limitation in terms of the findings of this research as participants may have exaggerated the information to provide the answers with which they felt comfortable as opposed to providing accurate information which may reduce the reliability of this research.
- 3. This study was aimed at the exploring the key CSFs of Kuwait's PPP which are still based on best practice globally, Nonetheless, PPP is generally a country-specific practice and the responses produced are based on the Kuwaiti scenario with the inclusion of two case studies of public-sector organisations KAPP and PAHW. Thus, the application of the findings of this study to other countries may require further improvement as per their own context. Thus, the generalisation of findings may be possible in a limited manner as countries with a comparable context which may implement what they consider suitable. Nonetheless, most countries can still benefit by combining multiple TOP perspectives of stakeholders with the key CSFs to improve the implementation of PPP projects as argued in this research.

Despite these limitations, the researcher has been able to accomplish the aim and objectives of this study.

## 7.6 Suggestions for future research

The findings of this study are built on a particular aim and specific case study research approach based on a qualitative methodology adopted to fill the gap identified. Hence, the researcher deems that this study is the first step to future research based on its results. Since this study is based on public sector organisations, future research can be performed to compare the findings of this study with private sector organisations in Kuwait to determine the extent to which the findings of this research are accepted or rejected when analysed from the private sector's perspective. Since this study is based on qualitative methodology, future research can be performed using a quantitative methodology to further validate or reject the findings of this study. Furthermore, success of PPP projects is influenced by various challenges such as lack of finance, technical and human resource shortage and lack of legislation; hence, future research can be performed to analyse the challenges from stakeholders' TOP perspectives. In addition to this, future research can be performed on how to integrate and test the findings of this research in an actual PPP project in Kuwait. Lastly, future research can be performed within the context of other Middle Eastern countries with similar political and economic environment such as the United Arab Emirates, Qatar, Oman and Saudi Arabia to identify areas of collaboration and development of sustainable PPP housing sector projects based on the integration of stakeholders' perspectives and key CSFs.

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# Appendices

## Appendix A Ethical Approval



#### DECLARATION OF ORGINALITY - CONDUCT OF ASSESSED WORK

#### ASSESSED WORK WHICH DOES NOT HAVE THIS FORM ATTACHED WILL NOT BE ACCEPTED

Research Degree Programme; PhD full time						
Assessment Title internal Evaluation						
Title of the report Multiple Perspective of Public-Private Partnership Project Success: The Case of Kuwaiti Housing Initiative						
Family name of candidate <b>ALRASHIDI</b> (jp, BLOCK CAPITAL LETTERS)						
Given name of candidate MOHAMMAD(jp, BLOCK CAPITAL LETTERS)						
D number: @00407069						
n presenting my Interim Assessment / Internal Evaluation (please delete as appropriate) I declare that I nave read and understood the University Policy on Academic Misconduct available at <a href="http://www.salford.ac.uk/about-us/corporate-information/governance/policies-and-procedures/browse-by-theme/2">http://www.salford.ac.uk/about-us/corporate-information/governance/policies-and-procedures/browse-by-theme/2</a> ) and that:-						
this work is my own     the work of others used in its completion has been duly acknowledged						
Signature of candidate: <b>M</b> . <b>Alrashidi</b>						
n the event of any uncertainty, students should consult the members of his/her supervisory team.						

Oct 2015 v1

http://www.pg.salford.ac.uk/page/progression forms



Research, Innovation and Academic Engagement Ethical Approval Panel

Research Centres Support Team GO.3 Joule House University of Salford M5 4WT

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30 August 2016

Dear Mohammad,

<u>RE: ETHICS APPLICATION ST16/136</u> – Developing a strategic approach for effective implementation of Public Private Partnership for the provision of housing projects in Kuwait; based on stakeholders perception

Based on the information you provided, I am pleased to inform you that your application ST 16/136 has been approved.

If there are any changes to the project and/ or its methodology, please inform the Panel as soon as possible by contacting <u>S&T-ResearchEthics@salford.ac.uk</u>

Yours sincerely,

Prof Mohammed Arif

Chair of the Science & Technology Research Ethics Panel Professor of Sustainability and Process Management, School of Built Environment University of Salford Maxwell Building, The Crescent

Greater Manchester, UK M5 4WT Phone: + 44 161 295 6829 Email: m.arif@salford.ac.uk

### **Appendix B** Email invitation

Dear Sir/Madam,

### **Invitation to participate in research study**

My name is (Q888)i and presently I am undertaking my PhD, at the School of the Built Environment, The University of Salford, Manchester, UK. My PhD topic is; 'Developing a strategic approach for effective implementation of Public Private Partnership for the provision of housing projects in Kuwait'.

In my research I am investigating, analysing and assessing the factors that would contribute to the effective implementation of PPP's in Kuwaiti housing projects. Moreover to draw a set of recommendations to guide Kuwaiti decision makers implementing PPP housing projects.

I would like to invite you to participate in this research study by being one of the participants. If you agree to participate in this research these activities will be scheduled at a convenient time for yourself.

The interview will be conducted privately with only yourself and myself (as the researcher) present.

The Ethics Committee of University of Salford has granted ethical approval for this study.

Please contact me if you are happy to take part in this research experiment and interview.

My e-mail is: <u>@edu.salford.ac.uk</u> and the telephone number is: +447qqqqqqqqq.

Your attention to this matter is greatly appreciated.

Best regards,

Q888

PhD Candidate

## **Appendix C** Research Participant Consent Form

Title of Project: **Developing a strategic approach for effective implementation of Public Private Partnership for the provision of housing projects in Kuwait** 

RGE	$\neg \mathbf{p}_{\alpha}$	+ NL	٠.
KUIDA	$\sim r$	: 1110	).

Name of Researcher: Q888 - PhD Student

School of Build Environment – University of Salford

E-mail: @edu.salford.ac.uk

	Please tick the appropriate boxes	Yes	No	NA
1.	I confirm that I have read and understood the project information sheet for the above study dated DD/MM/YYYY			
2.	I have been given the opportunity to ask questions (face to face, via telephone and email)			
3.	I understand that my participation is voluntary and that I am free to withdraw at any time, without giving reason.			
4.	I agree to take part in the above study.			
5.	I agree to the use of anonymised quotes in publications			
6.	I understand my personal details such as name, phone number and address will not be revealed to people outside the project.			
7.	I understand that my words may be quoted in publications, reports, web pages, and other research outputs but my name will not be used unless I requested it above			

Name of Participant	Date	Signature

### **Appendix D** Participant Information Form

Name of Researcher Date Signature

#### **Participant Information Form – Date**

My name is Q888, a PhD student at the School of Build Environment in the University of Salford, Manchester, UK. I am currently conducting my PhD research program, which is aimed at 'Developing a strategic approach for effective implementation of Public Private Partnership for the provision of housing projects in Kuwait'. I would like to invite you to take part in this research project.

Please, read the following information carefully and make sure you understand the research concepts. Kindly, if you have any questions or are uncertain on anything, do not hesitate to ask me. Please take time to decide whether or not you wish to take part in this Interview.

#### What is the purpose of the study?

In Kuwait, financing of mega project such as Housing, power generating, water treatment, transportation etc has been primarily undertaken by the government. But owing to the huge demand for developing new projects of housing and rehabilitating the existing one, private sector participation in the developing and operating of such project is now seen as accepted concept.

The Kuwaiti government's declared intention to use a public-private partnership model for the construction of housing projects is evidence of a change to legislative and business culture endorsed by the IMF and World Bank. An efficient implementation of PPP in Kuwait is timely, as it coincides with the Kuwaiti Government desire to increase the role of the private sector in housing projects.

Toward the development of such implementation this research will identify and analyse various criteria and various critical success factors (CSFs) for PPP housing projects. This research will investigate the early progress of PPP's from the private investor and the Kuwait Authority for Partnership Projects' perspective, using interviews with well-informed actors to help assess whether the reforms to Kuwait's investment culture will make it amenable to the successful application of free market values.

### Why have you been invited?

You have been invited to take part in the research project because you are one of PPP potential stakeholders, and the researcher wants to explore, analyse and assess the factors that would contribute to the effective implementation of PPP's in Kuwaiti housing projects

.Moreover to draw a set of recommendations to guide Kuwaiti decision makers implementing PPP housing projects. Through your participation, you can have an effective influence on how PPP could be implementing in future.

## Do I have to take part in the interview?

It is your choice to decide whether or not to take part. Indeed, if you do join the study, you have the option to withdraw at any time without giving reason. If you decide to be a part of the research, you will be required to sign a consent form.

### What will happen to me if I take part in the interview?

Once you have decided to be a part of the research study, as the researcher, I will set an appointment for the interview that is suitable and convenient to you. You will need to allocate around one hour for interview to achieve a specific task.

### What are the possible benefits of taking part in the interview?

There is no direct benefit from taking part in this research. But your share will constitute a significant source of data, which will contribute to the understanding of how PPP can effectively be implementing. Furthermore, the data collected by the researcher will be the main source for analysing the research phenomenon and activities. We believe that finding of this research will help us to draw a set of recommendations to guide Kuwaiti decision makers implementing PPP housing projects

### What if there is a problem?

If you have any problems during the experiment and any concerns, you can ask or speak to the researcher who will help you and answer your questions and help to solve any problems.

## What will happen if I don't want to carry on with the study?

Your participation in this research project is voluntary and you can withdraw from the study at any time without giving a reason. If you withdraw from the research project, all data we collect from you will be used for the research unless you specifically request it be deleted; at that time, all data will be deleted and destroyed, and your name and information will be removed from all relevant media.

## Will my taking part in this study be kept confidential?

All information acquired and collected for this research project and study will be kept strictly confidential. In addition, your personal information will be maintained securely, and the researcher will use a code to identify the result. In addition, printed materials or hard copies will be stored in a secure and locked cabinet at the University of Salford.

## What will happen to the result of the research study?

The result of the research will used for achieving the research project as a part of the researcher's thesis. Moreover, it will use for publishing articles in international academic journals. Furthermore, it will use for conference publishing and presentation.

**Appendix E Interview Questions** (Key CSFs of PPP implementation in housing projects in Kuwait based upon TOP perspectives)

#### **Interview questions for Public Sector representatives**

- 1. From the public perspective, how does investment environment contribute to the success of PPP housing sector project implementation?
- 2. From the public perspective, to what extent the perception of attractive project contributes to the success of PPP housing sector project implementation?
- 3. How does the public view of consortium reliability contribute to the success of PPP housing sector project implementation?
- 4. Why is it essential to have sound financial package so to contribute to the success of PPP housing sector project implementation?
- 5. How does risk allocation contribute to the success of PPP housing sector project implementation?

#### **Interview questions for Private Sector representatives**

- 6. From the private sector perspective, how does investment environment contribute to the success of PPP housing sector project implementation?
- 7. From the private sector perspective, to what extent the perception of attractive project contributes to the success of PPP housing sector project implementation?
- 8. How does the private sector's view of consortium reliability contribute to the success of PPP housing sector project implementation?
- 9. Why is it essential to have sound financial package for the success of PPP housing sector project implementation?

10. How does risk allocation contribute to the success of PPP housing sector project implementation?

#### Interview questions for Members of Kuwait's National Assembly

- 11. From the National Assembly's perspective, how does investment environment contribute to the success of PPP housing sector project implementation?
- 12. From the National Assembly's perspective, to what extent the perception of attractive project contributes to the success of PPP housing sector project implementation?
- 13. From the National Assembly's perspective, to what extent consortium reliability contribute to the success of PPP housing sector project implementation?
- 14. From the National Assembly's perspective, why is it essential to have sound financial package for the success of PPP housing sector project implementation?
- 15. From the National Assembly's perspective, how does risk allocation contribute to the success of PPP housing sector project implementation?

#### **Interview questions for End User**

- 16. From the end user's perspective, how does investment environment contribute to the success of PPP housing sector project implementation?
- 17. From the end user's perspective, to what extent the perception of attractive project contributes to the success of PPP housing sector project implementation?
- 18. How does the end user's view of consortium reliability contribute to the success of PPP housing sector project implementation?
- 19. Why is it essential to have sound financial package for the success of PPP housing sector project implementation?
- 20. How does risk allocation contribute to the success of PPP housing sector project implementation?

## **Thanks**

## **Appendix F: Case-Study Profiles**

The provision of good standard housing for its citizens has been a priority of the Kuwaiti government ever since the 1950s. To this end, a number of steps were taken and related institutions were established, as outlined in the following part (PAHW, 2006): • In 1954, The Construction Council was created, which was the starting point for the development of a number of 2000 multi-model housing units in five different areas, namely, Al-Shamiya, Kaifan, Fayha, Salmiya, and Dahiya. • In 1956, The Public Domains Department was

founded and put in charge of housing allocation. • In 1958, The Public Domains Department was aided in its work by the Housing Committee. • In 1960 The Credit Bank was established.
• In 1962, the responsibility of allocating state housing was relegated to the Ministry of Social Affairs and Work. 199 • In 1965, the Credit Bank was renamed the Credit and Savings Bank to coincide with its new role in helping citizens to construct their own houses by provisioning them with the necessary loans. • In 1974, the General Organisation for Housing was formed and put in charge of the construction of state housing for citizens. • In 1975, the responsibility of allocating state housing was transferred from the Ministry of Social Affairs and Work to the Ministry of Housing. • In 1986, the integration of the Ministry of Housing with the General Organisation for Housing took place with the purpose of improving the planning, design, construction and distribution of state housing. • In 1993, the Public Authority for Housing Welfare (PAHW) was created.

With respect to Kuwait, there were no specific bylaw for housing provisions till the establishment of the National Housing Authority (NHA) in 1974. Such institution was later converted to Public Authority for Housing Welfare (PAHW), which was charged with the responsibility of the housing welfare projects and specification such as location, house size, etc. However, since its inception, PAHW could not be able to cope up with housing demands and there was a significant backlog of 19,000 housing applications in 1980, which later on tend to increase and demand-supply gap of housing provision is getting significant. This incapacity and incapability of PAHW and Kuwait government to provide housing provisions at a required rate has induced the citizens to look for alternative means of accommodation. In order to meet this increasing demand, the Kuwait government also considered alternative solutions such as apartment housing provision. In this regard, only two projects were completed with multi storey residential buildings. However, it trebled the density problem of

the city to 21.3 units per hectare from only 8 housing units / hectare in the city center. In addition, various residential apartments were converted into commercial 200 properties due to lack of appropriate lease regulation and other issues which caused failure of apartment housing provision in Kuwait City (Alshalfan, 2013).

Although it is unthinkable that a housing crisis could occur in a country which is one of the highest per capita income countries, but this is the reality of Kuwait. Demand for houses is continuously increasing than its supply from PAHW. In a public survey of real estate company owners and local citizens conducted by Al-Ghannam et al. (2012) the article noted that "It has become impossible for the young generation to buy a family home compliant with their basic needs". A local family in Kuwait is entitled to any of three options if it requires a housing provision; first is the house of standard size built and provided by PAHW along with 150KWD rent allowance on monthly basis in entire waiting period; second is standard plot at nominal value along with 70,000KWD interest free long term loan for construction from Savings and Credit Bank of Kuwait as well as 150KWD monthly rental 201 allowance during waiting period; and lastly, an interest free long term loan of 70,000KWD for buying or building a house/apartment (PAHW, 2011). In Kuwait, the housing problem is one of the toughest challenges that the Kuwaiti government and parliament have been working hard to address in recent times. The waiting list of housing applications at the PAHW is expected to touch 130,000 within few months, the waiting list of housing applications at the Public Authority for Housing Welfare (PAHW) is expected to touch 130,000 within few months, marking a record number in Kuwaits history (PAHW, 2015). The waiting time to get a house is increasing upto eighteen years (Al-Nashi, interview, 16 April 2015). This critical situation of increasing backlog of housing applications is also increasing pressure on PAHW for providing more houses in less time frame as now protests (Natir Bait Group) has been started by the citizens of Kuwait demanding for their basic housing rights (Al-Dudlaijan 2012).

However, as PAHW is solely responsible for building and construction of houses in Kuwait, the slow completion progress of housing provisions is the root cause of this delay in houses delivery in Kuwait which, in turn, highlighted the housing crisis in the country. Every married Kuwaiti couple is entitled to a house or apartment, or land and a loan to build or buy one. But with this huge backlog of housing applications, most of those waiting not expect to have their own accommodation soon (PAHW, 2015). Moreover, this rental allowance given by the government is also putting financial burden on the government. PAHW seems to be incapable of handling this housing crisis alone because of lack and shortage of capital budget, human resources and expertise and knowledge in this particular sector. Meanwhile, the State Minister for Housing said that the funding system of the project is unclear. The Housing Ministry will study ways in which the government can purchase houses, while the private companies invest on those houses for 45 years, which highlighted the significance of involving private sector in creating a solution of housing crisis of Kuwait. It is clear that PAHW in need to adopt a new strategy to involve private sector in the provision of housing projects to fulfil its institutional commitments (PTB, 2015). The slow progress in completion of residential projects has been the main cause for the record levels of waiting list applicants, the rate indicates that PAHW is in crisis, and is incapable of meeting the ever-growing housing demands, coupled with government's inability to devise prompt solutions. Every married Kuwaiti couple is entitled to a house or apartment, or land and a loan to build or buy one. But with a backlog of 106,747 housing applications, most of those waiting not expect to have their own accommodation soon (PAHW, 2015). Meanwhile, the State Minister for Housing said that the funding system of the project is unclear Kuwait has been recognized in Golf countries to follow the strategic approaches in participating number of projects. It is a real fact that Kuwait considers outflows in financial and commercial projects. However, the dilemma has been rising that reflect transitional factors in the context of Private sector growth

to contribute to solving the housing crises. The most of Kuwait based companies are unable to regulate their productive growth extents by converging the streams of drastic flow with the strong partnerships. The comparative and descriptive reports on commercial and financial concerns have been produced to highlight the issue of housing that is not focusing on the private companies in Kuwait (diva-portal.org, 2018).

Public Authority Of Housing Welfare (PAHW) The Public Authority of Housing Welfare (PAHW) has been founded in 1993 in keeping with the promulgations of law No (47) and it is the department of the Kuwaiti government, which is in charge of the construction of housing and its allocation to Kuwaiti citizens who are eligible for it. As has already been mentioned, to qualify for state housing, a Kuwaiti citizen must be married; in return, the PAHW offers a choice of three types of housing, namely, plot, flat, and ready-made houses, which the citizens can opt for based on their preferences. By making available these three different types of housing, the Kuwaiti government seeks to ensure good standard housing for every one of its citizens. In addition to these three housing types, there is another choice that is taken into consideration, namely, the concrete framework (PAHW, 2006). Meanwhile, apart from its roles in the construction and distribution of housing, the PAHW is also responsible for making sure that the private sector companies which are involved in the construction and housing sectors are operating properly and fulfilling their duties accordingly (PAHW, 2006). In Kuwait, no other real estate development concern is more expansive than the PAHW, which has at its disposal a yearly budget of over KWD 200 million. To make sure that Kuwaiti citizens enjoy a good standard of housing, the PAHW offers subsidised housing to people who meet the specified requirements. Regardless of whether they are a plot of land, a flat or a readymade house, all residential units offered by the Kuwaiti government are about the same size (400 m2). However, eligible citizens are only granted housing on the condition that they repay the cost of their chosen housing unit in fixed payments every month

over a period of two decades (PAHW, 2006). Ever since it has been established, the PAHW has successfully overseen the construction and allocation of more than 70,000 housing units. What is more, in addition to residential housing, the PAHW has also contributed to the development of public institutional buildings such as schools, police stations, mosques, and libraries. In 2002, the number of state housing and plots of land that have been allocated in different areas of the country reached 768 and 3398, respectively. On the downside, at present there is an extremely long waiting period of between 10 and 18 years for citizens who wish to purchase a house through the scheme offered by the PAHW. This issue has not been advanced in any way by the several large-scale projects that the PAHW has recently completed, including the urban development project known as the Al Qurain Project, which cost KWD 500 million and covers an area of 30,000 km2 capable of accommodating 100,000 people (PAHW, 2006). Given that the demand exceeds supply, it can therefore be deduced that Kuwait is currently confronted with a housing crisis. As highlighted above, in addition to residential housing units, the PAHW is also in charge of projects for the construction of public buildings and infrastructure.

Project delivery in PAHW There are three types of home that the Kuwaiti government puts at the disposal of its citizens, namely, plot, flat and ready-made house, and which married individuals can choose from 211 according to their preferences. However, regarding the option of a ready-made house, it has given rise to a significant issue, in that individuals start to make changes both to the exterior and interior of houses on grounds that the original design is incompatible with their needs or they simply do not like it. Such changes brought by citizens to state houses immediately after they move in result in unnecessary costs for them as well as for the government. Option 1 – Plot and Mortgage Citizens who choose this option of the plot and mortgage are provided a plot of open land measuring 400 m2 together with a loan amounting to 70,000 KWD (~ \$250,000) which needs to be repaid over an established

period of time with no added interest. Upon completion of infrastructure in a given area, the housing units are immediately allocated to citizens (PAHW, 2007a). The main attraction of this option is the fact that citizens are given the opportunity to select not only their preferred design and shape of the house, but also the number, size and configuration of rooms. As a result, the majority of citizens have a clear preference for this option, by comparison to the options of ready-made house or flat. A number of reasons, most commonly cited in favour of the plot and mortgage option have been identified by Al-Khaiat et al. (2005), including ability to select an individual design that stands out from the other surrounding designs (100%), the fact that no modifications have to be made after the house is completed (84%), the ability to specify the number of rooms and organise the building area, according to requirements (74%), improved finishing (70%), the opportunity to create a basement (66%), and optimal financial situation (50%). It can be clearly observed from the above proportion of expressing preferences that people in Kuwait wish to have houses which do not have the same design as those of their neighbours and which have ample space and a sufficient number of rooms, regardless of whether or not all the space is necessary immediately upon moving in.

Nevertheless, in spite of the clear advantages that the plot and mortgage option has, there are also some limitations to it, as was revealed by the survey conducted by Al-Khaiat et al. (2005). This survey indicated that problems during construction were encountered by a proportion of 67% of owners, while 70% of citizens expressed the belief that the house construction process could have been made less difficult if the PAHW had provided them assistance, and a proportion of 42% of citizens stated that they would prefer a partially constructed housing system, referred to as concrete framework, if this were made available.

Plot and Mortgage housing in Kuwait Option 2 – Flats Standard Flat, is another type of housing unit offered by the Kuwaiti government. The Al-Sawaber Project is one example of a construction development of flats (PAHW, 2007a). However, statistics clearly show that

Kuwaiti citizens have a preference for living in single-unit houses than in flats, since only 1088 flats have been allocated until now.

Situated in the centre of Kuwait City and covering an area of 24.5 ha, the Al-Sawaber project consists of 33 eight-story buildings containing a total of 524 flats, each with a floor space measuring 236 m2. Of the various problems affecting the Al-Sawaber project, the most significant one is the fact that, due to its location in the heart of the city, it is subjected to the noise caused by the relentless traffic. Furthermore, most people are used to living in twostory villas and therefore eight-story buildings do not appeal to them. As a result, the number of qualified families who have chosen this type of housing unit has not exceeded 300. AlKhaiat (1989) observed that, even in the case of families who chose this option, the only likely reason that prompted them to do so is so that they did not have to wait for 8-11 years until they got allocated a house.

Option 3 – Black Concrete The cost of the black concrete framework is 25,000 KWD (~ \$90,000). The Kuwaiti government offers citizens who opt for this choice the cost difference between the total cost of a readymade house and the cost of the executed framework, to which 25% of the cost difference is added; therefore, the overall cost amounts to around 62,500 KWD (~ %230,000) (Al-Saeed, 2007). The only elements that are provided with the concrete framework are footings, columns, beams and slabs. This gives the owners the chance to design the house, both inside and out, according to their liking (Al-Saeed, 2007). As previously mentioned, the option of concrete framework means that the eligible Kuwaiti citizens are given unfinished constructions by the PAHW which they can then complete as they wish or see fit (Mandi, 2006). The defining features of this system are as follows: & The PAHW has limited involvement in the different stages of construction of the housing units, enabling it to enhance its productivity in constructing and distributing housing units, thus reducing the extended waiting time. & The Kuwaiti citizens receive free rein to design and

organise their houses based on their preferences and needs, thus providing a solution to the issue of modifications affecting ready-made houses. Black Concrete Option in Kuwaiti welfare housing Option 4 – Ready-made Houses State houses are housing units that are allocated to eligible citizens in a completed form. With an area of 400 m2, this type of housing has a price tag of around 55,000 KWD (~ \$200,000), which has to be repaid with no added interest via monthly instalments over a period of two decades (PAHW, 2007a). In contrast to the over 24,000 plots and around 1100 flats, about 47,000 ready-made houses have been allocated to Kuwaiti citizens to date. The main issue with ready-made houses is that they do not satisfy citizens' need or desire for a unique design and specific layout. As a result, many occupants take it upon themselves to make changes to the houses, leading to unnecessary costs, both for them and for the PAHW (Al-Khaiat et al., 2005). The Kuwaiti government created the PAHW to be in charge of all aspects of social housing, including construction and distribution of housing units, and to cooperate with different governmental institutions (PAHW, 2006). The PAHW has completed planning of six new urban development projects spread over wide areas in the northern and southern parts of the country, namely, Jaber Al-Ahmed, Sa'ad Al-Abdellah, Sabah Al-Ahmed, Khairan, Sabuya City, and Al-Mitla'a. Aside from housing projects, the PAHW is also involved in the construction of public infrastructure and institutional buildings, such as schools, healthcare centres, sports clubs, police stations, university departments, road networks, electricity networks, water systems, telecommunications systems, as well as sanitary and rainfall drainage systems (PAHW, 2006). Kuwait Authority for Partnership Projects (KAPP) Both KAPP and PAHW are the reconstitutions of previous government regulatory institutions, the Partnerships Technical Bureau and the National Housing Authority respectively. The constitutions, the personnel and the functions remain relatively unchanged, but their powers appear to increase. Sometimes broadening powers can slow rather than speed the process.

The emergence of PPP based projects have been well recognized when construction sector introduced similar types of arrangements for project delivery. In public infrastructure development related to construction and particularly for housing projects, the PPP model has been in practices since many years in different countries such as the United Kingdom, Thailand, Russian, Mexico, Bulgaria, South Africa, Pakistan, India, Malaysia and Egypt among many others (Abdul-Aziz and Kassim, 2011). However, the objective of introducing the PPP model in housing projects was different in different countries. For instance, USA local community based housing developers were motivated to partner with private funders to introduce affordable housing projects because of strict budgetary constraints (Pomeroy et al, 1998). Similar objectives also induced local governments in Australia (Maguire & Malinovitch, 2004), Canada (Pomeroy et al., 1998), India (Adusumilli, 1999) and the UK (Webb & Pulle, 2002) to join hands with the private sector to provide appropriate housing for their public. There is enough existing evidence of success and some failure PPP based projects in the world; however, the debate on this topic has gone beyond its merits and demerits to focus on the structuring the PPP projects in order to achieve the goal of public welfare (Yong 2010). Hence, the focus of current research is on assessing the contribution that public private partnerships can make towards housing provision in Kuwait. It not only analyse the benefits of public private partnerships, especially with regards to the provision of housing, but also analyse the context of Kuwait and present strategic guidelines for successfully forming such public private partnerships that can, then, fill the gaps left by the public sector in the provision of housing. The government of Kuwait represented by the Kuwaiti Authority for Partnership Projects (KAPP) has devoted to improving the economic status of the country. The country is seeking a rapid expansion and engaging private partners has been viewed as the best alternative of speeding up economic growth. Private investors have a lot of money that they seek to invest, but due to conflicts of interests, in most cases,

they are unable to make the investments. KAPP platforms provide an opportunity for private investors in partnering with the government and hence creating a better and improved Kuwait where citizens standards of living will highly increase. The KAPP aims at leveraging the private sector skills and expertise to develop quality infrastructure and service in a manner that gives value for money to the Kuwaiti citizens. KAPP is initiating projects of high impact to the Kuwait people in the power sector, education sector, health sector, transportation, real estate department, communications sector, and solid waste management sectors. These projects require a lot of expertise and resources and such partnerships will go a long way towards making the lives of the people of Kuwait better. A 2014 law established the Kuwait Authority for Partnership Projects (KAPP) to replace the failed 2008 Partnership Technical Bureau. The significant difference is that the Higher Committee under the PPP Law has a considerably better chance over the ability of individual public entities to enter into PPP based projects (KAPP PTB, 2017). To promote collaboration between the public and private sectors with the aim of developing its infrastructure, the Government has revised the legal and institutional aspects of its PPP strategy to clarify the regulatory framework around PPP's. This clarification has not involved a change of personnel, but has involved a change in legislation to include more investor friendly provisions, particularly in relation to attracting finance, and has added to the regulator's powers. Under the New PPP Law, the Partnerships Technical Bureau (PTB), previously responsible for PPP projects, is replaced by KAPP. The constitution of the PPP Higher Committee is relatively unchanged, but its powers are broader. KAPP is expected to have greater autonomy and authority than the PTB, but their responsibilities are largely similar (Oxford Report, 2016), Notably, KAPP will have the power to establish public joint stock companies for PPP projects. In addition, KAPP's powers include: assessing feasibility studies for PPP projects; developing contract templates; drafting PPP agreements; submitting recommendations to the PPP Higher Committee; following up on the implementation of PPP projects; The KAPP website states that the "Government of Kuwait has established a clear regulatory framework for implementing PPP projects". The laws and regulations establish high levels of transparency and certainty throughout the PPP process – both key to the success of a PPP program. The framework includes general laws and regulations as well as other relevant bylaws, but there are few, if any, detailed specific regulatory framework that offers an implementation plan and maps priorities for stakeholders and organisational bahviour.

Aim & Objectives of the KAPP aims at utilizing the skills and expertise possessed by the private sector organizations in building high impact projects that will improve the life of the people of Kuwait. On behalf of the Government of Kuwait, KAPP was established to: • Enhance Economic Performance Increase the Gross Domestic Product of Kuwait and diversify its resources by developing the country's infrastructure, most importantly in transportation, communication, health and education, the KAPP empower Kuwaiti citizens engage in different economic activities that will increase their individual income hence the GDP of the country. Enhance stakeholders' participation Promote private sector participation in development projects. In order for the Government to leverage on the skills and expertise of the private to develop the identified projects, it has to join hands with the private sector so that it can achieve its dream of implementing such high impact projects to the people. All this will be initiated and supervised by the KAPP. • Enhance Service Quality Improve the quality of services offered by the public sector. The Kuwait public sector has been in the limelight for its laxity in service delivery, on the other hand, the private sector is associated with a high level of efficiency and responsiveness in service delivery. The collaboration is expected to bring the expertise and dedication in the private sector to the public sector and improve on its service delivery to the people of Kuwait. • Enhance Human Development and Manpower Promote human development and generate jobs for the people of Kuwait. The collaboration in developing the high impact projects in the country will bring job opportunities to the people working on the projects, offering services like transport, food and even accommodation to the workers. When the projects are complete, job opportunities will open up as the government looks to employ people to work on those projects like health facilities, in learning institutions, manning transportation facilities etc.

•Scientific and Technological Development To promote scientific research and technological development. The collaboration between the private and public sector is aimed sharing the skills and expertise possessed by both sectors to enable smooth running and completion of the identified projects. The projects need to be completed using modern technology and the fact that the government is not outsourcing such technologies from other developed countries provides an opportunity for the local experts to engage in more research to meet the needs of these projects. KAPP Role The KAPP in collaboration with other state authorities and agencies is mandated to do the following: • To conduct surveys and other initial studies to identify development projects that will be of high impact to the people of Kuwait. • To develop the Pubic Private Partnership concepts, carry out pre-feasibility studies and selecting qualified PPP transaction advisors • To conduct studies on the projects as well as unsolicited proposals from the Higher Committee, to evaluate the economic as well as technical feasibility with the aim of providing recommendations on tendering of the projects identified. • To manage the development of feasibility studies and procurement processes for the Public Private Partnership projects. • To draft contracts stipulating the terms and conditions and other provisions of the Public Private Partnership projects • To develop mechanisms laying out the methods of project follow ups and evaluation of project performance. • To oversee project implementation, follow ups and provision of technical assistance to the public establishments over the whole life cycle of the projects. • To arrange award to bidders who

have won tenders and guide the process of creation of joint stock firms. • To prepare annual reports on the development of committed projects and submit the to the High Committee for approval before they are forwarded to the cabinet. KAPP Higher Committee The Higher Committee was established under the Provisions of Article 11 of Law No.7/2008 and Decree No. 145/2008. Chaired by the Minister of Finance, it is the committee responsible for studying and approving PPP projects and tendering them pursuant to Law No.7/2008. As such, no public entity may enter into a PPP contract without the approval of the Higher Committee.

The role is committee is to approve the public entities' contribution into PPP contracts. They also approve project concepts and Unsolicited Proposals before they are advertised and tendered. Furthermore, they develop general policies for projects and Unsolicited Proposals of strategic importance to the national economy. Selecting the relevant public entities that will partake in the tendering process and the signing of the PPP contract have also laid into their responsibilities. Then, they supervise the public entities that monitor PPP projects implementation and operation.