

How to Cite This Article: Sahibzada, A. R., Dard, A. R., Rahimi, R., & Sohail, M. (2023). Assessing Critical Success Factors of Public-Private Partnership Projects in Afghanistan. *Journal of Social Sciences Review*, 3(1), 533–542. <https://doi.org/10.54183/jssr.v3i1.144>



Assessing Critical Success Factors of Public-Private Partnership Projects in Afghanistan

Abdul Raqib Sahibzada	Lecturer, Public Administration Faculty, Nangarhar University, Jalalabad, Afghanistan.
Abdul Rahman Dard	Lecture, Economics Faculty, Nangarhar University, Jalalabad, Afghanistan.
Raihanullah Rahimi	Lecturer, Public Administration Faculty, Nangarhar University, Jalalabad, Afghanistan.
Mohammad Sohail	Lecturer, Department of Education, Abdul Wali Khan University, Mardan, KP, Pakistan.

Vol. 3, No. 1 (Winter 2023)

Pages: 533 – 542

ISSN (Print): 2789–441X

ISSN (Online): 2789–4428

Key Words

Public Private Partnership,
Infrastructure Development,
Assessing Effectiveness of PPP,
Critical Success Factors (CSF),
Economic Development, Afghanistan

Corresponding Author:

Abdul Raqib Sahibzada

Email: sahilabo@yahoo.com

Abstract: Since governments around the globe are established to facilitate and provide a comfortable living standards to its citizens, they are working in various fields and their responsibilities are increasing day by day. In some areas, the governments cannot provide proper services to their citizens/people due to the lack of skills and sufficient budget. For this reason, it shares some of its activities with the private sector for a long period. This action is called Public-Private Partnerships (PPPs). This structure was first introduced to Afghanistan with the help of Dr. Ashraf Ghani in 2016 by announcing the PPPs Policy. Currently, in Afghanistan, there is very little or even no information available about the Effectiveness of the PPPs Project and programs. Hence, this research was conducted in order to explore the topic and investigate the critical success factors of PPPs Projects that were implemented in Afghanistan. The study is analytical and data are collected through a self-administered questionnaire and analyzed through SPSS and statistical tools. The sample size was determined by using Krejci and Morgan's (1970) table. The findings of this research show that (6) success factors (Good Governance, Political support, Availability of Financial Markets, Appropriate risk allocation, and Transparency in the procurement process) out of (16) have a significant impact on PPPs project Implementation in Afghanistan.

Introduction

At present, every human being in the world knows that life is a difficult, challenging, and even impossible task without community and state. Therefore, government (public administration) is established to maintain law and order and security and provide services and facilities to its citizens in different areas. Such as, political, economic, social, cultural, educational, health, infrastructure, etc. Because of the lack of enough financial resources, budget deficits and lack of skills in public administration, public administration alone cannot meet all the needs of

society. Thus, private sector is needed by public administration to work with the government in developing the infrastructure and fulfilling the needs of the community and its people and share the responsibilities, risks, benefits, and liabilities with public administration (Bosso, 2008; World Bank, 2012). PPPs is a tool for the management of the public sector. As the government is responsible to provide public services to a society based on budget, professionals, and time, they cannot provide services to the public properly. Therefore, the responsibilities and risks of the

public sector are transferred towards the private sector through PPPs to offer better services to the public (Nilufa, 2010). Public-Private Partnerships Projects are implemented based on a specific structure. Each country has its own Public-Private Partnership Act. The factors that play a key role in the implementation of public and private partnerships have been assessed by researchers based on the country context. The scholars such as (Khalifa et al., 2020; Chan et al., 2010; Chang et al., 2009; Helmy and Mohamad, 2011; Hardcastle et al. 2005; Long Duy, 2004) assessed the critical success factors and identified the most critical factors. As the PPP concept is new in Afghanistan, a public private partnership law has been enacted recently by the Afghan government, and the formation of policies, procedures, and guidelines are in progress. Afghanistan's first public-private partnership policy and the law was issued in 2016. Some projects have been implemented based on this structure from 2016 to 2022 (MOF, 2016). Though, there is limited or no empirical research available in this field. Thus, to bridge this gap, this research was conducted in order to examine the critical success factors of PPPs projects in Afghanistan. In other words, this research aims to find the CSFs of the PPP projects in Afghanistan.

Literature Review

PPPs in Afghanistan

PPPs structure started in Afghanistan in 2014. There used to be a small PPP department in the Ministry of Finance of Afghanistan back in 2014, however, it was 2016 when the Afghan government paid attention to the implementation of PPPs and the government started to work on some projects based on the PPPs law issued by his Excellency, Mr. Ashraf Ghani on decree no (1650) dated 17/8/2016.

One of the purposes of starting PPPs in Afghanistan was to boost and enhance the economic growth and development of Afghanistan by developing infrastructure

alongside supporting the investors to invest in various sectors in the form of PPPs with the Afghan government. National Procurement commission for the first time approved two (Mazar-e-Sharif Gas Power Plant Project and Bayat Power Project) PPPs projects with a total value of \$113 million (MOF, 2017).

PPPs Critical Success Factors

(CSFs) are defined as: "those factors that are important for better implementation of PPPs projects" (Helmy And Mohamad 2011 p.2). There is no consensus among the scholars on pointing out PPPs' success factors. In order to identify the CSF for the implementation off PPPs Project in developed and developing countries, numerous past studies have been conducted that have investigated the critical success factors taking in to account the country context and project type. Every author assessed the critical success according to the country's context and project type. (Felix and Champika, 2016) investigated Europe road construction considered twenty-nine success factors and grouped them under nine principles (objectives, Risk, Specifications, tendering process, Construction phase, Operations, Monitoring and Evaluation, and Finance). Garvin (2007) considered thirteen success factors and grouped them under five principles namely scope of work, Acquisition and Procurement, Financing, Concession Management and User fees. According to the author, the success of PPPs projects and programs can be determined by studying the above-mentioned aspects. Erik and Chron  r (2014) found out that a project is effective and successful when it satisfies or even surpasses all customer requirements.

Ileana Palaco (2019) assessed the PPPs' success of PPPs in E-government in terms of risk and value. He points out two success factors: value and Risk. According to him when the risk is high, the value decreases, and the project is ineffective. If the risk is low, the value increases and the project is effective and successful.

Westhuizen (2005) asserted that PPPs project success comprises of two components which are project product success and project management success. This study shows that there is a distinction between the two aforementioned components wherein project management success mainly focuses on the effective and successful accomplishment of a project concerning quality, time and cost. Project product success means value add to the product and users are satisfied. From the author's point of view, the project has four success factors (cost, time, quality, and user satisfaction). Chan et al., (2010) identified five success factors that influence the successfulness of PPPs projects in UK: Availability of Financial Markets, Effective procurement, Government Guarantee, Project implementation, and Favorable economic condition.

Khalifa et al., (2020) listed 17 possible critical success factors in their research and the findings of the research show that government guarantees, good governance, a well-organized legal framework, stability and political support and the ability to pay back project debts are amongst the key success factors. Robert, Albert, & Ameyaw (2019) tested 19 critical success factors in different construction companies and found seven most important factors that affect the implementation of PPPs projects which are constant project monitoring, proficient service delivery, easy to use payment mechanisms, suitable legal framework, appropriate stakeholder management mechanism and safety control. Hari and Msani (2012) identified four success factors (comfort, competence, communication, and commitment). (Ioana et al., 2012). Found Five key elements were considered for the success of the all types of projects. Namely, Directions and goals of projects have clearly defined, Responsibilities and roles in the project are clearly defined, consultation and communication with stakeholders take place whenever necessary, Projects' team members have the necessary competencies, and Projects respect the estimated budget, time frame, and

performance standards), (Chang et al., (2009) identified five important factors that have an important role in effective project management which include innovation and learning indicators, project's physical indicators, stakeholders' indicators, financial indicators and process indicators. Morteza (2009) identified five success factors namely safety, cost, quality, schedule and participant satisfaction and the findings of the study signify that a project is successful when it is completed at a certain time, with a certain cost – within the predetermined budget, and meets the required specifications. Zhang and M.ASCE (2005) assessed 47 sub-success factors under five groups and found five factors namely appropriate risk allocation, economic viability, favorable environment for investment, a comprehensive financial package and a consistent concessionaire consortium which is technically strong, as critical success factors for PPPs.

Hardcastle et al, (2005) selected 19 Possible success factors and his research result is five critical success factors that include availability of financial markets, government guarantees, efficient procurement, promising economic conditions and the ability to implement a project in a sound way. Long (2004) and David (2005) also pointed out the gratification of the stakeholders as the main element of project success, Jamali (2004) stated that three Elements affect PPP's successful implementation, frankness, trust, and fairness). Jamali (2004) pointed out that openness, trust and fairness are the factors of success for a project. The findings of this study also signifies that partnering should not be viewed as a threat or potential loss of control, but it should be regarded as an opportunity. Zouggari (2003) Identified success factors as a comprehensive and sound legal, and regulatory framework, transparency, and financial accountability. The author points If the PPPs implementor does not think about the above elements, PPPs will fail. Hagen (2002) identified success factors as (careful preparation, economic evaluation, and feasibility study for each project).

The findings of the study further show that the governments of developing countries must develop and enhance their regulatory and legal capabilities to participate in PPPs and implement it Effectively. Aaron (1995) identified the success factors as time, cost, budget, quality, and stakeholders' satisfaction. The Author added another factor "stakeholders' satisfaction" with the traditional approach. According to the author, the project is successful when stakeholders are satisfied, Amiri and Clarke (2021) studied the success factors of public and private partnerships in Afghanistan and identified three factors which are important for the success of a PPP project namely the inclusion of technical and highly qualified financial experts, establishment of an inclusive PPP law and the existence of numerous financing mechanisms for implementing PPP projects. Niazi and Painting (2017) identified six

success factors for the PPPs project in Afghanistan that include political stability, appropriate legal framework, a transparent procurement process, availability of financial markets, risk sharing and appropriate risk allocation. (MOF, 2015) According to Afghanistan's public-private partnership policy, nine factors (Good Governance, Value for Money, Allocation of Risks, Affordability of Protection of Users, Transparency, Competition, Local capacity development and technology transfer, Environmental and social responsibility and Stakeholders Consultation Process) should be considered when implementing PPP projects. Based on the literature review and taking into account the country context this study identified 16 critical success factors mentioned in the following table.

Table 1

Most Critical Success Factors of PPPs from Published Literature

	Critical Success Factors	Definitions	Citation
1	Need assessment		(Hagen, 2002)
2	Objective and plan		(Chang et al, 2009;Ioana et al., 2012)
3	Tendering Process/ Competitive		(Chan et al., 2010; MOF, 2015; Ioana et al., 2012; Robert et al., 2019; Hari and Msani, 2012)
4	Monitoring and evaluation		
5	Appropriate legal framework,		(Niazi and Painting, 2017; Amiri and Clarke, 2021; Ioana, Emil, et al, 2012; (Robert et al., 2019, Khalifa et al.2020)
6	Availability of the financial market and lastly		(Garvin, 2007; Robert et al, 2019)
7	User satisfaction		(Erik and Chronéer, 2014; MOF, 2015)
8	Transparency		(Niazi and Painting, 2017; MOF, 2015)
9	Good governance		(Chan et al., 2010; Niazi and Painting, 2017; MOF, 2015, Khalifa et al., 2020)
	Available Financial Market		(Chan et al., 2010)
10	Transparency in the procurement Process		(Niazi and Painting, 2017; MOF, 2015)
11	Proper Risk allocation		(Ileana Palaco, 2019; Niazi and Painting, 2017; MOF, 2015)
12	Political Support		(Niazi and Painting, 2017; Khalifa et al, 2020)

13	Stakeholders satisfaction	(Chang et al., 2009; MOF, 2015), (Ioana et al, 2012; Hari and Msani, 2012; Robert et al.,2019; Westerveld, p. 2003)
14	Cost, time, and quality	(Westhuizen, 2005)
15	Social support	(Frilet, 1997)
16	Commitment/responsibility to the public/private sector	(Niazi and Painting, 2017; Hari and Msani, 2012; Khalifa et al, 2020)

Research Methodology

This section presents the research design that was used in this study.

Rationale and Purpose of the Research

This study is explanatory and used a cross-sectional research design through which data was collected only once to accomplish the objective of this study. As the main purpose of this study was to find the critical success factors of the PPPs project and their importance in the implementation of the projects in Afghanistan, taking into account the critical success factors found by previous studies, the researchers developed a questionnaire which was distributed to 26 carefully selected PPPs implementers and government officials. PPPs implementors were asked to rank the pre-determined factors that could play a key role in the successful accomplishment of PPP projects in Afghanistan. The data are analyzed through The Relative Importance Index (RII) and SPSS Statistical Tools. An in-depth study was conducted to find PPPs' success factors, the factors placed in table 1 are the factors that are considered most important from the author's Perspective and are thought to be the most critical above-mentioned factors for better implementation of the PPPs project in Afghanistan.

Data Analysis

As mentioned before this study used qualitative and quantitative content analysis to analyze the data obtained from the questionnaires. Firstly, a five point Likert Scale of five ordinal measures ranging from 1 to 5 was used where 1 is not significant, 2 is slightly significant, 3 is

moderately significant, 4 is very significant, and 5 is extremely significant. Second, the Relative Importance Index (RII) model was employed to rank success factors by importance because most authors have used this model for ranking the success factors (Niazi and Painting, 2017; Khalifa et al., 2020; Amiri and Clarke, 2021; Aayushi et al., 2012; Nivea et al., 2017; Ramakrishna et al., 2017).

The RII in this study was calculated using the undermentioned equation:

$$RII = \frac{\sum_{i=1}^5 W_i \cdot X_i}{A \times N}$$

Where:

RII Relative Importance Index

W Weightage assigned to every factor by the respondents

X Frequency of the ith response given to every factor

N Number of total respondents

A Highest weightage, which is 5 in this study

Then SPSS was used to find the mean and the importance of every factor. For the purpose of examining the variances in the perceptions of the public and private sector respondents, an independent sample t-test was also used.

In total, 26 questionnaires were distributed, and 24 were returned for analysis. The findings of the study are shown in Table 2.

Findings

Table 3 presents the respondents' positions which signifies that a large majority of the respondents were Project Implementers (67%)

followed by government PPPs authority (33%). The results further indicate that 37.5% of the respondents have an experience of 5–15 years in

the construction sector, 12.5% less than 5 years, whereas 50% have an experience of more than 15 years in the construction industry.

Table 2

Summary of the survey carried out

Parameters	Values
Total questionnaires distributed	26
Total questionnaires received	24
Response Rate (%)	92.30%

Table 3

Respondents' demographics

Parameters	Frequency	Percentage (%)	Cumulative (%)
Respondent's position			
Government PPPs authority	8	33	33
PPPs Implementors/ Manager	16	67	100
Working experience			
Less than 5 years	3	12.5	12.5
5–15 years	9	37.5	50
More than 15 years	12	50	100

The demography of respondents proves all of the respondents were appropriate to take part in the survey.

Table 4 indicates that six factors namely political stability, availability of financial markets, appropriate legal framework, good governance, proper risk allocation and transparency in the procurement process are amongst the critical success factors which have a significant effect in the successful implementation of PPP projects in Afghanistan.

The findings show that political stability was ranked by the respondents as the most significant of all the factors which is vital for the successful implementation of PPP projects in Afghanistan. Political stability in any country is vital in so many ways and in order to ensure the development of PPP based projects in Afghanistan, the Afghan government should focus on paving way for bringing political stability in the country because it plays a key role

in attracting investors from within and outside Afghanistan to invest in the development of infrastructure in Afghanistan.

The respondents ranked availability of financial markets as the second most influential factor which plays a significant role in the successful implementation of PPPs in Afghanistan. Public private partnerships undertake those projects that require massive and huge amount of capital, hence the existence of a such a financial market wherein funds can be financed for PPP projects at relatively lower costs throughout the country would be a substantial incentive for PPP project implementation.

Appropriate legal framework is also an influential factor when it comes implementing PPP projects in a successful way. In fact, the results show that appropriate legal framework was the third highest ranked factor which the respondents of the study think is necessary when it comes to undertaking PPP projects in

Afghanistan in a successful way. The result signifies that for the purpose of ensuring transparency in the process of implementing PPP

projects, the existence of a comprehensive legal framework is of utmost importance in Afghanistan.

Table 4

Critical success factors

Critical Success Factors	RII Value	
	RII	Rank
Political Stability	0.92	1
Availability of the Financial Markets	0.89	2
Appropriate legal framework	0.88	3
Good governance	0.85	4
Proper Risk Allocation	0.83	5
Transparency in the procurement Process	0.80	6
Tendering Process/ Competitive	0.77	7
Available Financial Market	0.75	8
Commitment/responsibility to the public/private sector	0.73	9
Monitoring and evaluation	0.70	10
Need assessment	0.69	11
Objective and plan	0.66	12
Transparency	0.65	13
Cost, time, and quality	0.63	14
Social support	0.60	15
Stakeholders satisfaction	0.58	16
User satisfaction	0.55	17

The fourth critical factor identified by the participants is “**good governance**”. A strong government and good governance ought to be in place for the purpose of increasing the overall monetary value of PPP projects in Afghanistan. If the procurement process of PPP projects is governed and managed in good way, it will promote fair completion alongside reducing the cost and time of the procurement process. The main goal of this process is getting the best available proposal which can guarantee the selection of a good implementer/ contractor and increasing the monetary and can also ensure value for money.

The results of this study further show that “**appropriate risk allocation**” amongst the parties when it comes to undertaking PPP projects is also an influential factor, and in fact it was ranked fifth by the participants amongst the CSFs. It helps because the risks are distributed amongst

the relevant parties in a proper and suitable way, and when the appropriate distribution of risks amongst the concerned parties is ensured, it will increase the commitment towards a successful and effective implementation of the projects.

The findings of the study show that **Transparency in the procurement process** is the sixth most influential factor when it comes to implementing PPP projects in a successful way. Afghanistan is a country wherein most of the businesses are carried out and run in an informal way, hence for the purpose of carrying out the procurement process in a transparent manner, the establishment of a sophisticated and well organized regulatory system is necessary. As Afghanistan lacks transparency in the bidding process of PPP projects which has led to the discontentment of many contractors, concrete steps need to be taken by the relevant authorities in order to ensure transparency in the entire

process of implementing PPP projects. Since public-private partnership is new in Afghanistan, the presence of a well-organized strategy for the capacity building of those who work in public-private partnerships is of utmost importance.

Conclusion

This study was conducted in order to investigate those factors that are influential and significant in the successful implementation of PPP projects in Afghanistan. In order to achieve the objective of this study, primary data was collected through a self-administered questionnaire wherein the participants were asked to rank the factors they believe are the most significant for undertaking PPP projects in Afghanistan. The findings of the study show that six factors namely political stability, availability of financial markets, appropriate legal framework, good governance, proper risk allocation and transparency in the procurement process are amongst the most influential factors that can ensure the successful implementation of PPP projects in Afghanistan.

Based on the results, it can be determined that the Afghan government must focus on paving way for bringing political stability in the country because it plays a key role in attracting investors from within and outside Afghanistan to invest in the development of infrastructure in Afghanistan. The Afghan government should also ensure the development and existence of a comprehensive and appropriate legal framework to pave the way for the successful implementation of PPP projects. The government should also pave the way for the availability of financial markets, good governance, create a system for sharing the risks of PPPs projects between private and public sectors, and create transparency in the implementation process of public and private partnership projects.

References

- Aaron J, S. d. (1995). Toward typological theory of project management. *Research policy*.
- Aayushi, G., Mahesh Chandra, G., & Ranjan, A. (2012). Identification and ranking of critical success factors for BOT projects in India. *Management Research Review*, 140-160.
- Adnan, E., Sherif, M., & Saleh, A. (2009). Factors affecting the performance of construction projects in the Gaza strip. *Journal of Civil Engineering and Management*, 269-279.
- Amiri, A. F., & Clarke, S. (2021). Success Factors for Public-Private Partnerships in Infrastructure Development of Afghanistan: An Evaluation. *Kardan Publications kabul afghnistan*.
- Bank, W. (2012). *PPPs Reference Guide*, (9-105). World Bank.
- Bosso, D. J. (2008). Effectiveness of Contemporary Public-Private Partnerships for Large Scale Infrastructure Projects in the United States,. *vtechworks.lib.vt.edu*, 19-35.
- Chan, A. P., Lam, P. T., W. M. Chan, M., Cheung, E., & Ke, Y. (2010). Critical Success Factors for PPPs in Infrastructure Developments: Chinese Perspective. *MASS INSTITUTE OF TECHNOLOGY*.
- Chang, M.-Y., Hung, Y.-C., Yen, D. C., & Tseng, P. T. (2009). The research on the critical success factors of knowledge management and classification framework project in the Executive Yuan of Taiwan Government. *Elsevier*.
- David J, D. B. (2005). THE INFLUENCE OF A PROJECT PERFORMANCE MEASUREMENT SYSTEM ON THE SUCCESS OF A CONTRACT FOR MAINTAINING MOTORWAYS AND TRUNK ROADS,. *The project management institute*, 57-65.
- Dodyal, M. B. (2007). *Public Procurment*. Nangarhar: Yaar publishor.
- Erik, S., & Chronéer, D. (2014). What is project efficiency and effectiveness? *Procedia - Social and Behavioral Sciences*, 279-287.
- Felix, V.-R., & Champika, L. (2016). Evaluating success in PPP road projects in Europe: a comparison of performance measurement approaches. *Transportation Research Procedia*, 373-381.

- Frilet, M. (1997). Some universal issues in BOT projects for public infrastructure. . *The Int Constr Law Rev*, 499–512.
- Garvin, M. J. (2007). Are public-private partnerships effective infrastructure development strategies? *CME 25 Conference Construction Management and Economics*, 379–390.
- Guri, W. (2006). Public-Private Partnerships: Addressing a Nebulous Concept. *International Research Symposium on Public Management*.
- Hagen, R. (2002). Globalization, university transformation and economic regeneration : a UK case study of public/private sector partnership. *international Journal of public sector management*.
- Hardcastle, c., edwards, P., Akintoye, A., & Li, B. (2005). CRITICAL SUCCESS FACTORS FOR PPP/PFI PROJECTS IN THE UK CONSTRUCTION INDUSTRY: A FACTOR ANALYSIS APPROACH. *Construction Management*.
- Hari, G. J., & Msani, T. (2012). Critical success factors influencing project success in the construction industry,. *Acta Structilia*, 90–108.
- Helmy, M. A. (2011). INVESTIGATING THE CRITICAL SUCCESS FACTORS FOR PPP PROJECTS IN KUWAIT. *Royal institute of technology*.
- Ileana Palaco, M. J. (2019). Public-Private Partnerships for e-government in Developing Countries: An Early Stage Assessment Framework. *Evaluation and Program Planning*.
- Ilker, E., Sulaiman, A. M., & Rukayya, S. A. (2015). Comparison of Convenience Sampling and Purposive. (<http://www.sciencepublishinggroup.com/j/ajtas>), 1–6.
- Ioana, B., Emil, C., & Razvan, N. (2012). MAIN FACTORS INFLUENCING PROJECT SUCCESS. *INTERDISCIPLINARY MANAGEMENT RESEARCH XI*, 59–72.
- Jamali, D. (2004). Success and failure mechanisms of public private partnerships (PPPs) in developing countries. *International Journal of Public Sector Management*, 414–428.
- Khalifa, A., Sabah, A., & Saleh, A. (2020). Critical success factors for public-private partnerships in affordable housing in the United Arab Emirates. *Emerald Insight*.
- Lena, B., & Ole, H. P. (2017). Public-private partnerships (PPPs) in development policy: Exploring the concept and practice. *Development Policy Reveiw*.
- Long Duy, N. S. (2004). A study on project success factors in large construction projects in Vietnam.... *Construction and Architectural Management*, 404–412.
- Massoud, M. A.-F. (2003). Assessment of public vs private MSW management: a case study. *Journal of environmental management*, 15–24.
- MOF. (2015). NATIONAL POLICY ON PUBLIC PRIVATE PARTNERSHIPS (PPPs). AFGHANISTAN: MINISTRY OF FINANCE.
- MoF. (2017). PPP's Background in Afghanistan. kabul: <https://ppp.mof.gov.af/background/>.
- Morteza S, G. K. (2009). Generic Project Success and Project Management Success Criteria and Factors: Literature Review and Survey. *WSEAS TRANSACTIONS on BUSINESS and ECONOMICS*, 456–468.
- Niazi, G. A., & Painting, N. (2017). Critical Success Factors for Public Private Partnership in the Afghanistan Construction Industry. *8th International Conference on Engineering, Project, and Product Management (EPPM 2017)*.
- Nilufa, A. K. (2010). Conceptual Issues in Defining Public Private Partnerships (PPPs). *International Review of Business Research Papers*, 150–163.
- Nivea, T., Anu, D., & Thomas, V. (2017). Critical Success Factors of Public- Private Partnership Projects in Kerala. *researchgate.net*, 1–4.
- Ramakrishna, N., Haris D, S., Tauseef F, S., & Farhan A, S. (2017). FACTORS AFFECTING THE SUCCESS/ FAILURE OF ROAD INFRASTRUCTURE PROJECTS UNDER PPP IN INDIA. *KICEM Journal of Construction Engineering and Project Management* , 1–12.
- Robert, O.-K., Albert, P. C., & Ameyaw, E. E. (2019). A Fuzzy Synthetic Evaluation Analysis

- of Operational Management Critical Success Factors for Public-Private Partnership Infrastructure Projects. *An International Journal*, 2093-2110.
- Tony, B. (2010). A brief intellectual history of the public-private partnership movement. *Elgar online*.
- WB. (2012). *Public Private Partnership Reference Guide*. World Bank.
- Westerveld, E. (2003). The Project Excellence Model & linking success criteria and critical success factors. *International Journal of Project Management*, 412-417.
- Westhuizen, D. v. (2005). Defining and measuring project success. *Department Information Systems, Faculty of Business, University of Southern Queensland - Wide Bay Campus, Hervey Bay, Queensland, Australia*.
- Zhang, X., & M.ASCE. (2005). Critical Success Factors for Public-Private Partnerships in Infrastructure Development. *JOURNAL OF CONSTRUCTION ENGINEERING AND MANAGEMENT*, 1-14.
- Zouggari, M. (2003). Public-private partnership: Major hindrances to the private sector's participation in the financing and management of public infrastructures via delegated management. *International Journal of Water Resources Development*, 123-145.