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ISTANBUL AYDIN UNIVERSITY

INSTITUTE OF GRADUATE STUDIES

CRITICAL SUCCESS FACTORS IN PUBLIC-PRIVATE PARTNERSHIP FOR SUSTAINABLE DEVELOPMENT: A CASE STUDY OF RENEWABLE ENERGY DEVELOPMENT IN AFGHANISTAN (2015-2019)

MASTER'S THESIS

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June, 2021

ONAY FORMU

DECLARATION

I hereby declare with respect that the study "Critical Success Factors In Public-Private Partnership For Sustainable Development: A Case Study Of Renewable Energy Development In Afghanistan (2015-2019)", which I submitted as a Master thesis, is written without any assistance in violation of scientific ethics and traditions in all the processes from the Project phase to the conclusion of the thesis and that the works I have benefited are from those shown in the Bibliography. (.../.../20...)

Abdul Bari Latifi

FOREWORD

I would like to thank my thesis advisor Assistant. Professor Dr. Nurgun Komsouglu Yılmaz for his endless support and guidance at every phase of this thesis.
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June, 2021 **Abdul Bari Latifi**

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ABBREVIATIONS

ADB : Asian Development Bank
APEC : Asia-Pacific Economic Cooperation
APSMP : Afghanistan Power Sector Master Plan
CAREC : Central Asia Regional Economic Cooperation
CAWEC : Central Asia Water & Energy Program
CPA : Central Partnership Authority
CSFs : Critical Success Factors
CSP : Concentrated Solar Power
CTR : Cross-tab Results
DABS. : D Afghanistan Breshna Sherkat
DFI : Development financial Institutions
ESRA : Energy Services Regulation Authority
GA : Government of Afghanistan
GHG : Green House Gases
GW : Gigawatt
IEA : International Energy Agency
IFC : International Financial Corporation
IPPs : Independent Power Producers
IRP : Integrated Resource Plan
IRP : Integrated Resource Plan
MFIs : Multi-Lateral Financial Institutions
MW : Megawatt
PDF : Project Development Fund
PFI : Project Finance Initiative
PPA. : Power Purchase Agreement
PPP : Public Private Partnership
RAGA : Rapid Assessment Gap Analysis
RES : Renewable Energy Source
RES : Renewable Energy Sources
SE4 ALL : Sustainable Energy for all
TAS : Transaction Advisory Services
UK : United States Dollar
US : United Kingdom
USA : United States of America
VfM : Value for Money
WB : World Bank

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CRITICAL SUCCESS FACTORS IN PUBLIC-PRIVATE PARTNERSHIP FOR SUSTAINABLE DEVELOPMENT: A CASE STUDY OF RENEWABLE ENERGY DEVELOPMENT IN AFGHANISTAN (2015-2019)

ABSTRACT

Public Private Partnerships (PPPs) have been started to be considered an integral avenue for the pursuit of Afghanistan's development agendas. They are seen as a vehicle through which the government encourages and involves the private sector through investments in projects and services (infrastructure and renewable energy). The adaption of this policy has widely been lauded, however there is need to evaluate how these PPPs can be utilized in order to achieve sustainable energy, the 2030 sustainable development agenda.

The study examined sectoral variances and Drivers or critical Success Factors (CSF) for PPPs in renewable energy for sustainable development in Afghanistan, with a specific interest in the Infrastructure, Transport sector, Energy sector, Agriculture sector and Mining sector. By focusing on identifying the drivers of renewable energy, this study analyzed the available literature and employed a three-stage survey method on how to measure success of PPPs, the various models of PPPs, cost benefits of PPPs, the role of multilateral lender in PPPs, the structure of electricity sector and project profile characteristics as factors.

This study used qualitative method data collection and made use of both primary and secondary methods of data collection. The primary method of data collection applied by sending semi-structured questionnaire directly to respondents through their email address and were collected from the Governments Ministries and (PPP Unit, DABS, WB, ADB, ESRA). The study also utilized secondary data from PPP Units documents, World Bank and Asian Development Bank documents as well as other material.

The finding indicate that private sector in Afghanistan don't have enough information about PPPs and PPA policies have low confidence in the government's political commitment and procurement transparency to PPPs projects. The finding also indicate that PPPs procurement method is still a new concept, hence essential requirements need to be done term of advisory, institution building, and technical assistance, the World Bank, Asian Development Bank, international organizations and Government agencies have been instrumental in building up the PPP practice in Afghanistan.

Key Words: *Public Private Partnership (PPP), Renewable Energy Development, Sustainable Development Goals (SDG).*

SÜRDÜRÜLEBILIR GELIŞMEDE KAMU ÖZEL ORTAKLIĞI KRITIK BAŞARI FAKTÖRLERI: AFGANISTAN'DA YENILENEBILIR ENERJI GELIŞIMINE DAIR ÖRNEK BIR ÇALIŞMA (2015-2019)

ÖZET

Kamu Özel Ortaklıkları (KÖO'ler) Afganistan'ın gelişme konularının takibi adına ayrılmaz bir yol olarak düşünülmeye başlandı. Devletin proje ve hizmetlere (altyapı ve yenilenebilir enerji) yatırım yaparak özel sektörü teşvik ettiği ve dahil ettiği bir araç olarak görülmektedirler. Bu politikanın uyarlanması büyük ses getirdi, ancak 2030 sürdürülebilir kalkınma gündeminde sürdürülebilir enerjiye ulaşmak için bu KÖO'lardan nasıl yararlanılabileceğini değerlendirmek gerekmektedir.

Çalışma, Altyapı, Ulaşım sektörü, Enerji sektörü, Tarım sektörü ve Madencilik sektörüne özel bir ilgi göstererek Afganistan'da sürdürülebilir kalkınma adına yenilenebilir enerjideki KÖO'lar için sektörel farklılıkları ve Etmenleri veya kritik Başarı Faktörlerini (KBF) incelemiştir. Yenilenebilir enerjinin itici güçlerini belirlemeye odaklanarak bu çalışma mevcut literatürü analiz etmiştir ve KÖO'ların başarısının nasıl ölçüleceğine, çeşitli KÖO modellerine, KÖO'ların maliyet faydalarına, KÖO'larda çok taraflı borç verenin rolüne ilişkin üç aşamalı bir anket ve yöntemi kullandı ve elektrik sektörünün yapısı ve belirleyici olarak proje profilleri veya özellikleri ele alınmıştır.

Bu çalışmada niteliksel yöntem veri toplama kullanılmış ve hem birincil hem de ikincil veri toplama yöntemlerinden yararlanılmıştır. Yarı yapılandırılmış anketin doğrudan katılımcılara e-posta adresleri aracılığıyla gönderilmesiyle uygulanan birincil veri toplama yöntemi, Hükümetler Bakanlıklarından ve (PPP Birimi, DABS, WB, ADB, ESRA) toplanmıştır. Çalışmada ayrıca KÖO Birimleri belgelerinden, Dünya Bankası ve Asya Kalkınma Bankası belgelerinden ve diğer materyallerden ikincil veriler kullanıldı.

Bulgular, Afganistan'daki özel sektörün KÖO'ler ve PPA politikaları hakkında yeterli bilgiye sahip olmadığını ve hükümetin KÖO projelerine yönelik siyasi taahhüdüne ve satın alma şeffaflığına güveninin düşük olduğunu göstermektedir. Bulgular ayrıca, KÖO tedarik yönteminin hala yeni bir kavram olduğunu, dolayısıyla danışmanlık, kurum kurma ve teknik yardım için yapılması gereken çok şey olduğunu ve Dünya Bankası, Asya Kalkınma Bankası, uluslararası kuruluşlar ve Afganistan'daki KÖO uygulamasının oluşturulmasında Devlet kurumlarının araçsal olduğunu göstermektedir.

Anahtar Kelimeler : *Kamu Özel Ortaklıkları (KÖO), Yenilenebilir Enerji Gelişimine (YEG), Sürdürülebilir Kalkınma Amaçları (SKA)*

1. INTRODUCTION

1.1 Background Of The Study

One of the great challenges currently facing the world is the ever-increasing scarcity of resources vital for sustainability. According to the United Nation, by 2030, people will require 30% more water, 45% more energy, and 50% more food. The Sustainability of food, energy, and water (FEW) has become a critical area of study for environmental science.

In 2015 all United Nation Member states adopted the 2030 Agenda for Sustainable Development. Overall, 17 Sustainable Development Goals (SDGs) for world transformation are adopted. Considering that energy is the "dominant contributor to climate change, accounting for around 60 percent of total global greenhouse gas emissions", Goal Number 7, " reasonable and renewable energy", is developed with an aim to increase the share of renewable energy in the global energy mix, to improve energy efficiency rate, to expand international corporation in the examination and innovation and to advance interest in energy foundation and clean energy technology among others, in developing countries all by 2030. In many advanced countries in Europe, America and Australia, PPP has been well practiced delivering projects and services (Cheung, Chan, & Vining, 2012) and their success has been well documented.

There is little doubt about the achievements of PPPs based on worldwide interest, the frequency of usage in countries such as Australia, Canada and the UK, by the prompt infrastructure delivery (Greve &Hodge, 2013). The UK emerged as the primary proponent of the PPP concept Osbome (2000) as part of john Major's government reform program in the early 1990s (Grege &Hodge, 2010). In making the PFI scheme an attractive policy was a mix of philosophical, financial and political considerations under the Conservative party's neoliberal agenda (Hllowell, 2010). In the philosophical spectrum, PFI was channel for increasing the role of the private sector in areas of the public

sector where privatization was considered impossible. Financially, PFIs focused on facilitating additional, rather than substitutional, public investment so as to ease the strain on UK's national debt. Politically, it meant that the voters could be supplied with new facilities such as hospitals, schools and new roads without the related investment having an immediate effect on the budget (Hellowell & Pollock, 2009). Australia's support and endorsement of the PPP framework was influenced by the participation of the UK (Hodge, Greve, & Biygautane, 2018). While there is no consensus on the definition of public private partnerships, most definitions share some commonalities (Bjarstig & Sandstrom, 2017; Glasbergen, Biemann, & Mol 2007). To begin with, they all indicate a voluntary cooperation between at least one state actor and one none state actor, but However, different types of PPPs vary with the actors that take part in the collaboration. Additionally, the partnership is a formalized long-term undertaking in which the contributions of the partners are integrated in a manner that enables them effectively attain their objectives.

Another common feature is that the partners in a PPP share the assets, liabilities and benefits of the project (Bjarstig & Sandstrom, 2017). Ideally, PPPs delegate responsibilities to execute and operate a project granted to the private sector by a public entity under the conditions of delivering results and a certain level of service performance (Barral & Haas, 2007).

Hodge (2005) postulates that PPPs fundamentally give governments the ability to quickly acquire high quality infrastructure on loan and away from the traditional government debt surveillance. For Ng'ang'a & Kisimbii (2018), PPPs describe a relationship through which the assets from both the government and private are brought together to accomplish set goals and objectives that both parties consider mutually beneficial. Koimett (2013) argues that PPPs are used as an alternative source of funding for the government.

Boussabaine (2014) attributes the need for PPPs to the lack of finances to fund the projects and services needed to enhance economic development in a society with an heightened demand for infrastructure and public services. A report by EIB (2005) suggested that, with the adoption of PPPs, it is anticipated that the private sector will bring knowledge and expertise in the implementation of projects that the society will benefit from. This concept has increased the need

for the private sector to be involved in the delivery of public projects (Barral & Haas, 2007).

In most countries, the acceptance of the PPP concept is partly linked to a broader belief that bureaucracies in the public sector are inefficient and ineffective in ensuring efficient cost effective quality services (Ng'ang'a & Kisimbii, 2018). Mitchell (2008) attributes the adoption of PPPs to need for the public sector to reestablish its dual function of funding and service delivery due to its growing incapacity on both fronts, while (Bjarstig & Sandstrom 2017).

Attribute the concept of PPPs to the idea of government failure to deliver sustainable development hence the need to seek assistance from other sectors of society. Developing countries need more infrastructure funding than the national government and Official Development Aid (ODA) can provide (Pessoa, 2008). International financial institutions, especially the World Bank and the IMF consequently encourage developing countries to adopt the concept of PPPs (Sundaram Chowdhury, 2009).

Afghanistan is a mountainous land-locked country which is located in the Central Asia, bordered by Turkmenistan, Uzbekistan, Tajikistan from the North, Iran from the west, Pakistan from the south and east, china from northeast. Afghanistan has sufficient energy and Renewable Energy potentials to provide reliable electricity to its people. Accordance to pre-estimation of the National Renewable Energy Laboratory of the United States of America, Afghanistan's technical solar potential is over 220 gigawatts (GW), and technical wind potential more than 66 GW and hydropower potential is estimated almost 23 GW (Ludin et al., 2016). Afghanistan also have biomass and geothermal potentials, by exploiting its RERs, can provide its power shortages and also can export it to Energy deficit Countries.

As Afghanistan is situated geographically as center point between energy surplus countries (central Asian Countries) and South Asian energy deficit Countries (Pakistan and India). It is in position of a bridge can facilitate the transition of energy from the surplus countries to deficit countries and also, if exploit its own renewable energy resources RERs after satisfying its domestic power demand also can export the surplus energy.

Afghanistan will coordinate into the reginal economy and can take a lead in encouraging exchange and business exchange for Afghanistan and the area. The structure of new Silk Road, whereby Afghani-stan will recover its authentic part as a land-connect between South Asia, Central Asia, the Middle East and Eurasia. Afghanistan turning into a center point for exchange, transportation and energy in the locale (India's Policy towards Afghanistan, 2013). India facilitated a speculation culmination on Afghanistan in Delhi in June 2012, welcoming other "Heart of Asia" Countries, which tried to feature the chances for putting resources into Afghanistan. The arising areas featured by India as being possibly very productive were mining, foundation, media communications, agro-based/ based on agriculture and limited scope businesses, wellbeing drugs, training, and data innovation. the US government and Afghanistan government gauges Afghanistan's mineral abundance from $ 1 to $ 3 trillion. The Ministry of Finance, through the Public Private Partnership Unit (PPPU), is responsible for coordinating, promoting and overseeing the implementation of the PPP concept in Afghanistan.

1.2 Statement Of The Problem

Vision 2030, Afghanistan long-term development plan, aims to create a globally prosperous and ambitious country and turn Afghanistan in to an industrializing middle income and hub country in center of Asia. The bright future and Vision 2030 are anchored on foundation of infrastructural development, agro-based, small-scale industries human resource development and mining, among others. To achieve this, government will require heavy investment in infrastructure. Additionally, in order to achieve its set Sustainable Development Goals, that run concurrent with the Vision 2030, there is a growing appeal for acceleration of infrastructure advancement and improvement of the ever-growing demands of its people.

It is a common difficulty for the government of most developing countries to build infrastructure with their own finance (i.e., tax revenues or borrowing). This has pushed the governments to explore new methods for production and delivery of basic infrastructure and public service. These include contracting-out, outright privatization, and Public private partnership PPPs. Thus, PPP or P3

reflected as one of the latest innovations in advance discourse gaining popularity across the countries.

An interactive partnership between public and private sectors distributes risks and rewards between them, allowing the construction and operation of any piece of infrastructure cheaper than traditional public sector provision. It also allows both the sectors to work together towards joint targets, while utilizing joint assets and exploiting on the relevant skills and strengths.

Development planners in Afghanistan have considering these benefits and made policy commitments and budgetary allocations to involve private sector on a partnership basis in the financing and provision of infrastructure services. In the budget speech for fiscal year 2020-2030 the finance ministry pronounced the adaptation of P3 initiatives to meet the probable investment gap in infrastructure development and maintenance. In 2018 all united Nations Members States adopted the 2030 Program for Sustainable Development. Overall, (SDGs) for world transformation are adapted. Considering that energy is the "dominant contributor to climate change, accounting for around 60 percent of total global greenhouse gas emissions" Goal number 7, " affordable and clean energy", to improve energy", is developed with an aim to increase the shar of renewable energy in the global energy mix, to improve energy efficiency rate, to expand international cooperation in the research and technology and promote investment in energy infrastructure and clean energy technology among other, in developing countries all by 2030 (UN 2018). Development of renewable energy requires significant resources and private investments which is required participation of private sector for sustainable development and in infrastructure specially in for energy sustainability and renewable energy development (Carbonara et al., 2015).

1.3 Purpose of The Study

As the potential obstacle in PPPs need proper managerial skills to control and analyze, the main purpose of this research is to explore the opportunities of public private partnership development in the Afghanistan Renewable Energy sector. the study well comparatively assesses the advantages of the PPPs in project implementation as well as the potential barriers (risks) and the extent of

its implementation with regards the quality of workmanship, delivery time and issues of cost overruns accordance to the (Burke & Dmirag, 2019; & Kwa 2020) and (Hwang et al., 2013). The study investigates the risk factors of PPP projects for sustainable energy development in Afghanistan.

1.4 Aim

To explore the opportunities, progress and challenges of public private partnerships to develop Renewable energy sector for Sustainable Development in Afghanistan.

1.5 Objectives

1.5.1 General objective

1. To examine Critical Success factors in Public Private Partnership in Infrastructure and Transport sector, New and Renewable Energy Sector, Mining sector, Housing sector, agriculture and livestock sector for Sustainable Development.

2. Reliable with the discoveries of (Achieng. J, 2018) and (Hwang et al., 2017) who really helped both public and private sector by his investigations and publications and studied the Risk allocation and Critical Success Factors in Singapore. The study provided valuable information about Critical Success Factors (CSFs) Risk Factors for Renewable Energy (RFRE) Risk Allocation and more information for lenders that intend to invest in renewable energy sector, the study will investigate and giving important data to moneylenders that expect to put resources into clean energy area in Afghanistan.

1.5.2 Specific objective

i. To examine the role of multilateral lenders/funders on success of PPP for sustainable development in Afghanistan.

ii. Determination of the sector-specific conditions for the promotion of PPP regulations for sustainable development in Afghanistan.

iii. To analyze the renewable energy project characteristic/profile that make renewable energy in Afghanistan.

1.6 Reserch Question

i. What are the multilateral lenders/funders factors necessary for renewable energy sustainable development in Afghanistan?

ii. What are the sector exact situations encouraging interests in the renewable energy sector in Afghanistan?

iii. What are the renewable energy project quality/profile that create renewable energy succeed in Afghanistan?

1.7 Sıgnıfıcance Of The Study

The study tried to evaluate the determinant of multilateral lenders contribution in Sustainable Development in Afghanistan.

The results from this study will be helpful to divers' groups people, government agencies and institutions which attributed or participants in PPP projects for sustainable development as follows:

1. Accordance to the (Achieng, 2018) who studied the critical success factors in Kenya, with findings of (Hwang et al., 2013) who investigated the critical success factor and risk allocation in Singapore. The study will provide more data to managers, investors, project designer, government agencies private sector, national and international organizations and researchers to understand how and why PPP projects work or fail to work in Afghanistan.
2. Funders and government agencies; like international donors which lending or granting Afghanistan for rehabilitation and sustainable development and/or like Afghanistan government agencies which are responsible for electricity sector are dealing with renewable energy project in Afghanistan. The result of this study could be useful, the funder and government agencies can use the result of this study to achieve their goals.
3. Stakeholders: Afghanistan is will endowed significant renewable energy, have the word best water and soil for agriculture Good opportunities for livestock. Recently Afghanistan Government have launched Public Private Partnership (PPPs) as infrastructure project delivery mainly in new and renewable energy, based on NPA & PPPs policies. Consistent with the

findings of (Baker & Demerge, 2019; Kim & kwa, 2020). Which include allocation and transferring of risk factors, country's profiles in terms of CSFs and risk distribution, the study will prepare proper data for stakeholders.

4. The government's line ministries, agencies; like ministries of (Mining, Agriculture, Urban and Transport) agencies like (municipalities and DABS) which are main participants for public service and delivering infrastructure projects like Mining, Livestock's and Agriculture, Housing, Transportation, Urban Services and Renewable Energy Development. The mentioned agencies can use the study's data for doing their projects accordance to PPPs improved framework.

1.8 Scop of The Study

PPP have been recommended as a fundamental strategy to increase efficiency, resource generation and improving the quality-of-service delivery in the public Sector. These actions appear to promise a way of addressing problems and meeting global obligations in the context of the Sustainable Development Goals. However, even with the few PPP projects in motion, Afghanistan is still far from meeting the objectives of the Sustainable Development Goals (UN 2018). The broad aim of this study is to develop the research on P3 to explore whether the ability of PPPs implied in theory and recommended by research mostly out in developed countries is applicable to understanding PPP in Afghanistan.

1.9 Organization Of The Study

This investigation is separated into five significant sections. Part one spotlights on the presentation, foundation of the examination, issue proclamation, objective, research questions, meaning of the investigation and association of the examination just as the impediment of the examination. The part two, which cover the writing audit of examination theme, review of literatures. calculated system and the hypothetical survey. It audits different works done by other researchers and experts corresponding to the subject and talks about different

reactions from them. Section three likewise centers around the exploration approach adjusted for the specialist and specify the methodology of research. This involves the examination design, inspecting strategy and test plan, instrumentation, method of information assortment, pretesting, reliability and legitimacy. Part four will cover the research findings, analysis, discussion, information, examination and conversation and the last section five will be discussion, conclusion, recommendations, conversation and recombination.

2. LITERATURE REVIEW

2.1 Introduction

The literature review of this thesis takes on thematic approach in analyzing what other scholars have authored about the Critical Success Factors in Public Private partnership. The literature highlights scholars' relevant views about public private partnerships on measuring Critical Success Factors, different PPP arrangements and the World Bank, the Asian Development Bank and the Government of Afghanistan role on PPPs as funding method. These themes are instrumentally in realizing the academic knowledge gap in understanding what are the Critical Success Factors in the implementation of PPPs for development of renewable energy projects.

Accordance to (Achieng, 2018), and (Bacilian et al., 2012, Deicmann et al., 2011, Sokona et al., 2012).

Renewable energy is secure and affordable source for least and developing countries.

Reliable on Da Afghanistan Breshna Sherkat (DABS) and Asian Development Bank (ADB) reports Afghanistan relies on energy imports from its neighboring countries to meet its domestic demand. Due to the country's damaged and fragmented energy Generation, Transmission and Distribution Infrastructure. Despite significant progress since 2002, only about 34% of the population has access to grid-connected electricity. As evident form much lower per capita energy consumption (140 KWh/capita/day) compared to global average larges consumption of consumption of 3060 KWh (Jahangiri, et al., 2019). Over the past few years, Afghanistan's total installed capacity is 655 MW consisting of 333 MW hydro and 6 MW Utility and private owned solar rooftop and the balance is thermal energy with high generation cost, (Asian Development Bank, 2015). Afghanistan is rich in renewable sources and can develop its own domestic electricity generation capacity from renewable energy sources

development, the government of Afghanistan has the target to generate 5GW from renewable energy by development of its renewable energy sources. The policy will have been implemented in two steps: 1, (2015 – 2020) to create and support an atmosphere and activities for the development and growth o the development of renewable energy sector particularly in the public private partnership (PPP) mode and 2, to develop IPPs and PPPs for (2021- 2032) to deploy renewable energy in full commercialization mode (Renewable Energy National Policy, 2015). Exploitation of energy projects can be managed skilled mangers, experienced top management and by PPP arrangement which involves partnership between the public sector and the private sector (Chowdhury, Chen, & Tiong, 2011).

2.2 Definitions Of Terms And Concepts

2.2.1 Public private partnership (ppp)

Public Private Partnership alludes to a scope of potential connections among public and private elements in setting of foundation and different administrations, Economic Planning Advisory commission (1995). It is additionally characterized by the (Business Magazine, 2000) as a business connection between a private-area organization and an administration office for motivation behind finishing an undertaking that will serve people in general. The public assistants in a PPP are government substances, including administrations, workplaces, areas, or state-asserted endeavors. The private assistants can be close by or worldwide and my fuse associations or monetary supporters with specific or financial capacity relevant to project. Dynamically, PPPs may similarly incorporate nongovernment affiliation (NGOs) just as neighborhood affiliations (CBOO) how rep-scorn accomplices direct impacted by the endeavor, (Brentt M, 2007). The (Investopedia, 2013), definition of course, explains public private associations as the use of private region hypotheses to subsidize a public errand when sufficient public finding isn't free. For example, a regional government might be strongly committed, anyway a private undertaking might be enthusiastic about financing the endeavor's development as a trade-off for tolerating the working advantages once the exercises is done.

2.2.2 Private sector participation (psp)

Private Sector participation (PSP) contract transfer obligations to the private sector rather than emphasizing the opportunity for partnership; (Minnow, et al., 2009). Privatization in most common and more widely accepted in sectors that are not traditionally considered public service, such as manufacturing, construction, etc. privatization is also the process of transferring ownership of a business, enterprise, agency, public service or public property form the public to the private sector, either to a business that operate for a profit or to a nonprofit organization. It may also mean government outsourcing of services or functions private firms, e.g., revenue collection and law enforcement, and prison management (Chowdhury, 2006).

Five forms of privatization are identified by Rechard C. Broors in his paper "privatization of Government Services: An overview and review of the literature" these five forms of privatization are:

- Complete Privatization
- Privatization of Operations
- Use of Contracts,
- Franchising,
- And Open Competitions (Schoenberg, 2006).

Privatization has occurred numerous times around the especially in socialist Countries.

2.3 Public Private Partnerships And The 2030 Sustainable Development Goals

Public private partnerships have become even more noteworthy with the adoption of the 2030 Sustainable Development Goals. The 17 goals which cover 169 targets cover crucial policy areas including quality education, good health, no poverty, gender equality, climate action, clean energy and responsible consumption among other (Marx, 2019).

Together with other international organizations the UN has explicitly acknowledged that it will not be possible to achieve the sustainable

development goals without the involving the private sector and public private partnerships (Leighann, 2018). Hence PPPs have been looked into to contribute towards the achievement of the SDGS by providing financing, expertise and knowledge and efficiency (Abbott, Levi-Faur, & Snidal, 2017).

The challenges that Afghanistan needs to tackle in implementing the SDGs are huge, addressing infrastructure, climate change, inequalities, job creation and renewable energy. The best way to do this is with the involvement of the private sector (Sustainable Development Fund, 2015). The SDG fund decided to create an advisory group mainly trying to see how the fund can work with the private sector in order to achieve the 2030 agenda on sustainable development.

Figure 2.1: 2030 Sustainable Development Goals

Source / https://unemg.org/

2.4 Economıc Ratıonalısm Of Publıc Prıvate Partnershıps

In an attempt to rationalize public private partnerships, (Greve & Hodge, 2017) attribute the present-day life of PPPs as falling into four periods: 1992-2001, 2002-2007 and 2003-present.

2.4.1 The policy breakthrough

The PPP policy breakthrough was the first period between 1992-2001. This period is when the model was first announced and demonstrated (Hodge, Greve, & Biygautane, 2018) under john Major's conservative government in 1992

(Hellowell, 2010). The PPP policy widely known as private Finance Initiative (PFI) in UK was not an immediate success since the private sector was wary of taking over the risks form the public sector (Greve & Hodge, 2017). Similarly, the policy was soon taken up by the government of Australia with the initial aim of building six hospitals in state of Victoria in the period of 1997-2204 (Hodge, 2005). In summing up the first period, PPP came up as a consistent policy initiative that encouraged using private sector financing to build new infrastructure in a bid to avoid creating a budget deficit for the government.

2.4.2 Extension of the ppp directive

In the second period between 2002 and 2007, the political idea gained acceptance worldwide in a phase of economic expansion (Flinders, 2010). Canada then followed in the early 2000s, drawing inspiration from the UK PFI approach. So far it has been hailed as one of the most admired PPP programs internationally (Greve & Hodge, 2017). Other OECD countries, including Germany, Spain, France and other European countries, followed the example of the UK, Australia and Canada and adopted PPP policies (Greve & Hodge, 2010; Flinders, 2010). This second period was marked by an economic boom. People became wealthier and governments got involved in riskier investments and mega-projects (Flyvbjerg, 2014).

2.4.3 Temporary suspension of the ppp policy

In the third period between 2008 and 2012, the PPP policy was temporarily suspended after the end of the global financial crisis that began in late 2008. As some private companies involved in government PPP project0s were declared bankrupt, governments had to step in to save them (Greve & Hodge, 2017). During this time in the UK, the Treasury Department temporarily had to take over most of the over 700 PPP projects. Other countries such as Greece, Spain and Portugal also suffered from the global financial crisis, with Spanish PPP projects being halted or temporarily suspended (Loxley, 2012).

The dominance of the global financial crisis dampened enthusiasm for PPP in many countries where the concept had not yet taken shape.

2.4.4 Towards a global ppp policy agenda

The fourth was characterized by renewed interest in PPPs which came as part of a Surge in the interest for new infrastructure policies and the construction of new physical infrastructure. The renewed interest in PPPs came from countries in Africa, South America, Asia and the United States (Greve & Hodge, 2017). In the UK, the new British government was looking for a fresh start on the PPP program and they established a systematic new Policy called "PF2" Policy program (HM Treasury, 2012).

2.5 Suitability Of Public Privat Partnerships As A Funding Method

According (UNECE, 2004), PPPs are not advisable in all cases and should not be used as a panacea. If well enforced, however, PPPs can overcome insufficient infrastructure that limits economic advancement, particularly in developing countries (WBI, 2012). According to (Calderon & Serven, 2010), infrastructure investments are known to speed up the much-needed development for developing countries and decrease the income imbalance.

2.5.1 Role of asian development bank ppps

ADB is committed to achieving a prosperous, inclusive, resilient, and sustainable Asia and the pacific, while sustaining its efforts to eradicate extreme poverty. Established in 1966, which is headquartered in the Ortigas Center located int city of Mandaluyong, Metro Manila, Philippines it is owned by 68 members—49 from the region. The company also maintains 31 field offices around the world to promote social and economic development in Asia.

ADB assists its members, and partners, by providing loans, technical assistance, grants, and equity investments to promote social and economic development. (https://www.adb.org/)

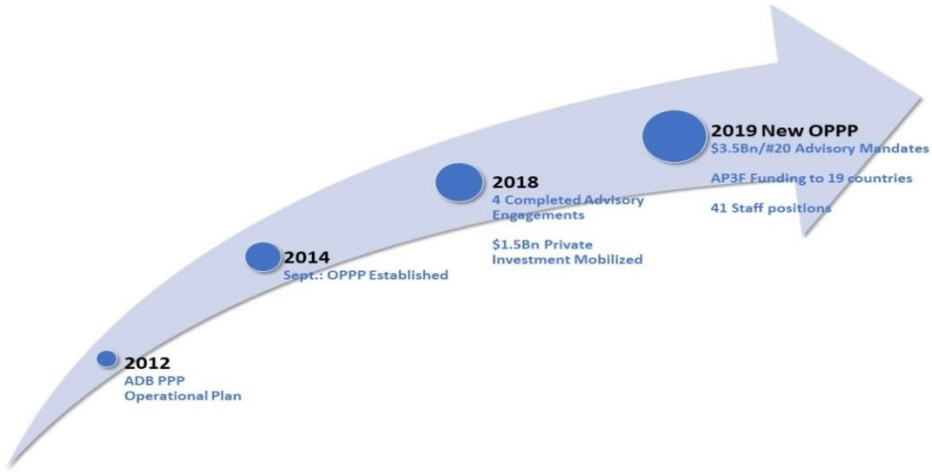

Figure 2.2: Adb Establishment And Operation Plane

Growth shown with new OPPP plan. (Graphics courtesy of ADB)

Source / https://www.adb.org/

ADB's office of public-private-partnership helps governments use the financing, efficiency and quality of the private sector for projects that benefit society.

ADB provides Transaction Advisory Services (TAS) to both public and private sectors. (https://www.adb.org/sites/default/files/publication/157741/oppp-flyer-2019.pdf)

2.5.1.1 Public sector

Tas for public sector are transaction advisory service over the entire range of activities associated with the development and structuring and placing of PPP projects in to market. Our experienced transaction advisors bring international best practice and depth of skill sets spread over various fields such as technical, finance, legal, market/demand, environment and social. These qualities enhance the project's credibility and increases investor confidence (https://www.adb.org/sites/default/files/publication/157741/oppp-flyer-2019.pdf) .

TAS for public sector is ideally suited for:

Pathfinders or "firs-of-its-kind" transaction.

Transaction that involves financial legal, or risk aspects which could be effectively assisted through ADB's unique knowledge and experience.

Transaction that may benefit from ADB's bran which is associated with transparency, fairness, and governance; and

Transactions that may benefit from ADB's role as a multilateral development bank which can galvanize multilateral financing and credit enhancement products (https://www.adb.org/sites/default/files/publication/157741/oppp-flyer-2019.pdf)

2.5.1.2 Private sector

Tas for private sector is transaction/financial advisory services which assists private sector clients to structure bankable projects and raise financing. ADB's unique country knowledge, sector knowledge, country presence, financing and project experience can add significant value to the clients, ADB's assistance also benefits developing member countries by acceleration the delivery of critical infrastructure (https://www.adb.org/sites/default/files/publication/157741/oppp-flyer-2019.pdf).Tas for private sector is ideally suited for;

Innovative transactions which require bespoke financing structuring and solutions.

Transactions in countries where the perceived country risk is high and there is insufficient local financing market.

Transactions that may benefit from ADB's presence in catalyzing and mobilizing financing.

2.5.2 Role of the world bank in ppps

The justification of the support for PPPs by the World Banks's is grounded on the contention that PPPs potentially assist in closing the infrastructure gap by adopting technology and innovation from the private sector to deliver quality public services through enhanced operational efficiency (World Bank, 2015). The World Bank looks at PPPs through a "poverty lens" (World Bank, 2015, P.7) in view of its central objective of poverty reduction and acknowledged by the 2013 twin goals of ending extreme poverty and promoting shared prosperity. Hence, infrastructure and stimulate economic growth that will eventually reach

the Poor (IEG, 2011). Additionally, PPPs can also make significant investments and hence advance economic development (DFID, 2008).

The World Bank provide a broad variety of knowledge, tools and services that contribute to the PPP agenda through government Policy guidance on legislative and institutional reforms.

The World Bank helps governments make informed decisions about improving access and quality of infrastructure, using PPPs as one delivery option (World Bank 2016a). Through capacity building, promoting disclosure, strengthening data and encouraging engagement, the World Bank provides supports for its client countries along the full PPP process from policy advices to project Closure (World Bank, 2015b).

The World Bank recognizes the hesitation by some developing economies, mostly in the Asian and African countries, to embarking on PPPs as a result of prior bad experiences with ill-prepared PPPs (Rana, 2018). Additionally, Part of the reason why PPPs is fraught with a number of difficulties is that these projects are very complicated to prepare, structure and operate, and generally involve some specialized skills which are not always accessible (Ong'olo, 2006). To tackle this, many governments around the world acknowledge the need for PPP training to boost skills and the required knowledge to benefit from PPPs.

The World Bank Group has employed ab broad variety of tools and services in its client countries to target PPPs. With a commitment of $6.2 billion, the International Finance Corporation

(IFC) invested in PPPs, the Multilateral Investment Guarantee Agency (MIGA) backed PPP initiatives through political Risk Insurance (PRI), with total Gross exposure of $4.1 billion and IFC contributed to PPPs through advisory Services with total commitment of $177 million. On the public sector front, the International Bank for Reconstruction and Development (IBRD) for 353 projects with PPP element adding up to$7.6 billion (World Bank, 2015). Globally, the World Bank Group has helped 134 countries with PPP targeted measures, in which 103 of those countries have received multiple PPP interventions (IEG, 2013)

2.5.3 Role of government of afghanistan in ppps

The development of a comprehensive investment framework for PPPs was initially driven by the Government of Afghanistan (GoA) to use PPPs as an alternative funding method in addition to national budget to expand efficient service delivery and physical infrastructure at the national lever for:

Attracting and utilizing private sector business expertise.

Effective use of public properties and assets (https://ppp.mof.gov.af/)

Reducing reliance on foreign aid and

Effective use of existing capital in the private sector and banks.

Currently the Government of Afghanistan issues of lack of infrastructure, congestion and delays in implementing development projects, overreliance on foreign aid, and poor service delivery.

The GA, with the coordination of stakeholders, will effectively and comprehensively implement PPPs through the establishment of Policy, legal and regulatory framework, and establishing a fully professional Central Partnership Authority (CPA). To attract investment and establish an enabling environment for domestic and foreign investment in PPPs, the Government of Afghanistan will provide guarantees, viability gap funding and other incentives to the private sector.

Afghanistan as a country which decades of wat has been destroyed all its infrastructures needs to have international support, WB and ADB in close coordination with government can play a positive role in this context and active participation of private sector will bring a bright future. For a country like which doesn't have stable economic development, multilateral lenders support such as World Bank and Asian Development Bank is really important and conductive (https://ppp.mof.gov.af/).

The most effective part of multilateral lenders contributions in process is their experiment in the field of PPP projects, as such model of projects didn't fully take over either party in Afghanistan to be able fully understand its challenges. Since 2001, these multilateral lenders have been providing financial and technical supports to Afghanistan for conduction of large projects.

Therefore, since the government cannot alone implement mega projects due to economic constrains, the renewable and other gigantic projects should be implemented jointly or with financial supports of those multilateral lender's agencies. The study finding shows that PPP project need strong financial support which is sometimes not possible to be covered by the government and private-sector, therefor Multilateral lenders' role is bold in PPP projects. Meanwhile, it should be mentioned that lenders are more likely to pursue PPP Project in countries that have already successfully implemented PPP projects, and where investors have been satisfied and seen good returns. Nevertheless, countries with no previous history of PPPs but which seem to be stable and able to meet certain other conditions will be able to attractive private investment. The respondent feedback and research finding shows that committing to sustainable development Goals (SDGs) countries pledge to pursue progress on economic, social and environmental targets, in a balanced and integrated manner. The SDGs are Cross cutting and ambitious and require a shift in how in partnership they also push us to significantly change the level of both public private investment in all countries (https://sustainabledevelopment.un.org/).

The research finding suggest studying the developed PPPs in Afghanistan and evaluate the success ability of those projects, which requires a detailed investigates and mitigate those with the new and under study projects in the country.

The study identified and evaluate opportunities to integrated Renewable Energy (RE) into the overall electricity supply plan presents some unique challenges. Generally traditional planning models which attempt to optimize, in terms of size and timing, among a range of generation options are not well suited to evaluating resources whose cost effectiveness can vary widely depending on location and market density.

Accordance the study and the research respondents hope that a new political system can address the problem of fragile political/security conditions in Afghanistan and step up of ceasefire can bring stability to the country, this will automatically lead up to attraction of investors to the country, and also recommendation for procedures for proposals and set up of time frame for approval. Tendering, procurement, incentives, Project Development Fund (PDF)

should reform and set in according to the experiences of developed countries (https://ppp.mof.gov.af/).

The study finds that Public Private Partnership PPP to be related to provision of public infrastructure to society towards attaining the Sustainable Development Goals (SDGs) set by the UN. Multilateral lenders role for Public Private Partnership project are very important and the lenders role must be reform in Afghanistan, the relation between project doer and lenders is one the framework must be reform. The study finding shows that the Word Bank (WB) and Asian Development Bank (ADB) presence and support was always conductive on PPP projects in Afghanistan, as they are initiating many PPP projects so far specially in Public Private Partnership power sector and renewable energy projects.

(World Bank, 2018) conducted a research in Afghanistan to examine the legal, political and institutional environment for PPPs and found that there has been movement toward greater transparency and openness in all areas of government in Afghanistan, with several new initiatives having been launched in recent years. The Afghanistan government, with the recommendation of the World Bank, launched the PPP disclosure portal, an online tool which makes all nonconfidential information relating to PPPs available to the public.

(World Bank, Report No: PAD 1812, 2018), the Afghanistan Government for building on foundation developed by previous and ongoing interventions, the PPIAP will help develop an integrated PIM-PPP framework to support optimal allocation of public and donor finances, maximize private investment, and address challenges related to institutional and technical capacity in the MoF and relevant sponsoring line agencies. In doing so, the PPIAP's design will enable the GA to reflect MFD within the PIM-PPP framework. Notably, the PPIAP will establish an Infrastructure project preparation facility (IPPF), aligned with the overall budget process, to support the periodization and preparation of public investment projects and bankable PPP projects. The project will benefit from the World Bank's experience and expertise in supporting PMI and PPPs, within the context of MFD, in fragile environments. The PPIAP will coordinate the efforts of World Bank Group teams (World Bank, Report No: PAD 1812; annex 5,2018), and other development partners.

The Public-Private Infrastructure database indicates that 6 PPP Energy (40MW, Solar, 100MW, Hydro and 90MW, Thermal) projects with a total amount of $ 330 million signed Power Purchase Agreement (PPA) with the Independent Power producers (IPPs), between 2018 and 2020 in Afghanistan. Currently there are 000 projects in the list of PPP projects approved by PPP Committee, EHC and aligned Ministries, with a total investment of approximately $ 000 billion. These projects cover a variety of sectors, including Energy, Transport, education, agriculture and health care sectors.

2.6 Measures Of Success For Ppps

(Hodge & Greve, 2017), (Hodge, Greve & Biygautane, 2018), and (McConnell,2010) have detailed literature on the relative success of PPPs. (McConnell, 2010) notes, however, that the answer to the question of how to measure success is inherently ambiguous. (Hodge, Greve & Biygautane,2018) build on this by claiming that the question of whether PPPs work is not an easy question to answer. It shows unclear how what works for whom and in what sense. Success can be viewed differently by the various actors and groups involved in public infrastructure (Hodge, Greve & Biygautane, 2018; McConnell, 2010).

(Osei-Kei & Chan, 2018) elucidate the expectations of both the public and private sectors for this interaction by postulating that the private sector's perspective on effective PPP through a strong and well-structured private partner, engagement and inclusion the top leadership of the private partner, a clear vision and mission for PPPs and set Scope and measurable goals. On the other hand, the public sector's perspective on successful PPPs is defined by the lively government involvement, the selection of the right company for a long-term partnership and communication with all parties involved.

(Almarri & Abu-Hijleh, 2017) explain the importance of government support to create a favorable environment for PPPs to thrive, including legal, technical, state and administrative support through the completion of project phases. (Cheung, Chan & Kajewski, 2012) support (Almarri & Abu-Hijleh,2017) by stating that the critical success factors for the implementation of PPP for a new government are crucial to minimize risk and ensure project success.

(Wachira, Kidombo & Kinyua, 2015) define Critical Success Factors (CSF) as a set of factors, characteristics and conditions that are considered necessary for success. (Ganisen, Mohammed, Newsan & Gunavathy, 2015) support the definition of (Wachira, Kidombo & Kinyua, 2015) and consider critical success factors as a limited number of variables required to ensure the success and high performance of organizations.

(Mullin, 2002) describes the main characteristics of PPP success and compares them to the viewpoint of the private sector and the public sector. Five factors are generally considered to be critical to the success of PPPs. These factors include appropriate risk allocation, project (feasibility, effective procurement, favorable economic conditions, and favorable legal frameworks); (Olatunji, Olawumi & Ongusemi, 2016; Cheung, Chan & Kajewski, 2012; Khanom, 2010).

2.6.1 Measures of success for ppps in renewable energy

Afghanistan has great significant Renewable Energy Resources with excellent to fairly good generation potential. These resources are spread over wide geographical areas throughout the country which remains largely unexploited.

Afghanistan is well-endowed with around 318 GW significant renewable energy potential, through diverse renewable energy portfolio representing Hydro (23.000 MW), Wind (67,000 MW), Solar (222,000 MW), Geothermal (3,000 to 3,500 MW) Biomass (4,000 MW). which remain largely unexploited. For last eighteen years, only parts of Hydroelectric power projects have been implemented.

Further, a striking movement is being seen from private area to public private association (PPPs) being developed of sustainable power area in Afghanistan (https://policy.asiapacificenergy.org/sites/default/files/Afghanistan-Renewable-Energy-Policy-English-and-Dari.pdf).

While environmentally friendly power is seen having the capacity to assume a significant part in giving practical energy to the tremendous populaces in non-industrial nations with no admittance to clean energy and notwithstanding its monetary reasonability for a few applications, its latent capacity is yet to be completely acknowledged because of a few obstructions to its infiltration (Painuly, 2001).

The boundaries to sustainable power improvement in any case, interest in fuel sources includes settling on essential decisions for any financial backer considering its evident long haul sway and critical costs of monetary assets.

These challenges still abound in most developing countries and a shift in focus is being seen in the exploitation of mini and micro-energy sources, which ensures that the energy sources benefit the population around the resource endowments. Indeed, the development financial institutions like the World Bank and the African Development Bank are encouraging the exploitation of mini and off-grid energy sources and are developing tailor-made financial products for renewable energy sources using the micro and mini-grid technologies to target populations located around the resource endowments and without transmission or distribution infrastructure.

Several of the approaches to overcome some of the challenges in the exploitation of off-grid and mini-grid energy solution lies in the employment of innovative business models. (Ngoepe et al., 2016) in a review of innovative business models lauds the use of Pay-As-You-Go (PAYG) as the most popular end-user financing model where customers pay a deposit for a device (e.g for Solar PVs) to be installed in their homes and make regular payments through their phones over times. There are also a number of energy access enterprises working in collaboration with Non-Governmental Organisations (NGOs) and Community Based Organisations (CBOs) to unlock markets and build capacity for exploitation of off-grid renewable energy solutions.

Institutional barriers to renewable energy include the size of most of the power systems which are too small to support meaning exploitation of renewable energy sources, (Eberhard & Shkaratan, 2012). By 2014, for example, Sub-Saharan African countries had a combined installed capacity of 92 GW out of which, half was controlled by South Africa with only 14 of the remaining countries have installed capacity of more than 1GW (Eberhard et al., 2016). This call for investment in capacity expansion strategies for renewable resource endowed countries if exploitation of such resources is to be accelerated including lessening disruptions into the power systems stability.

distinguishes poor institutional structure and framework, deficient arranging approaches, absence of coordination and linkages in the sustainable power

program and estimating mutilations as a portion of the obstructions to sustainable power improvement. archives capacity and readiness to pay by shoppers as one of the obstructions to environmentally friendly power advancement and stays key determinants for both extended, unified and decentralized assistance arrangement. They have likewise refered to deficient network association, which is by and large to the record of the buyer as a further hindrance to full assistance arrangement. In any case, considering the development in power request occasioned by financial and populace development, the force frameworks have been growing and the requirement for expanded age is relied upon to spur more private area interest.

However, according to figures from the International Renewable Energy Agency (IRENA, 2018), renewable energy technologies have experience price reductions over the last ten years.

IRENA estimates that Solar PV have dropped by close to 75% between 2010-2017 while wind-turbine prices have dropped by 50% over a similar period driven largely by technological improvements, higher Solar PV modules efficiencies and larger turbines.

It can along these lines be contended that thinking about that around 80% of the worldwide energy supplies depend on depletable petroleum derivatives which make huge energy security hazards, the misuse of sustainable power gives an enhancement impact both to the public authority regarding power blend and to the private area as far as portfolio broadening (Wüstenhagen and Menichetti, 2012).

A Country as Afghanistan utilizes the Least Cost Power Development Plan way to deal with the area arranging while the Asian and neighbor nations like India and China depends on the Integrated Resource Plan, to anticipate the arrangement of environmentally friendly power and retirement of old plants.

While a portion of the above difficulties endure, the commitment of private parts in quickening power improvement in many business sectors can't be denied. Aside from absolutely private interests in the energy area, PPPs models have additionally acquired money. PPPs can be followed present privatization on set aside governments cash and make economies run effectively by

expanding circle of movement coordinated by the public area (Chowdhury, Chen, and Tiong, 2011).

2.6.2 Development model for public private partnership and renewable energy

Inspirations of public-private partnership are viewed as comprising of an arrangement benefits for both public and private areas. Such advantages incorporate lessening public area costs, quick delivery of infrastructure, high proficiency, strength and maintainability accepted accountability, private administration, end of danger and more improved type of administrations.

Achieng, J. (2018), investigate that huge investment are needed to convey energy projects, private sector investment and public private partnership models are viewed as the only procedures for delivery of power projects.

Chou and Pramudawardhani, (2015) while seeing that PPP are a viable and set up technique for getting foundation projects additionally brings up that not all undertakings actualized under this casing work have been fruitful by virtue of unseemly danger allotment and absence of data on suc-cess in explicit nations.

Three is still a general understanding that the PPP model is not always cost-effective in implementing government projects (Lim, 2004; Van Ham & Koppenjan, 2001). In practice, most PPP project are likely to be susceptible to risks their long-term type and the complex circumstances surrounding the main stakeholders can be quite unpredictable. Much of the risks of PPP project comes from the complexity of the arrangement itself in terms of documentation, financing, taxation, sub-agreements etc involved in a major infrastructure venture, while the type of the risk alters over the duration of the project (Grimey and Lewis 2002). Precisely, the potential barriers (risks) to the effective operation PPPs are often financial corruption, an unpredictable political situation, unforeseen costs, variations of demand prediction, an undeveloped regulatory framework, and lack of experience in PPP projects (Bae & Joo, 2016 Baker, 2016; Burke & Demrag, 2019; Kim & Kwa, 2020)

2.6.3 Critical success factors for private investments and ppps in renewable energy development

Critical Success Factors (CSF) are delegated contributions, particular attributes and situations which in the proper climate, communicate as free factors and perform a significant job in venture achievement (Pandremmenou, Sirakoulis, and Blanas, 2013). While these elements are versatile to numerous PPP exchanges, explicit CSFs have been distinguished in numerous examinations including advancement of environmentally friendly power.

United Kingdom is promoted as quite possibly the best nations in actualizing PPPs for framework Projects (Chou and Pramudawrdhani, 2015). In Singapore, in an investigation of danger and favored danger distribution for PPP projects; efficient offices, proper danger designation and sharing and solid private consortium were distinguished as sure factors for sustainable power advancement while negative elements were seen as deferrals in finishing up exchanges, high exchange costs, hazy government goals, assessment standards, absence of involvement and suitable abilities (Hwang er al., 2013).

Critical Success Factors (CSF) are delegated inputs, particular qualities and conditions which in the proper climate, connect as free factors and Play a significant job in venture achievement (Pandremmenou, Sirakoulis, and Blanas, 2013). While these variables are versatile to numerous PPP exchanges, explicit CSFs have been recognized in numerous examinations including improvement of environmentally friendly power.

The UK is promoted as one of the top well-to-do country in actualizing Public Private Partnerships for infrastructure Developments (Chou and Pramudawrdhani, 2015).

Antonio and Funihas, (2012), found that impetuses and sponsorships approaches, for example, Feed-in-taxes and strategy cycles, for example, essential arranging demonstrated viable in cultivating Renewable Energy Development in the chose European Countries.

Marques and Fuinhas, (2012) experimentally tried the public arrangements driving improvement of environmentally friendly power in an enormous number of European nations and found that approach of impetuses, for example,

sponsorships and Feed-in-Tariffs end up being critical drivers of Renewable Energy Development.

In an alternate investigation of elements inspiration sustainable power in European nations (Marques et al., 2012) utilizing a board information method evaluated the impacts of political, financial variables and country explicit components helpers. They discovered hall pressure, CO2 outflows and salaries as significant drivers of environmentally friendly power venture as drivers. They likewise referred to oil wins and fails, social and political pressing factor for advancements in clean energy and monetary emergency (expecting governments to help their economies) as drivers of environmentally friendly power improvement post 2006.

Chou et al., (2015) mentioned which the country of Indonesia is a much sought-after Public Private Public Private Partnerships venture objective, Public Private Partnerships execution have stayed risky by unmanageable risks encompassing government projects particularly with respect to land attaining.

The investigation considered 67 achievement related factors assembled under four fundamental task viewpoints, to be specific, supportive of project characteristics, stakeholders, project members and intelligent cycles.

The methodologies of study received regardless, there is right around an agreement among creators on the established factors that can studied as Critical Success Factors for Public Private partnerships projects. As a scientist and architect I discovered during investigating written works, the most CSF for accomplishment of PPP projects followed by proper danger distribution by means of dependable legally binding game plans, sound monetary bundle, great venture climate, and solid concessionaire with solid specialized strength individually and contract the board is quite possibly the main parts of PPP project conveyance, whenever done viably, it will uphold the drawn out achievement of the PPP project line with the concurred contract terms.

The table underneath features an example of studies on CSFs and set CSF planned with can frame a premise of resulting studies and exploration.

2.6.4 Overview Of Renewable Energy In Afghanistan

Afghanistan is building its energy sector to provide the framework for its socio-economic development. Energy access is a high advancement need for Afghanistan and is the second priority after guideline of law. In the new past, the endeavors have been aimed at reproduction and development of the public power framework with the risk of force exchange with central and south Asia.

Afghanistan as a country which decades of war has been destroyed all its infrastructures needs to have international support, WB and ADB in close coordination with government can play a positive role in this context and active participation of private sector will bring a bright future. For a country like which doesn't have stable economic development, multilateral lenders support such as World Bank and Asian Development Bank is really important and conductive.

The most effective part of multilateral lenders contributions in process is their experiment in the field of PPP projects, as such model of projects didn't fully take over either party in Afghanistan to be able fully understand its challenges. Since 2001, these multilateral lenders have been providing financial and technical supports to Afghanistan for conduction of large projects.

Therefore, since the government cannot alone implement mega projects due to economic constrains, the renewable and other gigantic projects should be implemented jointly or with financial supports of those multilateral lender's agencies. The study finding shows that PPP project need strong financial support which is sometimes not possible to be covered by the government and private-sector, therefor Multilateral lenders' role is bold in PPP projects. Meanwhile, it should be mentioned that lenders are more likely to pursue PPP Projet in countries that have already successfully implemented PPP projects, and where investors have been satisfied and seen good returns. Nevertheless, countries with no previous history of PPPs but which seem to be stable and able to meet certain other conditions will be able to attractive private investment. The respondent feedback and research finding shows that committing to sustainable development Goals (SDGs) countries pledge to pursue progress on economic, social and environmental targets, in a balanced and integrated manner. The SDGs are Cross cutting and ambitious and require a shift in how in

partnership they also push us to significantly change the level of both public private investment in all countries (https://sustainabledevelopment.un.org/).

The research finding suggest studying the developed PPPs in Afghanistan and evaluate the success ability of those projects, which requires a detailed investigates and mitigate those with the new and under study projects in the country.

The study identified and evaluate opportunities to integrated Renewable Energy (RE) into the overall electricity supply plan presents some unique challenges. Generally traditional planning models which attempt to optimize, in terms of size and timing, among a range of generation options are not well suited to evaluating resources whose cost effectiveness can vary widely depending on location and market density.

Accordance the study and the research respondents hope that a new political system can address the problem of fragile political/security conditions in Afghanistan and step up of ceasefire can bring stability to the country, this will automatically lead up to attraction of investors to the country, and also recommendation for procedures for proposals and set up of time frame for approval. Tendering, procurement, incentives, Project Development Fund (PDF) should reform and set in according to the experiences of developed countries.

The study find that Public Private Partnership PPP to be related to provision of public infrastructure to society towards attaining the Sustainable Development Goals (SDGs) set by the UN. Multilateral lenders role for Public Private Partnership project are very important and the lenders role must be reform in Afghanistan, the relation between project doer and lenders is one the framework must be reform. The study finding shows that the Word Bank (WB) and Asian Development Bank (ADB) presence and support was always conductive on PPP projects in Afghanistan, as they are initiating many PPP projects so far specially in Public Private Partnership power sector and renewable energy projects.

The establishment of the Renewable Energy (RE) advancement depends on the Afghanistan National Development Strategy (ANDS, 2008) which gives the general vision and objectives of the energy area; Power Sector Master Plan, (PSMP, 2013) that gives the general status and needs of force sec-peak network

arranging and extensions, including distinguishing proof of locales where network extension isn't monetarily reasonable; and the National Energy Supply program, (NESP, 20013) which has set the present moment (by 2015) and long haul (up to 2022) focuses for power supply; energy effectiveness and sustainable power area; energy organizations a private area support and limit and administrative structure improvement.

The AREP Seeks to complement the PSMP target by seeking to increase deployment of renewable energy projects in the country to meet the 2030 target. In doing so, it tacitly accepts a de facto goal of around 95% presence of renewable energy in the national grid mix. The AREP's goal in fat targets meeting a gross power demeaned of 5 – 6 GW by 2030.

Afghanistan is well-endowed with around 318 GW significant renewable energy potential, through diverse renewable energy portfolio representing Hydro (23.000 MW), Wind (67,000 MW), Solar (222,000 MW), Geothermal (3,000 to 3,500 MW) Biomass (4,000 MW). which remain largely unexploited. For last eighteen years, only parts of Hydroelectric power projects have been implemented (MEW, REP, 2015), https://ppp.mof.gov.af/#projects).

From 2015 – 2020 development of renewable energy sector in Afghanistan has been largely limited in the small Solar Energy projects. To create and support an atmosphere and activities for the development and growth of the renewable energy sector particularly in the Public Private Partnerships PPP. The Afghanistan Government sets framework to achieve a target of deploying 4500 – 5000 MW of renewable energy capacity as the total demand by 2020 – 2032 (MEW, REP, 2015).

The vision of Afghanistan National Integrated Energy Policy (ANIEP) is to synchronizes the Afghanistan Sustainable Energy Policy with the global framework of Sustainable Energy for all (SE4All). The framework seeks to ensure sustainable energy access for all, by 2030. Afghanistan has prepared the Rapid Assessment Gap Analysis (RAGA), the first step towards the SE4All framework.

Different Incentives to draw in private area support into the area have been set up by the Afghanistan's Ministries and agencies especially targeting renewable

energy investors. Some of the polices included the fact that RE projects have so far received full funding from donors and are still not able to self-sustain, provision of subsidies is considered necessary and unavoidable. However, the subsidies would be reviewed, rationalized and carefully targeted keeping in view affordability ad cost effective delivery of reliable energy service (https://ppp.mof.gov.af/).

The upfront capital support in the form of subsidies will be provided tall renewable Energy Projects in order to make them viable by either improving the returns on investment or by reducing the tariffs for commercial and domestic (both urban and rural) consumers. The amount and pattern of subsidy will be vary depending upon the technology, location and the design of the project. For instance, stand-alone projects providing basic energy services to remote communities, projects supported by women, or benefiting women and children may receive the highest allocation of subsidies. Subsidies could be given in the form of preferential Tariffs, performance linked incentives or Viability Gap Funding. Other incentives given to the developers of RE projects will include.

a) Interest subsidies and soft loans (low interest rates, moratorium/grace period on repayment, favorable debt-equity ratio).

b) Customs duty and sales tax exemptions for import/sale of machinery equipment and spare parts meant for the initial installation or for balancing, modernization, maintenance, replacement, or expansion after commissioning of RE projects.

c) Income tax exemption for the RE project developer for the first 5 years of its commercial operation.

d) Land acquisition

e) Security during project implementation.

f) Other incentives and rebates thar are considered necessary from time to time and on case-by-case basis. Compliance of guidelines, directives, regulations, rules etc. issued by regulatory authority from time tom time regarding these shall be binding on all (https://ppp.mof.gov.af/#projects).

2.6.5 Risk allocation

In a study to identify critical success factors of PPPs in Nigeria and Malaysia, (Muhammad & Johar (2019), discovered suitable risk allocation and risk sharing as a top success feature.

Abd-karim (2011) places the importance of risk allocation on helping the public and the private sector achieve a balanced distribution of responsibilities. Risk allocation between the private sector and public sector is central to implementation of PPP systems (Dahiru & Muhmmad, 2012). Accordance to above schedule risk allocation (Zhang, 2005) further adds that risk allocation is the fundamental principle of PPP implementation.

Abd-karim (2011) identifies some significant risk factors in PPP implementation including political risks, economic risks, legal risks, operation risks, project selection risks and market risks among others. Ke, Wang, Chan & Lam (2010) attribute economic risks to interest rate volatility which occur when the local interest rate is unanticipated due to immature local economic system. Political risks, as Jayaseelan & Tan (2006) note, are due to unsupportive government policies such as changes in law, delay of project approval and permit. Change in law occurs when local governments are inconsistent in application of new regulations and laws. Delay of project approval and permits happens when there is a delay or refusal of project approval by local government (https://ppp.mof.gov.af/).

2.6.6 Project implementablitiy

Project implement ability, as (Cuttaree and Manri-Perrott, 2011) note, is based on technical feasibility, stakeholder support and a strong private consortium. In a project technical feasibility assesses the details of how to deliver a product or service. As (Li, Akintoye, Edwards, & Hardcastle, 2005) notes, a technical feasibility study determines whether the required technology is available or not and whether the required resources are available. According to (Zhang, 2005), competent public and private sector partners with complementary interests in the project and a willingness to adapt to changing circumstances and opportunities consistent with the desired project outcomes and performance requirements is essential in facilitating the success of PPP projects.

2.6.7 Effective procurement

Effective procurement, (UNECE, 2004) postulates, ensures that the procurement process attracts bids from the most capable private sector entities and ensures that the possibility of winning is open to all. According to (Li, Akintoye, Edwards and Hardcastle, 2005), effective procurement is based on elements such as transparency, good governance, competitive procurement process, social support and thorough assessment of the costs and benefits.

Ong'olo (2006) argues that there is need for transparency in the procurement process, ensuring a rejection on the use of bribes and other forms of corruption to win approval for projects from government. There is also need for a competitive procurement process to ensure that a competent and qualified private sector partner is selected (Miller, 2000). Good governance in PPPs, as (Ong'olo, 2006) elaborates, refers to a number of interlinked components including public management, public accountability, dispute resolution and sustainable development. Zhang (2005) advises that, to achieve successful PPP projects, there is need for a government to retain control in case of any mishaps and be prepared to step in at any moment.

2.6.8 Economic conditions

The success of PPP projects in developing countries is found to be strongly associated with economic indicators such as the Gross Domestic Product (GDP) (Li & Akintoye, 2003) and inflation (Hammami, Ruhashyankiko, & Yehoue, 2006). Unstable macroeconomic conditions of a country affect the risk proportion that the private partner would be willing to accept in a PPP, which in turn, would make PPP projects complex and problematic (Muhammad & Johar, 2019); (Cuttaree & Manri-Perrott, 2011) also highlight the importance of economic viability stating that basic macroeconomic conditions should be sufficiently stable for the PPP arrangement to succeed.

2.6.9 Legal And regulatory framework

The large extent influenced by the legal environment where the projects. (Cuttaree & Manri-Perrott, 2011) emphasize on the need for a clear, broad and flexible legal environment, which ensures successful PPP projects.

Afghanistan as a country which decades of war has been destroyed all its infrastructures needs to have international support, WB and ADB in close coordination with government can play a positive role in this context and active participation of private sector will bring a bright future. For a country like which doesn't have stable economic development, multilateral lenders support such as World Bank and Asian Development Bank is really important and conductive.

The most effective part of multilateral lenders contributions in process is their experiment in the field of PPP projects, as such model of projects didn't fully take over either party in Afghanistan to be able fully understand its challenges. Since 2001, these multilateral lenders have been providing financial and technical supports to Afghanistan for conduction of large projects.

Therefore, since the government cannot alone implement mega projects due to economic constrains, the renewable and other gigantic projects should be implemented jointly or with financial supports of those multilateral lender's agencies. The study finding shows that PPP project need strong financial support which is sometimes not possible to be covered by the government and private-sector, therefor Multilateral lenders' role is bold in PPP projects. Meanwhile, it should be mentioned that lenders are more likely to pursue PPP ProJet in countries that have already successfully implemented PPP projects, and where investors have been satisfied and seen good returns. Nevertheless, countries with no previous history of PPPs but which seem to be stable and able to meet certain other conditions will be able to attractive private investment. The respondent feedback and research finding shows that committing to sustainable development Goals (SDGs) countries pledge to pursue progress on economic, social and environmental targets, in a balanced and integrated manner. The SDGs are Cross cutting and ambitious and require a shift in how in partnership they also push us to significantly change the level of both public private investment in all countries (https://sustainabledevelopment.un.org/).

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They further point out that private partners seek the reassurance of a sound legal framework that enforces contractual rights, clear legislations and regulations that assign responsibilities. (IMF, 2004, P17) advises that the “legal framework for PPPs should be supplemented by clear credible and efficient dispute resolution mechanisms” while ensuring that PPPs non-discriminatory taxation and regulation regimes.

2.7 Value For Money In Ppps

The main government rationale for delivering infrastructure such as hospital, schools, roads, subways and prisons through PPPs in the prospect of improving public service at a lower cost, also known as Value for Money (Wall & Connolly, 2009). The value of PPPs is guided by the belief that meaningful collaboration between governments and private firms will deliver major infrastructure projects that have better outcomes than any one party could deliver on their own Huxham & Vangen, 2000; McQuaid (2000).

In this simplest form, Value for Money (VfM) is described as a measure of the extent to which cost savings are achieved when delivering a public infrastructure project through a PPP Siemiatycki & Farooqi, 2012). Morallos & Amekudzi (2008) postulates that value for money assists government agencies determine whether to pursue a project as a PPP rather than by the traditional procurement process, as long as they can account for costs and savings throughout the life of the project. Sarmento (2010) argues that value for money should not only be about cost-effectiveness without regard for the quality of the service provided. Siemiatycki & Farooqi (2012) adds that VfM also ensures that the public sector is focused on the quality and competence of the private sector work and not on the lowest bid. Well-structured PPPs can introduce clear lines of accountability, performance and transparence of outcomes.

2.7.1 Technical innovation

Ball, Heafey, & King (2001) state that there is need for the private partner to adopt innovations in coming up with a PPP design as it drives VfM optimization. (Ismail, 2013) maintains that private sector is generally more effective and innovative and thus their involvement in implementing public infrastructure through the use of PPPs will result in VfM.

2.7.2 Competitiveness

A study by (Ismail, Takim & Nawawi, 2011) contends that in order to obtain the highest value for money from PPP projects, the selection criteria of the private partner should be highly competitive. In a competitive setting, the private

partner will take the necessary measures to enhance efficiency hence increasing the VfM of the PPP project (Cheung, Chan, & Kajewski, 2009).

2.8 Public Private Partnership Arrangements

Hodge & Greve (2013) Postulate that PPPs are found at various level of government, from partnerships between the local government and private companies, to national governments that team up with national companies or to international organizations teaming up with multinational companies.

PPP models vary and are influenced by the parameters of the projects (Armistead & Pattigrew, 2004). Numerous literature on PPP (Tvarno, 2010; Nwangwu, 2016; Grimsey & Lewis, 2004) identify service contracts, operation and management contracts, leases, concessions and Build-Operate-Transfer (BOT) contracts and variants as the main models for implementing PPPs. Turina & Car-Pusic (2006) postulate that the classification of PPPs is based on the level of private sector involvement, duration of the agreement and the level of risk and responsibility of the private partner.

2.8.1 Joint Ventures

The joint venture model of PPP is an arrangement through which the government and the private partner assume co-responsibility and co-ownership of the project. It involves bringing their resources together and sharing the returns generated from the project (Akintoy, Beck, &Hardcastle, 2003). The return is divided based on the investment each partner has made to the project (Nisar, 2007). The PPP is maintained and governed jointly by the government and the private partner but the day to day management is often the primary responsibility of the private partner (Trafford & Proctor, 2006). Kelly (2000) maintains that joint ventures are based on shared objectives of the stakeholders involved, tend to involve a component of shared risk and exist to deliver publicly financed projects.

2.8.2 Concession

A concession is a PPP arrangement where the public sector owns the assets, but it contracts the private sector for operations, maintenance and investment

(Pessoa, 2008). Akintoye, Beck, & Hardcastle (2003) notes that concessions have a typical duration of 25-30 years and has potential for high efficiency in operations and investments but requires considerable high level of commitment and regulatory capacity.

2.8.3 Lease

As (Pessoa, 2008) postulates, a lease is a PPP arrangement where the private sector entity leases the assets of the public sector entity and maintains and operates it, in return for the right to revenue. Commercial risk is borne by the private sector hence giving it strong performance incentives.

2.8.4 Long-term infrastructure contract partnerships (LTIC)

As (Hodge & Greve, 2011) mentioned, the most visible form of recent partnership has been long-term infrastructure contract partnership (LTIC). LTIC is is structured around a design, finance, build, own, operate and transfer model, which involves financing from the private sector (Bloomfield & Ahern, 2010). Also known as greenfield projects, these projects are usually built and operated by the private sector entity, which takes on the commercial risk Pessoa (2008).

2.8.4.1 Build operate transfer (BOT)

Usually, the most used in PPP context, (Tvarno, 2010), the Build-Operate Transfer concept allows for the control and the ownership of the projects to remain in private hands (Grimesy & lewis, 2004). The Performance in a BOT is focused on design, construction, operation and maintenance of the project and usually lasts a period of 25-30 years before transferring control and ownership back to the public Sector (Tvarno, 2010; Nwangwu, 2016).

2.8.4.2 Build own operate (BOO)

The BOO arrangement happens when the private sector partner builds, owns and operates a project with some degree of assistance from the public sector partner. While the public sector partner does not provide direct funding for this model, it offers some other financial incentives such as tax exemptions (Bloomfied & ahern, 2010).

2.8.4.3 Design build operate finance (DBOF)

This PPP arrangement is for the design, construction, operation and financing of public infrastructure where the private sector entity is in charge of designing building, operating and financing the project and recovers its costs from the public sector payments, which depends on its capacity to comply with the pre-approved output specifications (Grimsey & Lewis, 2004). Smith (2000) adds that when developing the project, the private partner is free to be innovative ensuring that costs are minimized at the final phases of the project.

2.9 Theoretical Framework

2.9.1 Rational choice theory

Rational choice theory of international relations is a theory used in understanding and modelling social and economic behavior (Ogu, 2013). Snidal (2013) explains the rational choice theory as a methodological approach that explains "individual goal-seeking" (p. 87) attempts. Rational Choice theory deduces models of life where individuals act to maximize the satisfaction of their main personal preferences in any given engagement or action. It is basically about making a rational or reasonable decision to the benefit of one"s interests (Bevir, 2009).

Rational choice theory provides useful insights into the use public private partnerships and how they can be used for sustainable development in Afghanistan. Afghanistan as a country which decades of wat has been destroyed all its infrastructures needs to have international support, WB and ADB in close coordination with government can play a positive role in this context and active participation of private sector will bring a bright future. For a country like which doesn't have stable economic development, multilateral lenders support such as World Bank and Asian Development Bank is really important and conductive.

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The rational choice perspective could partly explain the actions of all stakeholders (Spencer, 2014) in a partnership, arguing that all actions are determined by the assessment of profits and losses and a rational assessment would recommend the best strategy.

The rational choice theory in public private partnerships can be viewed in tow broad models that include the budget maximization model and the bureau-shaping model as described by Bevir (2009). In the budget maximization model, the rational choice theory posits that the stakeholders in PPPs or sectors of the economy may choose to increase their status or salary in course of the PPP by maximizing the size of their departments and their budgets.

The rationalist theorists who subscribe to the bureau shaping model where they support the idea of people engaged in PPPs being less interested in increasing their budgets but instead caring about increasing output, career development and seeking a rank within a suitable department they size and cut down.

This theory relates with objective one by guiding the role of multilateral Lender. It guides the WB and the ADB in giving loans towards development as the lenders tend to divide their thought in the aforementioned models of rational choice theory. This criterion determines which partnership is viable for funding from those that are not.

The second objective is also addressed by the rational actors' theory as the impact of PPPs solely depends on the reasonable decisions and choices made by lenders plus the leaders of sectors of the government. If they expand the departments instead of downsizing their budget to suit their output, then it might lead to failure of the PPPs.

2.9.2 Rational choice institutionalism theory

Rational choice institutionalism is a theory of institutions centered on actors, that explains the formation of institution as an attempt to effectively reduce transaction costs (Williamson, 1975). The theory is base on the institutional work of Douglass North and Oliver Williamson. North (1990) views institutions as structures offering incentives to influence the actor"s utility maximizing behavior, while (Williamson,1975) focuses on the environment in which institutions are efficient. As narrated by (Taylor & Hall, 1996), the central assumptions of the rational choice institutionalism include;

i. All actors have predetermined set of preferences and act rationally in order to maximize the realization of these preferences,
ii. Actors are driven by their intentions and expectations regarding the behavior of other actors, the through institutions, interactions can be formed to ensure the best result possible,
iii. Decisions are viewed as series of joint effort dilemmas, that an action taken by one actor is assumed to be beneficial or harmful to at least one other actor,
iv. Creation of institutions is a voluntary action.

A rational choice institutionalism analysis on the role of international institutions in public private partnerships focuses on how PPPs can potentially help in closing the infrastructure gap especially for the developing countries (Healey, 2007). In the analysis of how the rational choice institutionalism theory can be applied to PPPs, in Afghanistan. Afghanistan as a country which decades of war has been destroyed all its infrastructures needs to have international support, WB and ADB in close coordination with government can play a positive role in this context and active participation of private sector will

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the theory explains an organization's motive to demonstrate its capacity in world with many international organizations with similar roles and responsibilities (Scott, 1995).

Literature on PPPs suggest that all the partners in a PPP arrangement have a predetermined set of expectations at the get go of the PPP process. For the private partner, they seek to maximize profits from the big tendering projects of PPPs, while for the public partner, they seek to deliver public infrastructure to its citizens in a more efficient way. Additionally, the decisions by all the partners in a PPP arrangement have to be aligned in order to effectively deliver on both their expectations.

Saves (2000) argues that there is both ideological and pragmatic rationales for creating PPPs ideologically, proponents argue that in providing and delivering products and services, the private sector is preferred to the public sector. Pragmatically, government officials see PPPs as a way of bringing in

specialized technical know-how, financing, innovation and management from the private sector to address complicated public policy issues (Taylor & Hall, 1996).

2.10 Literature Gap

According to the rational choice theory of international relations, PPPs are choosing after a rational assessment of the best strategy to undertake in installing public infrastructure and service in a country. It is from this viewpoint that this study examined and compare Critical Success factors for Public Private Partnership in different countries and different government sectors in Afghanistan. This study assessed the PPPs that have been undertaken between 2015 and 2020.

Various authors from the literature review highlight the need for PPPs especially in developing countries and emerging economies in order to provide public services to its citizens in a more efficient method. The literature revealed that even after the temporary suspension of the PPP policy due to Global Financial Crisis, there was a renewed interest in PPPs and more countries were opened to adopt the PPP policy in their governments. This renewed interest came as part of surge in the interest of new infrastructure from countries in Asia, Africa, South America, and the United States.

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It is notable that multilateral development banks such as the Word Bank, the Asian Development Bank and the European Bank for Reconstruction and Development, among other are in support of the PPP policy and push the agenda to their member countries in an effort to promote the UN sustainable development goals. Th narratives presented on multilateral lenders should be considered in research policy development and practical interventions of the PPP policy in Afghanistan. Since the PPP policy is fairly new in Afghanistan (https://ppp.mof.gov.af/), a legal and institutional framework should be instituted at the core of the PPP policy. Capacity building and technical assistance for PPPs by the multilateral lenders are also concepts that should be at the core of the PPP policy in a fairly new PPP environment. Literature reviewed also illustrate on need for government to collaborate with international institutions such as the United Nations, the World Bank, the Asian Development Bank among others.

Additionally, it has been contended that PPPs are a strategic opportunity to maximize the contributions made by the private sector in delivery of public infrastructure and services to advancement of the development goals. Political, Public and scholarly attention is currently being committed to how PPPs further the sustainable development agenda, especially for developing and low-income countries.

2.11 Conceptual Framework

Drawing from the above writing audit, this examination adopts an alternate methodological strategy to contemplate the drivers of environmentally friendly power interests in Afghanistan. The investigation takes a three (3) stage approach including the review of factors including the survey of a bunch of a components business environmental, energy sector structure and profile to recognize the drivers of sustainable energy in Afghanistan.

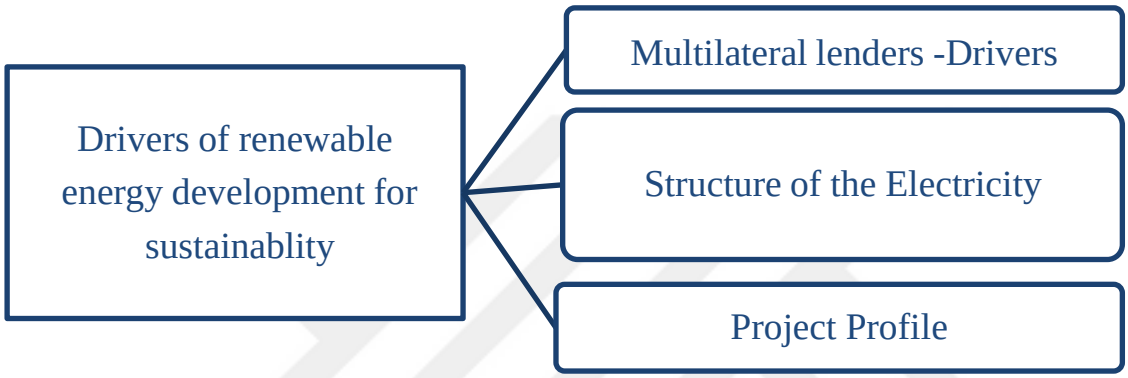

Figure 2.3: Conceptual Framework

Source: Primary data

In this study, macro-drivers encompass a host of macro-economic, political and governance dynamics in a country that may promote or obstruct project development. Such factors included the general political goodwill in the country, government responsibility to sustainable power advancement, freedom of the controller, country's improvement plans, monetary development and type of the country's administration frameworks.

Structure of the electricity sector is concerned with the factors necessary for the proper function and management of affairs of the players in the sector. Key considerations would include quality of laws and principles, existing clean energy strategies and criteria, quality of contracts such as Power Purchase Agreements (PPA), superiority of energy supply and communication

infrastructure, procurement procedure and systems, independence of the regulator and financial strength of off-taker.

Project profile includes measurements, for example, environmental and stakeholders 'management is critical. This expects adherence to worldwide natural norms and rules and packing in or winning the help of the neighborhood populace and networks for project.

The general expectations on environmental and social issues and how are they managed form a key consideration for investors wishing. Bankability considerations looks at the investment's risks and available risk mitigation instruments that are available to investors to enable them to receive adequate returns on their investments. Other factors included the maturity of technology to be deployed and human capacity factors in jurisdiction.

The general expectation is that the preference for investors would vary amount the factors and some factors will be preferred more than others. However, the positive prevalence of all the factors would be considered ideal to promote private sector involvement in renewable energy sector.

furthermore, social norms, bankability concerns and innovation and limit factors. Taking into account that most renewable energy resources are found in far off and difficult for procurement and management.

3. RESEARCH METHODOLGY

This chapter presents the research methodology to be used in the study. The study seeks to describe the approach employed to extract and analyze data for study. The chapter contains details on research design, variable description, population, sampling methods, and determining the sample size. The chapter also describes research tool, data collections, data analysis, presentation of result, ethical consideration, a brief but comprehensive profile of the renewable energy sector and associated procedures.

3.1 Reserarch Desing

Research design is defined as a framework for generating evidence chosen to answer the research questions in which the researcher is interested (Bryman, A; & Burgess, 1994); (Bryman, 2016). Also, the study adopted the mixed method approach to study the adoption, policy, formulation, implementation, successes and changes faced in the practice of public private partnership in Afghanistan. It is a framework for colecting and analyzing data.

According to (Collis et al., 2013), deductive approach where you don't get theory from observation theory already existed and proved by researchers moreover you can explain that based on empirical structure. Generally, researcher intends to test a theory by collecting the fresh data form respondents and observe the findings by applying various statistical tests. This method is generally recommended for specific studies in which researcher work on particular concept by creating assumptions and the verifying those assumptions.

3.2 Variable

The main variable analyzed in this study were the role of multilateral lenders/funders and loan's drivers, the structure of the energy sector and the project profile.

The macro-variables comprised of a progression of inquiries wherein respondents were posed to rate various elements utilizing a Likert scale. The macro-variables were further assessed using sub-factors that have been checked on in past investigations and that, as per the scientists, describe the idea of the full scale climate for the design of the foundation area factors, which centers around surveying the type of laws and guidelines, existing framework mandates and norms, type of agreements, for example, PPAs, quality of energy distribution and transmission framework, procurement cycles and frameworks, independence of the supervisor and monetary strength of the purchaser. the idea of the large-scale environment for sustainable power improvement. These components included political help from the controller, the province's improvement plan, financial development, and the type of the country's administration frameworks. The undertaking profile variable was viewed as its fundamental driver and zeroed in on task qualities that would urge engineers to put resources into sustainable power projects, given the large scale ecological and power area structure is overseeing. These ecological and social guidelines incorporated an evaluation of the type of nearby turn of events and the simplicity with which to acquire leave and to clean energy sources.

Another project characteristic that was checked on the study dedicated on bankability contemplations and surveyed factor, for example, power duties, simplicity of raising and cost of capital, accessibility of credit upgrade instruments, power dispatch ensure, request factors, accessibility of reports and studies on sustainable power advancement, support of MFIs and DFIs and monetary strength of the off taker.

Innovation and limit issues likewise surveyed as a feature of task profile and focused on the accessibility of abilities, demonstrated innovation and believable accomplices to actualize projects.

The principle factors were estimated utilizing an nominal kind of estimation scale.

i. To investigate the role of multilateral lenders/funders on success of PPPs for sustainable development in Afghanistan.

ii. To find the sector specific conditions promoting of PPP arrangements for sustainable development in Afghanistan

iii. To determine the Renewable Energy project characteristics/profile that make renewable energy succeed in Afghanistan.

3.3 Population and sampling

The research considers respondent from groups of specialists who have interacted or commenced Public Private Partnership projects transaction at several stages. For objective one, which discussed the role of multilateral lenders on the success of PPPs, the data collection was primarily based on respondent from multilateral lenders in the WB & ADB. For objective two and three the target population included respondents from the following organizations and sampling frame,

i.) The government ministries and organizations involving (Ministry of finance, PPP Unit, Afghanistan Electricity Department, DABS (D Afghanistan Breshna Sherkat) Electricity affairs In Afghanistan, Renewable Energy development company limited,

ii.) International and national organizations

iii.) Private sector (including developers, contractors, consultants)

iv.) Financial Organizations (including WB, ADB, developers, contractors, Investment Bankers and commercial banks and….

v.) research organizations.

Government agencies and organizations were focused for the investigation due to their role in creating different strategies that influence the business environment. Ministry of Finance and Afghanistan Breshna Sherkat (DABS) are responsible for creating policies influencing the energy sector.

The public private partnership (PPP) unit is additionally an administration division liable for supporting PPP exchanges and handling credit improvement instruments. For example, the Government Letter of Support while the Ministry of Finance offers budgetary help to the public authority agencies.

The second category, which discussed the impact of PPP projects on sustainable development in Afghanistan, the data collection was primarily based on secondary date from Afghanistan PPP projects all initiated between 2015-2019. Additionally, more data will be collected from the PPP Unit, the World Bank (WB), an Asian Development Bank (ADB), to collect data on sector characteristics will be contributing to the success of PPPs in Afghanistan (https://ppp.mof.gov.af/).

The third part of participants for the survey were selected from private sector. These intermediaries of private sector player were addressed by the project developer, contractor and specialists. Project developer assume a basic part in renewable energy as financial part and therefore their perspectives and discernment give a basic viewpoint on the reasonableness or deficiency thereof of a renewable energy improvement target.

Experts and suppliers could be involved in by the project developer and administration to deliver service on clear sides of transactions. The data and viewpoints procured during such association could give important input on the factors of environmentally friendly power interest in a country.

The fourth classification of members in the examination focused on multilateral lenders. These were basically drawn from business and improvement monetary establishments. DFIs are the principal suppliers of obligation financing and in certain examples value to private area players putting resources into environmentally friendly power. To enhance project bankability, DFIs likewise give acknowledge upgrade instruments, for example, Partial Risk Guarantees (e.g., by World Bank or Asian Development Bank, ADB) and Political danger Insurance by (Afghan National Insurance). The DFIs additionally offer budgetary help to the administrations or straightforwardly to government organizations to execute Infrastructure and sustainable power projects. Their viewpoints on the environmentally friendly power climate is along these lines basic.

The fifth class of respondents were drawn from the scholarly foundations and exploration disciplines. These classes of respondents convey normal examination and generally stay informed concerning the improvements in the business climate and their potential impacts.

As sampling is a technique (procedure or device) employed by a researcher to systematically select a relatively smaller number of representative items or individuals (a subset) from a pre-defined population to serve as subjects (data source) for observation or experimentation as per objectives of his or her study. This research employed two types of sapling techniques, because the respondents were targeted for the sampling in groups and for group sapling purposive and stratified sampling technique is suitable. The investigation utilized the stratified and purposive sapling methods to arrive at the above objective population. A Sample size of 44 members was focused with each group or layers focusing on 11 respondents this sample size is accordance to standards and acceptable for this investigation.

3.4 Data Collection Method

The study collected primary data by using semi-structured questionnaire. The questionnaires were administered directly to the respondents through their e-mail address, after approval of Thesis Advisor and ethical committee. And extra data collected from evaluation of appropriate literature review and reliable sources, for example World Bank, ADB and extra publications.

The questionnaire focused on questions targeting for 5 significant regions to help in gathering pertinent information to address every one of examination questions sat by the investigation.

The initial segment comprised of data about the respondents' profiles like sort of association, field of aptitude with PPP Projects, and encounters with the diverse design of environmentally friendly power area innovations. The second part of the questionnaire focused on collecting questions on the role of multilateral lenders variable on the success of PPPs, while part three (3) collected information that was used to assess specific factors and impact of PPP project and their influence on Sustainable development in Afghanistan. The part four (4) of the questionnaire focused on capturing data on the set of Proper-mods variables of PPP projects on sustainable development in Afghanistan. While the Part five (5) of the survey zeroed in on catching information identified with design of the electric area and how it supports or hinders the improvement of PPPs in Afghanistan (https://ppp.mof.gov.af/).

As a component of the information assortment measure, respondent have been approached to rate the elements from their own viewpoint utilizing 5-point likert scale. Th poll additionally will give the respondents the opportunity to add their own discernments and commitments to consider.

3.5 Pre- Testing

Data gathering started with a pilot test throughout which the questionnaire was tested according to (Creswell, 2009), pre- testing workout is used to choose the suitable of the research instruments for the study. The pilot study was directed using ten personnel of Berock Bentners Limited to determine whether the questions in the questionnaires were easily accessible by the researcher. The pilot testing helped testing helped to make necessary changes to the questionnaire in order to solicit the needed data for study. It also helped to know the right time and circumstance for managing since most of the team have very busy schedules.

The pilot-test helped to fine tune the items in the question to measure what it intended.

3.6 Data Analysıs

Raw data from the field have been summarized in Microsoft Excel and then exported to SPSS updated version 27. The descriptive statistics was used to analyze the data. To achieve this, data was analyzed by calculating Significance Indices of each of the CSFs and sub-success factors under each CSF. The Significance Indices were then ranked to assess the relative importance of factor to the study.

Achieng, J. (2018) & (Zhang & Asce, 2005).

To achieve this, 5-Poing Likert Scale was converted linearly from 0-5 Likert scale to 0-100 as shown in the table below.

Likert Scale	1	2	3	4	5
Significance Scale	20	40	60	80	100

The following formula has been to calculate the Significance Indices.

$$S_i = \frac{5N_5+4N_4+3N_3+2N_2+1N_1}{A*N}$$

Where

S_i = Significance Indices

n_5 = Number of respondents for strongly Agree

n_4 = Number of respondents for Agree

n_3 = Number of respondents for Neutral

n_2= Number of respondents for Disagree

n_1= Number of respondents for strongly Disagree

A = (Highest Weight) = 5

N = (Total Number of respondents)

3.7 Validity And Reliability

Study quality was usually determined by the validity and reliability of the methodology and data (Patoon, 2002). The investigator classified that validity and reliability are the two main issues that any study could be concerned about while planning a study, investigating outcomes and estimating the quality of data. Validity refers to the extent to which a measure returns concept it intends to measure. If the processes used to measure what they claim to and if there are no logical errors when drawing conclusion from the data, then the study is said

to be valid (Trochim, 2005). The researcher confirmed the validity of the elements in the questionnaire by pre-testing it on staffs with the same characteristics as the respondents used for the study. On the other hand, reliability means consistency or dependability (Newman, 2006). It indicates the likelihood of a given measurement technique that repeatedly yield similar findings or the same description of the phenomenon. To ensure reliability in this study, I mapped out a strategy for sample selection, selecting instruments, designing questionnaire and managing the questionnaire.

To determine reliability of the study instrument, internal consistency dependability and other relevant method have been used. Overall & individual reliability of the research variables have been tested and Cronbach's Coefficient Alpha was used in calculation to determine how elements correlated. A*N formulation was used, and the coefficient generated from all the variables tested showed a Cronbach's Alpha Coefficient of 0.808. Reliability coefficient of 0.7 or more means that there is a high degree of reliability.

The validity (accuracy) is the degree to which a test or an instrument measures what it purports to measure (Nachmias & Nachmias 1996). While there are various types of validity, this guide briefly describes one types, content validity. Continent validity unlike face validity, content validity involves "the systematic examination of the test content to determine whether it covers a representative sample of the behavior domain to be measured" definition and depiction of what have been estimated along with the exploration instruments have been approved through well-qualified assessments of senior analyst and proposal managers (Bernard; H. Russel, 2006).

Assemble and substance authenticity was used to evaluate how much inquiry things were seen by respondents to empower them offer reaction to issues raised concerning Critical Success Factors for PPPs in Renewable energy improvement in Afghanistan. Every respondent was acquainted with a relative instrument which improved the validness of the appraisal result.

4. RESEARCH FINDINGS, ANSLYSIS AND DISCUSSION

4.1 Introduction

This section presents the outcomes and discoveries of the study to explore and evaluate the observational information identified with the drivers of public private partnership in Afghanistan. The outcomes on every one of the investigations in this section is accordingly isolated into two sections. The first part shows the demographics of the respondents, the subsequent part, clarifies the discoveries as for the examination addresses presented in the investigation.

4.2 Respondents Background Information and Statistics

The respondents for the survey were very critical and choused very carefully from the experts of organizations. An aggregate of (44) data assortment surveys questionnaire was distributed out which (40) were completely filled and re-turned (2) of them have been missed, (90%) rate for responding is acceptable. This reaction rate shows that information was gathered from appropriate quantity of respondents and thus guaranteeing soundness.

The examination set up establishment of respondent' were summarized by the sort of alliance, field of mastery, number of extensive stretches of working experience, current Position in their affiliation, contribution in a structure headway and consideration in open private association (PPP) Transaction. The estimations on the entirety of the over respondents' profiles and viewpoints are presented as follow:

- Type of Organization Of The Respondent

The respondents were broadly engaged from affiliations including the Government, Contractors, engineer, Financial Institutions, Academics and International Organization. The portrayal of eve-ry classification of respondents in the examination is shown in the table underneath:

Tabel 4.1: Repostpones Class Of Organization

CLASSIFICATION OF ORGANIZATION	FREQUENCY (%)
GOVERNMENT	19
G. AGENCY	10
CONTRACTORS	26
DEVELOPER	7
CONSULTANTS INSTITUTIONS	19
DEVELOPMENT INSTITUTION	5
ACADEMIC	3
OTHERS	8
TOTAL	**100**

Source: Author

As demonstrated in Table 4.2-1 above, Contractor, enrolled the highest number of respondents at 26% followed by Central Government at 19%, Consultant 19% and Government Agencies, at10%. These four establishments comprised 74% of the reactions given by the respondent. These gatherings structure a center voting public for the examination and hence applicable for the investigation on the grounds that.

The public authority and government organizations portrayal was high in light of the fact that the vast majority of the sustainable re-sources in Afghanistan are claimed and overseen

by the Government through its different work environments and through private district Participation under various public private alliance models. Likewise, considering the gigantic extents of banks included, improvement moneylenders and funder establishments being the critical loan specialists of such endeavors promotion additionally gave a for the most part high depiction of DFIs in assessment at 8%.

- Respondents Field Of Expertise

Tabel 4.2: RESPONDENTS FIELD OF EXPERTISE

CLASSIFICATION OF INSTITUTION	FREQUENCY (%)
ENGINEERING	62
PLANNING	15
ACADEMICS	2.5
FINANCE	5
REGULATION	2.5
PROCUREMENT	2.5
SOCIAL SCIENTIST	7.5
OTHERS	3
TOTAL	**100**

Source: author

The table 4.2.-2 shows background of respondents in terms professionality. Engineering fields shown the maximum respondent 62% followed by planning at 15% and Social Scientist 7.5%, which contains the majority portions expertise constitute of responses by 84.5 %.

15.5% of respondents were from remaining field of Expertise. The result of table interpretation explained that the high number of respondents are from the engineering filed. It means that Afghanistan for supporting the renewable energy development project have sufficient technical teams. And the second higher number of respondents established from planning field and shows the optimum condition of planning stages of renewable energy project in Afghanistan.

- Number Of Years Of Experience

Tabel 4.3: RESPONDENTS NO. OF YEARS OF EXPERIENCE

YEARS OF WORKING EXPERIENCE	**FREQUENCY (%)**
LESS THAN 6 YEARS	15
6-10 YEARS	33
11-15 YEARS	36
16-20 YEARS	10
21-30 YEARS	3
MORE THAN 30 YEARS	3
TOTAL	**100**

Source: author

Table 4.2-3 shows that respondent with shifting experiences in the assessment, a large portion of respondent established from 11-15 years at 36%, trailed by 6-10 years at 33%, 16-20 years at 10%, 21-29 years 3 %, and over 30 years at 3%. Those with under 6 years were only15%. This suggests that 85 % of the respondents had knowledge of 6 years or more.

The number of long stretches of involvement shows that the renewable energy projects has longer conception period of development. It shows the ability of respondents for doing renewable energy for sustainability and given proper answer and feedback for study questionnaire.

- Position In The Company

Tabel 4.4: Respondents Position In The Company

YEARS OF WORKING EXPERIENCE	FREQUENCY (%)
SENIOR- LEVEL MANAGEMENT	55
MIDDLE-LEVEL MANAGEMENT	42
OTHERS	3
TOTAL	**100**

Source: author

Table 4.2-4 shows that 55 % of the respondents were from Senior level organization and 42% were from Middle level organization and 3% simply were from various levels of the board.

This suggests that the greater part, 97 % were drawn from the key and activities levels of their respective organizations and are thusly in dynamic class concerning environmentally friendly power improvement. The above discoveries are likewise steady with the quantity of long periods of involvement presented in 4.2-3 above.

- Involvement in Infrastructure Development

Tabel 4.5: Respondents Involvement In Infrastructure Development Projects

YEARS OF WORKING EXPERIENCE	FREQUENCY (%)
YES	88
NO	12
TOTAL	**100**

Source: author

Table 4.2-5 shows that 88% of the respondents have experience with infrastructure development project. This large amount of involved respondent in infrastructure shows that we have optimum experienced teams. And proper feedback for our investigation for study.

- Type Of Project

The most important factor for getting feedback for PPP project to find the type of project which the respondents were involved. Thus, the respondents were asked to response what is the type of infrastructure development project which they experienced. The frequency of their responses tabulated as bellow:

Tabel 4.6: Respondents Involvement in Infrastructure Development Projects

YEARS OF WORKING EXPERIENCE	FREQUENCY (%)
PURELY PRIVATE PROJECT	8
PURELY PUBLIC PROJECT	50
PUBLIC-PRIVATE PARTNERSHIP PROJECT	42
TOTAL	**100**

Source: author

Table 4.2-6 shows that most of the participant, 50% have been associated with public projects and 42 % have been engaged with Public Private Partnership projects and another 8% have been included just absolutely private activities. Since most sustainable power project in Afghanistan is being actualized either through Public-Private organization or through the public authority offices, the respondents for this investigation thusly give a decent premise to speculation of the discoveries to environmentally friendly power improvement.

- **Shareholding Structure of Renewable Energy Projects in Afghanistan**

Tabel 4.7: Respondents Views Of Shareholding Structure Of Sample Companies

SHAREHOLDING STRUCTURE	FREQUENCY (%)
FOREIGN	7
LOCAL	19
GOVERNMENT	29
MIX OF FOREIGN AND LOCAL	17
ALL THE ABOVE	28
TOTAL	**100**

Source: author

Table 4.2-7 shows that a large portion of the respondents (29%) were from organizations with absolutely government shareholding followed respondents were from organization owned by both of foreigners and local shareholding (17%) and a further 7% from organization with just foreigner's shareholding. The percentage followed by local shareholding 28%, local and foreigner 17 %. By the little analysis and looking of the response result of respondent we can find that till now there is no any institutions or organization that can lonely implement the PPP project lonely.

Respondents from associations with absolutely neighborhood investors represented for 19% and those from establishments with a blend of governments, unfamiliar and nearby shareholding represented 28%.

These discoveries show that the greater part of respondents was from organizations claimed by both government and consequently give a rich blend of perspectives. This followed by neighborhood and outsiders 17 % mirroring the way that a portion of the private offices that partook in examination are accountable for environmentally friendly power development.

- Experience with PPP Transactions

Tabel 4.8: Respondents Involvement In Infrastructure Development Projects

EXPERIENCE WITH PPP TRANSACTIONS	**FREQUENCY (%)**
YES	83
NO	17
TOTAL	**100**

Source: author

Table 4.2-8 shows that predominant piece of the respondents 83% had contribution with PPP exchange 17% had no understanding. Since most of the harmless to the ecosystem power development projects are completed through open private Partnerships, the experiences exhibit that the responses would be per-tinent to the investigation in Afghanistan.

- Experience with PPP Transactions

Tabel 4.9: Respondents Years Of Experience With Ppp Transactions

YEARS OF WORKING EXPERIENCE	**FREQUENCY (%)**
0 YEARS (NO EXPERIENCE)	5
LESS THAN 3 YEARS	40
3-5 YEARS	17
6-10 YEARS	20
11-15 YEARS	18
TOTAL	100

Source: author

Table # 4-2-9 shows that respondents have insight of rent than 3 years are 40% and 5% with zero insight, but the table also shows that 55% or respondents have more 3 years' experience, which are as follow in percentage order, 6-7 years 20%, 11-15 years 18% and 3-5 years 17 which is a total of 55%. The result

shows that almost 95% of respondents have the experience of transaction PPP project.

- Involvement with PPP Transactions

After we asked from respondents about their experience with transaction of PPP project, we continued to asking the respondents the number of PPP project transaction which they had any responsibility, or any kind involvement and the result were tabulated as follow:

Tabel 4.10: Number Of Ppp Project Involved By Respondents

YEARS OF WORKING EXPERIENCE	**FREQUENCY (%)**
LESS THAN 3	52
3-5 PROJECTS	14
6-10 PROJECTS	10
MORE THE 10 PROJECTS	10
NONE	14
TOTAL	100

Source: Primary Data/author

As the table # 4-2-10 shows the outcomes that 52% of respondent have been included less that 3 tasks, which implies in any event this 52% at any rate have been engaged with one PPP project, while 14% have been associated with between 3-5 undertakings, 10% have been engaged with more that 10 Projects and 10% just have been engaged with 6-10 activities, and 14% haven't been associated with any PPP project. The consequence of the respondent's input shows that 86% of respondents have been included in excess of 3 PPP project exchange. Which demonstrate that there is a development of PPP Project exchange in Afghanistan and manage the cost of acceptancy to aftereffect of the examination. Sectoral PPP Experience

One of the top advantages of PPP framework is that which we can use this framework in the multisectoral of infrastructure projects. Deferent sectorial categories have been scheduled bellow accordance to experience of the respondents with PPP transaction as shown in the table below:

Tabel 4.11: Respondents Years Of Experience With Ppp Transactions

YEARS OF WORKING EXPERIENCE	**FREQUENCY (%)**
TRANSPORTATION FACILITIES	7
ENVIRONMENTAL FACILITIES	10
SEWERAGE AND WATER SUPPLY	24
HEALTH AND MEDICAL FACILITIES	2
CULTURAL AND EDUCATIONAL FACILITIES	7
POWER FACILITIES	22
MAJOR INDUSTRIAL	5
SOCIAL FACILITIES	5
URBAN/DEVELOPMENT OF NEW TOWNS	7
NONE	11
TOTAL	100

Source: author

Table # 4-2-11 provide the frequency of respondents for sectorial usage of PPP project. The second majority of respondent which experienced or involved in sectorial PPP project scheduled in table # 4-2-11 is 22% which is the targeted purpose of study. And the remaining percentage of respondents respectively are 24% sewerage and water supply, 11% none, 10% environmental facilities, 7% transportation facilities, 7% cultural and education facilities, 5% major industrial and social facilities, urban development 7% and Health and medical facilities 2%. The figure of 89% of respondent's involvement shows the optimum situation of sectorial PPP projects in Afghanistan and credence of the study's result.

- Specific Experience with PPPs in the Energy Sector

Tabel 4.12: Respondents Years of Experience With Ppp

YEARS OF WORKING EXPERIENCE	FREQUENCY (%)
SOLAR	38
HYDROPOWER	17
BIOGAS	3
BIOMASS	3
(THERMAL, FOSSIL FUEL/COAL)	16
OTHERS	23
TOTAL	100

Source: Primary Data/author

As Table # 4-2-12 shows the recurrence of the particular involvement in PPP energy project transactions in the energy area chiefly environmentally friendly

power improvement for manageability. Most of the respondents referenced having practice with environmentally friendly power activities, for example, Solar tasks (38%), Hydropower (17%), biomass/biogas (6%) and 16 % had insight with fossil-based powers projects while 23% of the respondent had not involvement in PPPs in the energy area exchanges. In general, 61% of the members had practice with the environmentally friendly power area which is connected for the examination.

In presumption, the profile of members shows that the respondents had a decent chart of environmentally friendly power improvement in generally and thus were an important wellspring of data for the examination. It shows from the respondent's feedback that the huge source of renewable energy in the Afghanistan first position is Solar power and second position is Hydropower as in this study we focused on Solar Energy development and responses are valuable for reliability of the study.

4.3 Research Questions and Study Findings

As the study structured the questions accordance to the need of this research defined the independence variable and dependance variable and sub variable or sub factors have been categorized. The questionnaire has been made properly and the sample of population have been targeted. The questionnaire has been distributed via mail, after receiving the proper responses and analyze the standard receiving the proper number of filled questionnaires. After examining optimization of the received response the data have been analyzed by SPSS version 27 and all reliabilities of the data and all the relations of each question with the study have been checked and the date analyzed and interpret. The finding in each sections' questions in this research which the study required to answer are presented for each issue in detail and reasonable accepted and standard procedure. The tables and procedure are mentioned as follows.

- Macro-Drivers and Structure of The Electricity Sector

The Sustainable Development Goals (SDG) system is comprehensive, complex and interlinked, so it is necessary to find critical Success Factors (Drivers) that can help Afghanistan implement proper policy interventions. Even though there

is not any specific methodology for selecting SDG drives, but we can use the SDG Drivers Framework. The framework will enable government of Afghanistan and other stakeholders to identify, assess and evaluate actions necessary to accelerate progress towards 2030 Agenda. The purpose of this dissertation is to examine the main drivers of sustainable development and specifically try to pinpoint main drivers or macro-drivers and sector specific factors to contribute 7th goal of (SDG) renewable energy development in Afghanistan. To find the solution and become close to the objective of the study we must identify the structure the macro-drivers and the factors of sector. For achieving such goal, we construct or tabulate the drivers Renewable Energy and structure of electricity system, accordance to this schedule and the formulation of the study question we shared the questionnaire and asked respondents to rate the study specified factors as scheduled as bellow table:

Tabel 4.13: Variables for Renewable Energy and Structure Of Electricity Factors

NO	PARAMETERS	NO	PARAMETERS
	MACRO-DRIVERS		DRIVERS FOR STRUCTURE OF THE ELECTRICITY SECTOR
1	POLITICAL SUPPORT	5	GOVERNMENT COMMITMENT TO RENEWABLE ENERGY
2	COUNTRY'S DEVELOPMENT PLANS	6	GOVERNMENT SUPPORT TO OFF-TAKER
3	ECONOMIC GROWTH	7	INDEPENDENCE OF THE REGULATOR
4	COUNTRY'S GOVERNANCE SYSTEM	8	FINANCIAL STRENGTH OF THE OFF-TAKER

Source: author

The main macro-drivers for renewable energy scheduled as above table, 8 factors or variables structured in the questionnaire by Likert scale and the respondents have been asked to rank the factors on scale from 1- 5 and scale demonstrated 1= strongly Disagree and 5= strongly agree.

The analysis of the above factors is discussed in the sections below.

- Macro-Drivers

Even though the assessment of Success Factors or drivers of PPP project for renewable energy is very dynamic in Afghanistan and we must consider the dynamic factors of variables specially now adays there is war ongoing in Afghanistan and of course that will be a very important variable. As we

considered and found that the 4 main drivers or macro-drivers that must be assess for this study is Political support, country's governance systems, country development planes and economic growth of country. Thus, we focused on this 4 main-variables and scheduled the ranking of respondent in the table below:

Tabel 4.14: Respondents Results for Macro-Drivers

NO	MACRO-DRIVERS	STRUCTURE					SIGNIFICANCE INDEX	RANK
		STRONGLY DISAGREE	DISAGREE	INDIFFERENT	AGREE	STRONGLY AGREE		
1	POLITICAL SUPPORT	4	10	13	5	8	62%	1
2	COUNTRY'S DEVELOPMENT PLANS	7	9	12	6	6	58%	2
3	ECONOMIC GROWTH	8	10	9	4	9	58%	3
4	COUNTRY'S GOVERNANCE SYSTEM	6	13	9	5	7	57%	4

Source: author

The ranking figures in the table # 4-3-3 shows the importance all variables are more that 50% in Afghanistan. the outcomes show that the primary macro-drivers of sustainable energy project in Afghanistan are, political help (62%), country's advancement Plans (58%), economy development (58%) and nation's administer frameworks at 57%. The outcomes infer that Afghanistan's administration political help for environmentally friendly power is great and the nation has sound advancement designs over half, implies it is going emphatically because of Vision 2030 which gives away from to the development of the economy and thus interest for power. Curiously, the country's administration frameworks were not appraised profoundly as a driver of environmentally friendly power improvement in Afghanistan.

To additional check the respondent's view of the full-scale conditions like multilateral lenders and their impact on renewable energy improvement, the

participants were approached to scale their general vision or impress of the current full-scale situations for sustainable power improvement. A dominant part of the respondents (80%) showed that they accepted that macro-conditions are helpful for environmentally renewable energy development 10% were not in concurrence with a further 10% of the respondent being detached.

The respondent progressed various clarifications for their perspectives on the status of full-scale factors and their impact on environmentally friendly power advancement. Such perspectives included declarations that the strength of full-scale variable conditions give signs to financial backers; regardless of whether positive or negative and that sustainable power advancement relies upon the dependability of the economy which is portrayed by the type of large-scale variable boundaries.

Further, the respondents pointed that Afghanistan is the heart of Asia and has the best potential of renewable energy assets which makes it helpful for environmentally friendly power advancement to support its financial development rates and understand the improvement yearnings upheld in its country's improvement plans. Afghanistan has likewise exhibited great history in scaling up sustainable energy development particularly in the Solar and Hydropower area which has pulled in light of a legitimate concern for private sector to investigate the abuse of other sustainable energy resource.

To moreover understand why political assistance and country's improvement plans situated higher

(as far as importance files), a cross-tab examination was done ageist the various respondents trademark and enormous scope drivers. The cross-tab assessment was finished to find covered up reasoning and raking of the full scale drivers from the going with characterizations of respondent:

i)Type of association.

ii)Field of Expertise.

iii)Position in the organization.

iv)Energy sub-area gatherings; and

v)Shareholding structure.

The total cross-tab investigation are available in Appendix 3 table 6-10 to Tables 6-14. The re-sults are talked in the units beneath:

- Respondent's Type of Organization and perspectives on Macro-Drivers

The cross-arrangement investigation, cross-tab analysis or contingency table analysis is the best and valuable analytical tools for research, dissertations or study. This analytical useful tool used to analyze the categorical data, which categorical means (nominal measurement scale). The cross-tab analysis table provide prosperity of information about the relationship between the variables. A cross-tab analysis is a two or more dimensional table that records the number (frequency) of respondents that have the specific characteristics described in the cells of the table. Accordance to cross-tab analysis, the analysis of data received from respondents shows that, most of the respondents who evaluated political help as ideal (with rating going from "good" to "very good") were from Central Government (52%) and Commercial Financial Institutions (50%).

For the most part, the focal government is probably going to accept that political help is favorable. This is on the grounds that these classes of participants are generally occupant in the host country and the evaluations could be motivated by their commonality of nearby situations. In particular, the focal state is liable for implementing government statements and should work with the decision government in acknowledgment of its approaches and to accomplish this, political help is fundamental and required.

Likewise, workers for hire and business monetary organizations work under nearby conditions and are affected decidedly or contrarily by the acquiring political environment.

In light of their neighborhood presence and dynamic connections with the political circumstances, the project workers and business monetary organizations, thinking about their rating for the level of political help, accept that the political environment is Afghanistan's Conducive. The view was upheld by the scholastic's classification.

In the Afghanistan there is numbers of government agencies which during the 40 years war and weak management couldn’t have attained the people satisfactions, Unfortunately the Government agencies in Afghanistan which

operate under the Government management policies, affected negatively by political support.

Then again, advancement monetary Institutions, engineers and advisor didn't rate political help as ideal (in view of Cross-tab aftereffect of "good" to "awesome" being under half). Government offices, Contractors, advancement monetary foundation and advisor can be seen as intermediaries of private area class and based absolutely under investigation of the positioning of the political help for renewable energy, it could be reasoned that political help for environmentally friendly power improvement in Afghanistan isn't favorable from private area viewpoint.

The outcomes were gotten for type of nations advancement plan as pointer of the full-scale drivers of environmentally friendly power respondents from the advisors 66.6%, engineers 66.6% communicated condition certainty and controls improvement plans (in light of total rating scores of "agree" to "strongly agree").

While Central government, government organizations, worker for hire, business monetary establishment and development monetary foundation then again were to a great extent aloof with regards to the type of development plans.

- Assessments on Macro-Variables dependent on Participants' Field of Expertise and Level in the Organization

The assessment advances analyzed into the assessing the respondent's dreams on Macro-factors (Especially Political help and nature of country improvement plans) in view of the resignment as given by the respondents.

Largely, the perspectives fo these experts could be seen from their communication with the government and politicians at the policymaking level which might be understood to mean a genuinely decent under-remaining by the political class on the advantages of sustainable power and its advantage to the populace.

Especially, the organizers and attorneys' concurrences fair and square political environment for environmentally friendly power code intelligent of the area of assets and proclamation of value laws or guidelines that help sustainable power advancement. the relative law simultaneousness 57.1% of the designing class

with relatively sizable extent to 5.7% being impassive under degree of political help for sustainable power could be demonstrative of the way that reception and comprehension of environmentally friendly power advancements is moderate are developing.

The perspective on inventory Chen master who couldn't help contradicting the degree of political help for sustainable power improvement couldn't highlight intricacy of acquirement and offering laws and cycle that hinder the uptick of sustainable power innovation in Afghanistan.

Then again, the perspectives on natural and social researchers' gathering; that completely differ fair and square of political help for sustainable power; could be steaming from Asia identified with environmental and human variables affecting the improvement of environmentally friendly power in Afghanistan, for example, way-leaves procurement, resettlements of individual to make land for environmentally friendly power advancement and evolving ecological principles and laws.

Concerning Perficient’s gathering's insight on the type of nations advancement designs the majority of the experts concurred (in view of the consequences of "Concur" to "firmly concurred being >= half that the country's improvement plans are steady of sustainable power improvement in Afghanistan. lawful and administrative specialists (100%) arranging (66.6%) obtainment/store network (66.6%) researchers (66.6%) and scholastics (100%) upheld the View that the country's improvement plans uphold sustainable power advancement.

By and large, government's drawn-out advancement plans incredible improvements in the critical areas of the economy. public governments, government offices, and private players additionally utilize such designs to adjust and submit assets to extraordinary nations improvement plan. in the energy area, the long-haul development plan for area would incorporate how government and will in general build up the different wellspring of energy and another monetary area. Such arrangement of exertion breeds I helpful Environment for renewable energy improvement.

Finance and planning experts, for instance, they depend on government's advancement intend to plan and activate stores to help sustainable power

improvement. Likewise, the acquisition master's rely upon nations improvement intends to design and execute acquirement of sustainable power segments, for example, designing obtainments and development workers for hire and specialists to help an structuring renewable energy transaction.

Also, the legitimate/administrative master and account master administrations are needed by sustainable power developers to offer warning assistance to sustainable power designers. The simultaneousness on country's advancement plans there for affirms that Afghanistan's sustainable power improvements plans are realistic and unsurprising to the degree the key experts' specialists can secure their arrangements and exercises around governments advancement plans.

For the most part, industry pioneers a leader of associations think about the political circumstance in a country in settling on venture choice. Senior-level administration are accountable for settling on an essential choice affecting their organizations and would think about the political circumstance in a country. Also. senior level organization specialists, for instance, CEOs are known to crusade political class on the think about political circumstance and moreover take long stretch of things. ofcourse focus level organization executes key decision (brief to medium terms) For the affirmation of long stretch business choice. the point of view on these respondents' social event could be translated to infer that drawn out political cli-mate is uncommon an uncertain considering everything.

all things considered ward on the above assessment, the world of politics in Afghanistan can should be truly useful for harmless to the ecosystem power headway. political altruism and support are seen as a critical element for any premium in a country as on the side of decline political peril and gets secure financial backers premium confinement offices of political liberality deal four exactly as expected to help sustainable power ventures advancements. then again, researchers, money well detachment fair and square of political help.

The assessment further transformed into the studying the respondent's viewpoints on Macro-factors (Especially Political help and sort of country improvement plans) considering the respondent's field of ability and level in the affiliation. The master bunches were drawn from the controls joining designing,

account, lawful, arranging, scholastic, specialists and social and biological scientists while the level of the affiliation were senior levels (Strategic); focus level (Tactical and other order as given by the respondents, then again, the perspective on senior and center level administration was on the fringe inferring that the country's advancement plans are not completely steady of environmentally friendly power improvement.

- Structure of The Electricity Sector

This examination reviewed the development of force region as a driver or determinant of harmless to the ecosystem power progression. studying the meaning of a plan of the space as an energizer for sustainable force, factors, for instance, self-rule off regulator, government support to the off-taker, government obligation to maintainable environmentally friendly power improvement and financial strength of the off-taker were considered.

In understanding this impartial, the respondents were drawn nearer to rank the above plan of ele-ments on a size of 1-5 where 1 presents "extremely poor" and 5 presents "generally excellent". The table shows an examination of positioning doled out by the respondents to all of the limits:xiv

Tabel 4.15: Respondents Results For Macro-Drivers

PARAMETERS	RESPONSES					SIGNIFICANCE INDEX	RANK
	VERY POOR	POOR	FAIR	GOOD	VERY GOOD		
INDEPENDENCE OF THE REGULATOR	4	6	18	7	5	62%	1
GOVERNMENTS SUPPORT TO OFF-TAKER	1	13	15	8	3	60%	3
GOVERNMENT COMMITMENT TO RENEWABLE ENERGY	5	10	13	6	6	62%	2
FINANCIAL STRENGTH OF REGULATOR	7	11	16	5	1	54%	4

Source: author

Table # 2-3-4 demonstrated the investigation finds that freedom off controller is driving component for renewable energy interests in Afghanistan followed by the public authority backing to the off taker and government obligation to the

environmentally friendly power area. Monetary strength of the controller was positioned as the last driver inferring that financial backers saw freedom after controller from the point of view of being an autonomous judge more basic than its monetary strength.

to additionally comprehend their thinking educated about rating, a top to bottom cross-tab Analysis was completed and the outcomes are introduced an informative supplement 3 table 6-10 to table 6-14. the conversation on the outcomes is introduced in the segment beneath.

- i. The Regulator's Independence

Controllers are responsible for ensuring that the power area operates in a safe and efficient manner by ensuring that the players follow the rules, guidelines, and norms that are expected of them. Furthermore, the controllers serve as judges for disputes that arise among the area's important players. The controller's independence and this examination are interpreted to entail no or little obstruction

Controllers are required to advance supportable working of the power area by guaranteeing compliance with the guidelines, guidelines and codes expected of the players. Moreover, the controllers go about as judges for questions emerging among the major parts in the area. freedom of the controller and this examination is taken to mean no or negligible obstruction from the public authority Sector players the activity of the regulator. independence of the controller is those normal to move trust in the area players.

freedom of the controller has been surveyed through a cross-tab examination with the attributes of the respondents, for example, type of association, shareholding structure, energy subsector. the aftereffect of each crossed up examination are introduced in the part beneath:

- Independence of the regulator unnatural focalization

Accordance to the cross-tab Results, a large portion of the respondents from the focal government 62.5 %, contractor 63.7% developers 66.6% consultant 62%, were agreed on the autonomy of controller. then again, business monetary foundation, Development monetary organization, Government agencies a scale "great" to "excellent", scale, were aloof that the controller is free.

In Afghanistan the focal government is answerable for formation of controller and arrangement of its administration group. Subsequently, it very well may be contended that focal government consider the to be as a feature of it and its choices could be seen as addressing those of government and consequently the solid assertion of its autonomy.

the composition of the engineers could likewise have been affected by similar contentions for the focal government as the view the choices of controller as being impacted by government and accordingly not totally autonomous. Concerning the workers for hire, specialists and academicians, it very well may be contended that these respondent gatherings don't collaborate straightforwardly with the controller and choice of the controllers don't directly influence the matter of workers for hire and experts.

concerning endorsement appraisals by government offices, the greater part of the participants from this sub-bunch were generally drafted from the services which are under the administrative control of the controller. Accordingly, the endorsement rating from this gathering could be interpreted as meaning that the public authority offices included and environmentally friendly power advancement hours so this slides by working off the controller as a free office.

Likewise, business monetary foundation and improvement monetary establishments saw the independence of the controller has been acceptable excessively generally excellent. taking into account that both business and advancement monetary organization give financing to environmentally friendly power engineers, the great rating on vouching given by these two classifications after respondent gatherings suggested that the controller's seen as independent and, in this way, gives a decent driving force and provide a favorable climate for the growth of renewable energy sources.

- The regulator's and sub-sector group's independence

The respondents in this investigation also had knowledge of renewable energy production, such as solar, wind, and due hydropower, which are all environmentally favorable sources of energy. Respondents included and solar as a result of the analysis of these sub-gatherings. The evaluations by the Solar sub-area and hydro power sub-area could be clarified by the way that the

majority of the Solar ventures and hydropower projects are being executed by two government possessed elements D Afghanistan Breshna Sherket (DABS) and National Water Affairs Regulation Authority (NWARA) actualizes the duties using a variety of models and clothing for both public and private entities The respondents' fairly low appreciation of the controller's autonomy from this sub-gathering could be due to the way these organizations are claimed by the government, and therefore they regard the controller's choices as not being at a safe distance.

Further, the distinctions by the respondents from the breeze subsector could be coming from truth that paying little heed to embodiment of Wendy razors the equipping of wind advancement has been moderate Moreover the greatest when project improvement being worked on has defied challenge steaming from deferrals and satisfaction of progress line being endeavored by government substance an intervention of con-trawler has not been approaching to decide the resulting troubles between the architect and government elements.

- Independence of the Regulator and Shareholding of undertaking

The points of view on the respondent's reliant upon shareholding structure presented separating results. respondents from associations with new shareholding structure assessed opportunity of the regulator as poor (33.3 on a size of "poor" to "Poor") and a further 66.7 were detached concerning the autonomy of the regulator.

Of course, 37.5 % of respondents from associations with neighborhood shareholding assessed the free of the regulator as poor. Practically identical results were procured for associations with a mix of neighborhood and unfamiliar shareholding. Only associations with government shareholding yielded to the self-sufficiency of the regulator (rating on a size of "good" to "for the most part incredible").

Since the controller, in addition to other things, affirms power buy arrangements and furthermore gives generation permit to the designers, it very well may be deciphered that the privately owned businesses whether with neighborhood or unfamiliar have encountered troubles in getting vital endorsements by fact that

they consider the to be as an organization substance and as needs be are in circumstance to get government intervention when haggling with the controller.

Generally speaking, the above outcomes demonstrate that the while the controller has gotten a higher positioning as one of the area boundaries, the outcomes have been slanted by respondents from the public authority substances and consequently probably won't give indisputable outcomes on the autonomy of controllers.

- Government Support to Off-taker

Financial supporters and investors in energy generation are worried about the monetary soundness or financial security of the off-taker particularly in power area structures where the off-taker is the single mass purchaser of power delivered with in the country.

Afghanistan, D Afghanistan Breshna Sherket (DABS) is the single-mass purchaser of all the power created in the country and furthermore purchase from outside of country due to karma of adequate age of power in the country. In circumstance where the off-taker has gone into a few off-take organize ment or agreements with various power makers (whether or not public and private), government maintain is seen as significant both from a financial and procedure perspective.

On a size of "good" to "verry great" and ward on the actual relationship for respondents, those in focal government (37.5%), project worker (18.2%), designer 33.3% and advancement organization 33.3 were generally concurred that there is strong government sponsorship to the controller and furthermore concurred that the oversee offers help to the off-taker. Then again, Government offices, business establishments were uninterested.

While the positive appraisals from the public authority could be ascribed to commonality one-sided, the perspectives on the undertaking engineers appear to give further assurance to the public authority see and affirms that the public authority backing to the off-taker in Afghanistan is acceptable and going to be great and can be expected to advance sustainable power improvement.

The perspectives on advisors and project workers, then again, could be because of the legally binding associations with the utility which is confined to the

course of business for organizations conveyed and not as vendors of energy to the off-taker.

Considering the financial backers profile, there is apparently a predictable synchronization that there is suf-ficient help to the off-taker by the public position. (half) of respondents with affiliations of new shareholding and 33.3% respondents with neighborhood and government shareholding agreed that there was palatable government financing for the endeavor. In general, the perspectives on the respondents' highlight solid government responsibility and backing to the off taker which is relied upon to advance environmentally friendly power improvement in Afghanistan.

- Project Profile

Even though ADB is supporting the renewable energy development in Afghanistan. ADB by Technical Assistance (TA) prepared and assist the renewable energy department of Central Government Agencies for development of a renewable energy development road map and renewable energy project.

- Environmental and Social Standards

Generally, most sustainable power asset are found in far off and hard to show up at domains. For supportable abuse of the resources, normal and accomplice's organization is essential. This could be as adherence to worldwide natural standards and governs and amassing in or winning the assistance of the local people and organizations for the undertaking. Normal and social issues, thusly, from an imperative idea for monetary patrons wishing to manhandle harmless to the ecosystem power resources since the cost of consistence or disobedience could be gigantic.

In this assessment, respondents were drawn closer to rank their evaluation of the common and social norms in Afghanistan which could affect picking the country their choice of hypothesis decisions. To achieve this impartial, respondents were drawn closer to rate their impression of the close by regular conditions subject to a lot of biological limits, for instance, level of neighborhood people maintain for environmentally friendly power, accomplice the leaders, straightforwardness of getting access and way-leaves and the kind of natural standards. The results are as shown in the table underneath:

Tabel 4.16: Respondents Results For Environmental And Social Standards

PARAMETERS	STRUCTURE					SIGNIFICANCE INDEX	RANK
	STRONGLY DISAGREE	DISAGREE	INDIFFERENT	AGREE	STRONGLY AGREE		
STAKEHOLDER MANAGEMENT FOR PROJECT SUCCESS IS EXCELLENT	0	5	12	11	12	73%	4
LOCAL ENVIRONMENT & SOCIAL STANDARDS MATCH INTERNATIONAL STANDARDS	1	4	7	14	14	79%	1
LOCAL POPULATION SUPPORT FOR RENEWABLE ENERGY PROJECT IS EXCELLENT	0	5	12	11	12	75%	2
IT IS EASIER TO OBTAIN ACCESS AND WAY-LEAVE TO RENEWABLE RESOURCE AREAS	2	3	12	13	10	73%	3

Source: author

Table # 4-3-5 shows the outcomes from the investigation, Local climate and social norms in Afghanistan is incredible and underpins projects accomplishment as demonstrated by the higher Significance Index of 79% this is trailed by Stakeholder the board in Afghanistan (Significance Index of 73%). Then again, nearby populace upholds and getting approach and wayleaves for renewable energy projects discovered to be of worry for financial backers as uncovered by Significance Index of 75% and 73% respectively.

To additional increase experiences in the explanations behind the Significance Indices, optional examination was done utilizing cross-tab investigation to survey the perspectives on the respondents on the ecological and social standard. The outcomes are introduced in Appendix 3; Table 6-15 to Table 6-17 and talked about in the table below:

- Stakeholder Management

Accordance to the cross-tab investigation results, project developer (66.6%), central Government (50%), academics (100%) and development financial instructions, both Commercial (66.3%) and improvement monetary institutions (50) upheld the view that partner the board in Afghanistan is superb and favorable for environmentally friendly power undertaking's prosperity. Just a little level of project developers (25%) and contactors (33.3%) to some degree couldn't help contradicting the type of partner the executives and whether it is strong for project achievement.

The solid positive perspective on the subsidizing organizations joined with the public authority foundations loans to the end that the partner the board is magnificent and thought about significant for project achievement. The worries of the workers for hire and designers could be identified with difficulties encompassing acquiring wayleaves and access for project improvement.

- Local and international Environmental Standards

The study likewise inspected the equal between the type of neighborhood and global ecological standard. This evaluation was to survey whether there is intermingling between the two arrangements of guidelines that makes it simpler for a financial backer to comprehend and appreciate natural conditions from a worldwide setting.

Such intermingling on the closeness of ecological principles, rules, and laws advances ac-acceptance and all-inclusive comprehension of natural conditions acquiring in a locale and would be relied upon to advance the environmentally friendly power improvement.

in light of the outcomes, the perspective on respondents on type of ecological norms shifted huge ly. respondent from the focal government 66.6% concurred that nearby ecological norms were comparable to worldwide guidelines. This

view could be radiating from the way that public organization in Afghanistan liable for proclaiming and checking the usage of natural principles (The National Environmental Authority), (NEMA) is an entirely claimed government office and the public authority accepts that its ecological guidelines are benchmarked against those of global substances.

Then again, government organizations and venture were generally apathetic (36.4%) and some dis-concurred (36.4%). These evaluations could be credited to the way that administration offices are dependent upon the principles declared by the National Environmental Agency which is an administration claimed substance. Overall, it would be normal that the bearing of rating of the public authority offices would be steady with those of the focal government. Be that as it may, since these substances get financing from Development Financial organizations, they are dependent upon various arrangements of laws which may frequently be clashing and are dependent upon rigid necessities and consistence contrasted with the public norms.

The perspectives on project workers were likewise differed with 18.2% concurring and a comparative extent contradicting the comparability of nearby and worldwide laws. This could be ascribed to the way that project workers work in various systems and the polarity of the reactions mirrors their interesting and diverse experiences with natural issues. The reactions from project designers showed comparable example with 50% (half) being apathetic while another 50% (half) concurred that neighborhood environ-mental laws coordinates those of the worldwide guidelines.

Intriguing perceptions were made on the business monetary organizations and advancement monetary establishments. All the respondents from business monetary foundations were detached regarding whether neighborhood conditions principles match and worldwide ecological laws and guidelines while Development Financial Institutions to a great extent dissented (33.3%) with type of nearby natural norms with just 33.3% concurring that the nearby norms coordinate those of global necessities.

The perspectives on the business monetary organizations could be clarified by the way that these foundations depend on the task's financials and financial matters while settling on their loaning choices whereby loaning choices depend

on the patrons' capacity to administrations the head and interest reimbursements when they fall due. Such agents would require extra protections, for example, certifications to get them contribute and in this manner would be less worried about the natural dangers.

Then again, Development Financial Institutions are advancement arranged and their monetary help to governments and undertaking engineers typically place solid accentuation and necessity that the activities should fulfill severe ecological execution guidelines. Regardless, most global environmental laws and principles are created by Development Financial Institutions, for example, Asian Development Bank (ADB), World Bank (WB), International Financial Corporation (IFC) and other multi-sidelong and reciprocal loan specialists' organizations. These advancements monetary organizations give financing to the public authority and to the task designers and are probably going to have encountered deficiencies with the nearby ecological principles in Afghanistan.

In general, the assessment of ecological laws and guidelines was positioned second by the respondents' regarding the importance factors yet with a moderately low score of 64%. This rating could be interpreted to imply that while financial backers' natural guidelines as basic in their dynamic, the local ecological principles don't contrast and the worldwide norms and this could be worry to the financial backers.

- Local Population Support for Renewable Energy Development

Accordance to the evaluation of ecological guidelines and laws, the perspectives on the respondent fair and square of neighborhood populace uphold were fluctuated. Focal government and government offices and subsidizing organizations (business and improvement monetary) and scholastics either differ or were to a great extent indifferent with the degree of neighborhood populace uphold for sustainable power advancement. Differentiating, favorable to project developer were intrigued with nearby populace uphold for renewable energy development.

These differentiating perspectives could be clarified by the way that most environmentally friendly power assets are found in country territories and governments and government organizations are to a great extent liable for

drawing in, resettling or pay of the nearby people to encourage misuse of these assets. For certain situation, governments are needed to give assurances to extend designers to hazards emerging from aggravation by the nearby populace guaranteeing that the danger is to a great extent eliminated from the venture engineers.

This is generally the situation for projects realized under open Private Partnership plans where the public power and government workplaces are liable for land acquiring for adventures and this may incorporate migration or resettlement of tremendous people. Such exercises are regularly than not, faced with impediment and disobedience.

Further, subsidizing from improvement monetary foundation to governments and its organizations for environmentally friendly power advancement is generally fixed on getting of land-rights and resettlements activity plans by the public authority. Difficulties looked by the public authority during land procurement is accordingly liable to affect contrarily on the financing pattern of the subsidizing offices.

These situations clarify why focal government, government organizations and subsidizing offices gave lower rating to nearby populace uphold for sustainable power advancement.

In general, neighborhood populace uphold for sustainable power advancement in Afghanistan thusly was evaluated as modestly poor by respondents.

- Bankability Considerations

The examination also reviewed bankability considerations as a sub-factor of adventure profile and an influencer of harmless to the ecosystem power progression. As a component of this evenhanded, various bankability contemplations evaluated remembered an investigation of respondent's perspectives for the ampleness of power taxes; cost capital for project, accessibility of credit upgrade instruments, power dispatch ensures, power demand, type of reports and studies on environmentally friendly power, backing of headway financial establishments nearby and money related strength of the off taker.

The respondents were drawn nearer to rank the above segments subject to their impression of their importance as drivers of harmless to the ecosystem power improvement in Afghanistan. The investigations results is as demonstrated in the table under:

Tabel 4.17: Bankability Consideration

PARAMETERS	STRUCTURE					SIGNIFICANCE INDEX	RANK
	STRONGLY DISAGREE	DISAGREE	INDIFFERENT	AGREE	STRONGLY AGREE		
DEMAND FOR ELECTRICITY EXIST AND IS GROWING	2	4	8	11	15	77%	1
REPORTS AND STUDIES ON RENEWABLE ENERGY IN THE COUNTRY	2	10	10	13	5	65%	2
COOPERATION OF DFIS AND MFIS IN RENEWABLE ENERGY DEVELOPMENT	1	9	18	7	5	63%	3
FINANCIAL STRENGTH OF THE OFF-TAKER IS EXCELLENT	2	11	14	12	1	62%	4
COST OF CAPITAL IS COMPETITIVE	3	9	14	12	2	61%	5
EASE OF RAISING CAPITAL	3	12	15	9	1	57%	6
CREDIT ENHANCEMENT INSTRUMENTS ARE AVAILABLE	3	13	17	6	1	55%	7
ELECTRICITY DISPATCH GUARANTEE	4	13	14	6	3	51%	8
ELECTRICITY TARIFFS OFFERED ARE ADEQUATE	4	16	12	7	1	48%	9

Source: author

As demonstrated in the table above and dependent on the Significance Indices, Demand for electricity and developing (Significance Index 77%) Report and Studies on renewable energy in the country (Significance Index 65%),

Participation of DFIs and MFIs in sustainable power Development, (63%), Financial strength of the Off-taker is incredible (64%), Cost of Capital is serious (61%), Ease of Raising Capital (57%), Credit Enhancement instruments are accessible ((55%), Electricity dispatch ensure (51%), Electricity Tariffs Offered are sufficient (48%), were positioned ordinally from the top significancy to the most reduced backing of Development Financial Institutions (DFIs) and Multi-level Financial Institutions (MFIS) was situated as one of the huge bankability considerations for manageable force development in Afghanistan (Significance Index 63%). This was followed by presence and improvement of force revenue (Significance Index of 73%) and plentifulness of force demands being offered (Significance Index of 70).

On the other hand, power dispatch (68%); financial strength of the off-taker (68%), reports and studies on manageable force (66%) and availability of credit overhaul instruments were decently situated. Effortlessness of raising capital (56%) and reality of cost of capital were situated as the most re-duced impediments to harmless to the ecosystem power in Afghanistan.

The point-by-point assessment of the respondents rating of every one of the above variables is given in Addendum 3: table 6-18 to tables 8-22 and talked about in the areas beneath:

As demonstrated in the table above and dependent on the Significance Indices, Demand and growing for electricity (Significance Index 77%) Report and Studies on environmentally friendly power in the country (Significance Index 65%), Participation of DFIs and MFIs in sustainable power Development, (63%), Financial strength of the Off-taker is incredible (64%), Cost of Capital is serious (61%), Ease of Raising Capital (57%), Credit Enhancement instruments are accessible ((55%), Electricity dispatch ensure (51%), Electricity Tariffs Offered are sufficient (48%), were positioned ordinally from the top significancy to the most diminished help of Development Financial Institutions (DFIs) and Multi-flat Financial Institutions (MFIS) was situated as one of the huge bankability contemplations for supportable force improvement in Afghanistan (Significance Index 63%). This was followed by presence and improvement of force revenue (Significance Index of 73%) and plentifulness of force demands being offered (Significance Index of 70).

On the other hand, power dispatch (68%); financial strength of the off-taker (68%), reports and studies on reasonable force (66%) and openness of credit redesign instruments were decently situated. Straightforwardness of raising capital (56%) and earnestness of cost of capital were situated as the most reduced deterrents to harmless to the ecosystem power in Afghanistan.

The point-by-point appraisal of the respondents rating of all of the above factors is given in Addendum 3: table 6-18 to tables 8-22 and discussed in the spaces underneath:

- Participation of DFIs and MFIs in Renewable

Backing of DFIs and MFIs in any space of the economy is reliably welcome to monetary benefactors. These money related foundations can give long stretch and straightforwardness capital for infrastructural improvement. Likewise, they can drive governments to respect commitment vows through sovereign certificates. Overall, it would be typical that the presence and collaboration of DFIs and MFIs would maintain environmentally well-disposed force hypotheses. In view of the idea of the association, this factor was positioned exceptionally by a large portion of the respondents im-utilizing an overall agreement structure the respondents that interest of DFIs and MFIs in Afghanistan is acceptable and drives financial backers' cooperation in the sustainable power venture. Just a little extent of the public authority offices and undertaking (33.3%) DFIs and MFIs' effects on long-term power improvement was disputed. This could be attributed to the fact that these offices receive financial support from the government and have limited reliance on DFIs or MFIs to fund their work. Similarly, contract workers (25 percent of whom disapprove of the work of DFIs and MFIs) are usually reimbursed by project designers rather than by the government.

- Demand for Electricity Exists and Growing

When for Electricity in framework exists and is growing, new wellspring of energy is likely going to be abused to meet the flow and creating interest. It would be ordinary that the presence of interest and improvement thereof would vitalize interests in the energy region including supportable force the result from this assessment presented mixed results on the interest of force in the

country. Most of the deponents don't consider interest to be power as creating. Simply 33.3% (central oversee ment); 36.4% (Government organizations advancement money foundations 40% and designers half maintained the announcement that influence demand is creating. these results could be translated to suggest that age from existing source is not adequate to fulfill the current projected need. Such a circumstance predicts a threated a threated to progress of harmless to the ecosystem power sources.

Of course, counsel, academicians and various respondents maintained the view the interest exists and is creating. These disengaged viewpoints can be used to assert the presence of interest for power in the country and consequently, the factor of interest is useful for reasonable force improvement.

- Electricity Tariffs

Power taxes give the unit of hypothesis recovery and is expected to compensate monetary patrons for the cost of adventure, cover operational costs and give a re-appearance of monetary benefactors to the danger taken. Promotion compare or serious power levies are relied upon to spike interest in the area. In this examination, respondents were found out if the power taxes being offered in Afghanistan are sufficient for their speculations.

Larger part of respondents was apathetic with regards to whether the offered levies are sufficiently serious to prod sustainable power advancement. Nonetheless, the focal government (55%) and project engineers (half) appeared to concur that power duties are sufficient. Governments addresses financial backers' inclinations and would favor serious duties.

The perspectives on these two different vested parties appears to give solid simultaneousness on the sufficiency of power duties. These perspectives could be originating from the way that the public authority of Afghanistan sponsors customer levies and value revelation instrument under a force buy concurrence with off-taker.

In such an instrument, the duty so offered takes care of the expense of speculation by the designers and gives a pay of danger in type of sufficient re-visitation of the venture engineers. This agreement gives the convincing proof

that power duties goes about as a motivation for renewable development in improvement in Afghanistan.

- Financial Strength of the off-taker

Most of Power Purchase Agreement for power supply are wrangled dependent on take-or-pay terms. Money related limit of the off-taker, therefor, transforms into an imperative idea to monetary sponsor as this immediate whether the off-taker will really need to regard its responsibilities as and when they fall due. Moreover, the money related strength of the off-taker will choose if it is ability to go into future influence contracts with engineers.

In light of cross-tab analysis results, project engineers (66.7%) concurred that monetary strength of the off-taker is phenomenal. Taking into account that item engineers go into concurrences with off-taker and some of government organizations and endeavors likewise go into PPA's to create projects, this view affirms that the financial backer are OK with the monetary and strength of the off-taker.

Additionally, Afghanistan as of now has history of private contribution in renewable energy improvement and these private players have over time participated by the off-taker. This exhibited certainty on the money related instruments of the sticker is fundamental and gives the significant disembodies to private monetary supporter to participate in practical influence in Afghanistan.

Then again, perspectives on the focal government on the monetary instrument of the off-taker were changed with 25% differing and 75 being detached on the strength of the off-taker. Such perspectives on the Central Government could be clarified by the way that administrations give sovereign assurances to off-takers to get financial backers, for example, autonomous force makers against danger of non-installment and end chances.

In light of cross tab examination results, project engineers (66.7%) concurred that monetary strength of the off-taker is phenomenal. Taking into account that item engineers go into concurrences with off-taker and some of government organizations and endeavors likewise go into PPA's to create projects, this view

affirms that the financial backer are OK with the monetary and strength of the off-taker.

Additionally, Afghanistan as of now has history of private contribution in sustainable energy development and these private performers have throughout the years cooperated by the off-taker. This exhibited certainty on the monetary instruments of the sticker is essential and gives the important disenthralls to private financial backer to partake in sustainable power in Afghanistan.

Instead, perspectives on the focal government on the monetary instrument of the off-taker were changed with 25% disagreeing and 75 being agreed to get financial backers, for example, autonomous force makers against danger of non-installment and end chances.

- Quality of Reports and Studies on Renewable energy in Afghanistan

Presence of value researches and investigations, for example, plausibility considers improves the type of speculation dynamic and is probably going to lessen hazard and encourage raising support activities for renewable energy.

In this study the degree of concurrence with accessibility of data regarding reports and studies on environmentally friendly power asset dependent on Cross-Tab Analysis addressing, central government, (25%), government agencies (75%), advisors 50% and commercial institutions That there are excellent investigation and researches on renewable energy improvement. Most of the participant were to a great extent unconcerned. Such low degrees of appreciations present the need to smart examinations on the accessible renewable energy in Afghanistan to accelerate private sector involvement in the sector.

Surprisingly, Government agencies (75%) consultant 50% in general accept that there is satisfactory data and reports on the area.

- Technology and Capacity Issues

Another bankability thought that was measured in the investigation identifies with innovation and capacity issues. innovation thought surveyed whether there are trustworthy accomplices to execute the activities and whether the advancements for different renewables have developed and demonstrated.

For the most part, agents of foundation projects are agreeable to fund demonstrated advances given the more drawn-out financing turnovers and terms of force buy Agreements which traverses 2030 years. In this manner, accessibility of realized advancements to misuse environmentally friendly power sources Globally would be considered as a motivator to abuse the inexhaustible assets.

Limit thought then again took a gander at the limit of accessible HR to implement projects. Such limits would remember insight for the territories of task money, project the executives, designing abilities and specialized abilities.

As mentioned, (63%) accepted that the nonprivate management can execute projects. Solid ability to actualize projects is fundamental for favorable to eject engineers as financial backers it diminishes project execution dangers such deferrals and cost invades particularly for projects which are being actualized under open Private Partnership game plans.

Accessibility of solid accomplices, for example, providers of extra parts, suppliers of after cell administration, operation and workers for hire and designing obtainment and development firms likewise received a decent score with 68% of the respondents concurring that Afghanistan has sound accomplices to execute projects. This sort of certainty is useful for environmentally friendly power advancement. A further 74% of the respondents were in understanding that environmentally friendly power innovations are proven and develop advancements decrease the dangers to designers and is relied upon to advance inexhaustible energy improvement.

4.4 Study Findings and Literature Review

The examination uncovered numerous likenesses with the previous discoveries on the drivers and key achievement factors for sustainable power advancement. The condition of the full-scale business climate arises as a critical drivers of environmentally friendly power improvement. This is thinking about that project designers are worried about the overall monetary soundness of economy as portrayed by pointers, for example, level of political help, country's improvement plans, financial development rates and country's administration

frameworks. On account of Afghanistan, the key large-scale drivers for sustainable power improvement were identified as great political help and quality f nation's turn of events. These outcomes are steady with the discoveries of Eberhard and Gratwick, (2011) who distinguished the determinants of achievement of private area interest in the energy area as ideal speculation environment, clear approaches and administrative structure, viable arranging, obtainment and contracting arrangements and practices.

The assessment uncovered various resemblances with the past disclosures on the drivers and key accomplishment factors for supportable force headway. The state of the full-scale business environment emerges as a basic driver of harmless to the ecosystem power improvement. This is pondering that project creators are stressed over the by and large money related adequacy of economy as depicted by pointers, for instance, level of political assistance, country's improvement plans, monetary advancement rates and country's organization structures. Because of Afghanistan, the key enormous scope drivers for reasonable force improvement were recognized as incredible political assistance and quality f country's new development. These results are consistent with the disclosures the study that recognized the determinants of accomplishment of private region interest in the energy territory as ideal hypothesis climate, clear methodologies and authoritative construction, feasible orchestrating, acquisition and contracting plans and practices.

View from the institutional viewpoint, an independent controller and government uphold for renewable energy advancement were considered as key elements for renewable energy development absence of solid foundations hinders private area investment as recognized by (Bugaje, 2006), who refers to frail institutional structure as an obstacle to the improvement of inexhaustible of com-prehensive guidelines and codes of training, proclamation of suitable enactment to help the institutional system are suggested.

Venture profile factors advancing sustainable power improvement, for example, natural and social norms, bankability contemplations and innovation and limit factors similarly assume a significant part in driving private area support. Existences of magnificent partner the executives arose as giving a solid catalyst to sustainable power advancement thinking about that the vast majority of

renewable energy assets are situated in distant area and to a great extent in zones involved by native populace. This requires a sensible partner the board way to deal with advance neighborhood populace purchase in to encourage the misuse of the assets.

The investigation considered sustainable power advances as experienced and has given a solid motivator to private parts in the misuse of sustainable power improvement as found in a comparative report by (Wüstenhangen and Menichetti, 2012). This stems from the way that the expense of Renewable energy advancements, for example, Solar PVs have been on the decrease because of innovative development, organization and economies of scale with the resultant advantages being passed on the consumers. This has brought about in general acknowledgment of the sustainable advances making their organization broad.

The research finding shows the government of Afghanistan have started a huge program for development of PPP renewable energy projects. The government and government agencies are going to reform the public private partnership framework, policy and capacity building. These actions show a positive and significance influence on PPP programs. The funder and project developer perception have been improved.

Afghanistan as a country which decades of wat has been destroyed all its infrastructures needs to have international support, WB and ADB in close coordination with government can play a positive role in this context and active participation of private sector will bring a bright future. For a country like which doesn't have stable economic development, multilateral lenders support such as World Bank and Asian Development Bank is really important and conductive.

The most effective part of multilateral lenders contributions in process is their experiment in the field of PPP projects, as such model of projects didn't fully take over either party in Afghanistan to be able fully understand its challenges. Since 2001, these multilateral lenders have been providing financial and technical supports to Afghanistan for conduction of large projects.

Therefore, since the government cannot alone implement mega projects due to economic constrains, the renewable and other gigantic projects should be implemented jointly or with financial supports of those multilateral lender's agencies. The study finding shows that PPP project need strong financial support which is sometimes not possible to be covered by the government and private-sector, therefor Multilateral lenders' role is bold in PPP projects. Meanwhile, it should be mentioned that lenders are more likely to pursue PPP ProJet in countries that have already successfully implemented PPP projects, and where investors have been satisfied and seen good returns. Nevertheless, countries with no previous history of PPPs but which seem to be stable and able to meet certain other conditions will be able to attractive private investment. The respondent feedback and research finding shows that committing to sustainable development Goals (SDGs) countries pledge to pursue progress on economic, social and environmental targets, in a balanced and integrated manner. The SDGs are Cross cutting and ambitious and require a shift in how in partnership they also push us to significantly change the level of both public private investment in all countries.

The research finding suggest studying the developed PPPs in Afghanistan and evaluate the success ability of those projects, which requires a detailed investigates and mitigate those with the new and under study projects in the country.

The study identified and evaluate opportunities to integrated Renewable Energy (RE) into the overall electricity supply plan presents some unique challenges. Generally traditional planning models which attempt to optimize, in terms of size and timing, among a range of generation options are not well suited to evaluating resources whose cost effectiveness can vary widely depending on location and market density.

Accordance the study and the research respondents hope that a new political system can address the problem of fragile political/security conditions in Afghanistan and step up of ceasefire can bring stability to the country, this will automatically lead up to attraction of investors to the country, and also recommendation for procedures for proposals and set up of time frame for

approval. Tendering, procurement, incentives, Project Development Fund (PDF) should reform and set in according to the experiences of developed countries.

The study finds that Public Private Partnership PPP to be related to provision of public infrastructure to society towards attaining the Sustainable Development Goals (SDGs) set by the UN. Multilateral lenders role for Public Private Partnership project are very important and the lenders role must be reform in Afghanistan, the relation between project doer and lenders is one the framework must be reform. The study finding shows that the Word Bank (WB) and Asian Development Bank (ADB) presence and support was always conductive on PPP projects in Afghanistan, as they are initiating many PPP projects so far specially in Public Private Partnership power sector and renewable energy projects.

5. DISCUSSION, CONCLUSION, AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the results and finding of the study and discusses these finding in the context of existing literature on the subject. In addition, the chapter makes conclusion of the study based on each of the study research questions. The chapter further makes recommendations for improvement on the status of investor participation in PPP Renewable Energy Projects as well as recommendation for further studies.

5.2 Reasarch Summary

Variable of (CSFs) for PPPs in sustainable energy have been well re-looked in many created nations and huge writing exist. In Asia, concentrates on drivers of sustainable power improvement have zeroed in on southeast Asia and south Asia.

This investigation looked to distinguish the drivers of sustainable power in a creating or low-pay country like Afghanistan. Further, while past investigations have received different techniques, this examination utilized a three-stage review approach zeroing in on the setting of the inexhaustible energy ventures as reflected by the overall situations in the largescale business climate and the design of the power area and task profile or qualities as determinants.

The examination depended on the perspectives on undertaking designers (counting experts and workers for hire), Improvement Financial Institution; Commercial Financial Institutions, Government and Government Agencies, different expert gatherings and scholarly analysts, who were the primary objective gatherings for the investigation.

On the largescale business climate level, to key full scale level determinants of sustainable power improvement in Afghanistan were political generosity for sustainable power advancement and the country's advancement plans.

Strangely, the country's administration frameworks were not evaluated exceptionally as a driver of environmentally friendly power advancement in Afghanistan and this could be an obstruction to environmentally friendly power speculation.

Concerning design of the power area as a determinant of renewable energy development, freedom of the controller was positioned as the main driving component for inexhaustible energy interests in Afghanistan followed by the Government backing to the off-taker.

Taking into account that controllers are relied upon to advance maintainable working of the power sec-peak by guaranteeing consistence with the guidelines, guidelines and codes expected of the players of the controller rouses trust in the area players and hence advances contribute. In addition, taking into account that Afghanistan has single-mass purchaser of all the power favorable to the country solid government backing to the off-taker, from a monetary and strategy for every spectate, would be viewed as essential. Such help permits the off-taker to keep on going into new off-taker game plans or agreements with various power makers (regardless of whether public and private) while as yet depending on the public authority's support.

Task profiles determinants for sustainable power improvement in Afghanistan had fascinating outcomes. On natural and social issues, partner the board in Afghanistan was appraised as great and supports projects accomplishment in Afghanistan. Nonetheless, type of ecological laws and standard, nearby populace backing and way-leaves appeared to be of worry for sustainable energy engineers.

Other task profiles thought distinguished as significant in driving of sustainable energy development in Afghanistan included support of Development and Financial Institutions and Multi-Latera Institutions in the Afghanistan Energy Market, developing interest for power, sufficiency of taxes and demonstrated innovation and accessibility of neighborhood limit.

Support of DFIs and MFIs in any area of the economy is consistently welcome to financial backers. These monetary organizations can give long haul and ease capital for infrastructural advancements while additionally guaranteeing

governments regard obligation pledges through sovereign guarantees. Developing interest for power then again empowers new wellsprings of energy to be misused to meet the current and developing interest while serious duties guarantees that invest-peaks are enough made up for the expense of their venture, cover their operational expenses and give a re-visitation of financial backers to the danger taken.

On innovation and limit front, accessibility of trustworthy accomplices as provider of extra parts, favorable after deals administrations, activity and support workers for hire and Engineering and Construction firms and development or sustainable power advancements and neighborhood limit were distinguished.

The critical drivers of private area cooperation in sustainable power in Afghanistan can be extensively ordered as presence of political altruism and government uphold for environmentally friendly power development in area. The isolation of duties of area players with clear jobs emerging from the unbundling of the area and the presence of autonomy controller and solid government backing to the off-taker are positive elements for private area interest.

Sound partner commitment and support of Multi-Lateral and Bilateral Development Finance Institutions, developing interest and ampleness of levies additionally has helped Afghanistan as a favored speculation objective for sustainable power. The development of the greater part of the sustainable energy advances has likewise supported improvement of environmentally friendly power in Afghanistan.

The investigation likewise uncovers various strategy and administrative changes expected to support private area interest in the sustainable power areas of asset obliged climate.

Reinforcing of administration frameworks is needed to pull in private area interest. This will include organizing quality laws to battle indecencies, for example, defilements, which are key worries for investors.

Consistency of duty laws and the overall administrative climate is likewise essential for private sec-peak support. Specifically, natural laws ought to be

benchmarked with global prescribed procedures. This will empower financial backers to comprehend the neighborhood climate conditions inside an international setting, which guarantees simplicity of consistence and save money on orderly expenses. Further, considering that sustainable power projects are found in distant and difficult to arrive at zones, governments ought to give structures to obtaining of way-leave and admittance to environmentally friendly power re-sources to encourage abuse of way-leaves and admittance to environmentally friendly power assets to facilitate misuse and decrease clashes between project designers and nearby populace.

Capital raising for advancement of undertakings is a critical worry for engineers. To reduce the financial dangers to designers, a steady, unsurprising and working monetary framework is important. Governments need to develop and widen alternatives of raising money for private players from the neighborhood monetary area in nearby cash. This other than giving choices to the neighborhood populace to partners with project engineers will likewise serve to decrease the monetary dangers occasioned by PPAs de-named in USD while incomes are gotten in nearby monetary standards.

The majority of the sustainable assets, for example, wind, sunlight based, hydro and geothermal require quite a while of information assortment and investigation to illuminate speculation choices and diminish chances. For instance, in light of this investigation, on account of Afghanistan, respondents felt that the type of studies were not satisfactory. Governments and strategy producers need to fabricate neighborhood ability to have the option to gather, examine and store information for environmentally friendly power assets this call for interest in information assortment abilities remembering building nearby HR limit with respect to orders, for example, science, Technology, Engineering and Mathematics.

Emerging from review of literature and the discoveries of this examination, various issues are worth examination to quicken the improvement of environmentally friendly power assets. A portion of these issues are examined underneath:

Sustainable power advancements through private area improvement experience long-arrangements periods from the marking of the PPAs to arriving at

monetary close. It is assessed that if could require 4-5 years from consenting to of Power Purchase Arrangements to arriving at monetary close for most IPP exchanges. In addition, Financial Close is viewed as a Condition point of reference in a large portion of these task arrangements. During these mediating periods, a great deal of changes could be in the task's climate, for example, change in government, financial conditions. It is intriguing to exploring to examine what elements defer projects in arriving at monetary close for environmentally friendly power projects in agricultural nations and proposed strategy suggestions.

Afghanistan is one of the unstable nations in cent Asia, the psychological oppressor's assault on the distributions network frameworks and a lot greater security issues we suggest another fascinating zone of exploration could be to examine the job of off-grade or smaller than normal lattice power appropriation frameworks advancement or decentralized help arrangement in upscaling the improvement of environmentally friendly power assets. This is thinking about that the vast majority of sustainable power assets are situated in distant location with insignificant foundation. Contingent upon the framework associations which are generally little, and the regularly weather-beaten transmission foundation essentially affect the abuse of the sustainable power assets particularly where the engineers need to rely upon the public utilities to build up These necessary foundations.

5.3 Discussion

5.3.1 Stakeholder vieowpoints and participation in ppp projects

The study finding shows that the stakeholders' perceptions on PPP renewable energy projects had a significant effect on the level of participation in PPP renewable projects. The study also shows that they are affording to establish PPP units in the difference government agencies by supporting of WB and ADB banks. The government trying to support stakeholders and prepare more incentives like land acquisition, security support, grant fund, longtime loan, tax exemptions and social support. The study finding indicates that the parameters like Political support, country's development plans, economic growth and

countries governance system have a positive correlation with PPP renewable energy projects in Afghanistan.

Even though Afghanistan accelerated reform and improving security situation growth, but the PPP renewable energy project are slow with limited progress. The government of Afghanistan have preparing and developing a 2,000 MW solar energy program as part of wider green growth agenda and go due to sustainable goals of 2030. Study finding shows that the government and government agencies encouragement for PPP renewable energy projects for independent power producers (IPPs) to long term Power Purchase agreement (PPAs). The private sector is motivated by public sector by quick profits, grant funding, security support, land acquisition and off-taker support. They infer that the private sector is inspired by fast benefits, which proposes that the sector is more pulled in to put resources into momentary ventures that create snappy returns as opposed to putting resources into transportation foundation whose profits are long haul and connected with high dangers. It is in this way vital that both the public sector and private sector parties recognize, define and understand their responsibility for all stakeholders like off-taker. Consumer, project developer and investor like (funders and lenders) in the PPP renewable energy projects. The study investigations and literature reviews find that Afghanistan government established and unit by name of Central Partnership Authority (CAP). This unit start its mission to support the PPP units of different ministries and government agencies for PPP projects. CPA jis facilitating and supporting public private partnerships in the country through regulating government's policies coordination of stakeholders facilitating documentations convincing funders and making risk allocation and a long list of activities which are listed below:

i. Preparing and developing authorized and acceptable frameworks,
ii. Proposing incentives and facilities for PPPs in all sector
iii. Developing PPPs frameworks accordance to country environment
iv. Coordinating and consulting PPP's activities among stakeholders,
v. Advising PPP's stakeholders for building their capacities
vi. Approving the efficiency in whole PPP process, and

vii. Preparing technical assistance for entities in the identification, preparation, procurement and contract management in different phases of projects.

5.3.2 Organizational capacity and ppp renewable energy projects

The study finding accordance to the dissertation question on sector specific conditions promoting interests in renewable energy sector in Afghanistan shows through examining of variable and significance indices the sector capacity and capability getting improved.

The exploration discoveries in this investigation show that the financial backer skill, specialized ability, and monetary capacity have a positive and huge impact on interest in PPP projects. These examination discoveries on financial backer aptitude are firmly connected to a solid and able undertaking group is significant for the accomplishment of PPP project usage. The discoveries can likewise be identified with discoveries that the effectiveness of PPP project achievement is straightforwardly affected by the lack of staff.

The discoveries on the specialized ability of the private area financial backers is additionally connected with the degree of reliance of the private area party on the public authority organizations. The study shows proof that private concessionaires whose undertaking groups are profoundly reliant on the public authority, regardless of the venture being private area driven, are not equipped for fruitful actualizing PPP projects. Sadly, in the nearby setting, numerous organizations inside the development area battle with insufficiency in different capacity enrichments. In this way, the examination discoveries on institutional limit bolsters who distinguished eight elements adding to helpless task execution. These incorporate institutional limit factors in particular; absence of competency among staff or individual responsible for the PPP, administration conveyance disappointment, absence of methodology in evaluating execution, absence of checking, absence of involvement and comprehension of PPP among partners, and helpless administration. Further investigations supporting the examination discoveries on the impact of institutional limit fair and square of interest in PPP projects show that lacking limit by the financial backer can go about as a reason for project delays. These discoveries figure out how to amass

these institutional limit factors into worker for hire related variables, proficient administration related elements, material related elements, work and gear, government related elements, outside elements, project related components, proprietor related elements, authoritative obligations, and plan and documentation factors. Other institutional limit factors influencing the capacity of private area financial backers to attempt fruitful PPPs incorporate insufficient exchange abilities among those occupied with arrangement of PPP contracts and the absence of a PPP coordination team.

The examination discoveries on institutional limit of financial backers is additionally upheld by evaluations of the monetary ability of private area financial backers in less created capital business sectors who chiefly rely upon business banks and comparative moneylenders in the business. The chance of business banks shaping a consortium to subsidize such ventures is disturbed by the fluctuating perspectives on every likely accomplice. Ordinarily, banks analyze the achievability of undertakings dependent on the accessible data. A positive assessment of one of the banks may not really coordinate with that of another bank because of minor departure from needs. In evaluating the monetary ability to the extent insurance is included, reports that for PPP projects, interestingly with other business loaning arrangements that promise property or resources if there should be an occurrence of default, the task moneylenders will rather try to get "step-in" rights to utilize the resources to keep on working the utility until its obligation commitments have been reimbursed. Such a likely limitation on administration is absent, or is restricted, in different types of corporate loaning and is another thought for the inside monetary maintainability of a PPP. Traditionally procurement methods in Afghanistan didn’t have a good background and success, unfortunately for weak management and low capacity of procurement system there are many reports of projects have been failed and couldn’t deliver on time and in optimum quality. Accordance the respondent’s feedback there is allot of barrier for developing the PPP projects like, war, corruption, low capacity in public and private sector, lack of fundamental frameworks, proper policies, terrorism and sabotage and many more barriers. But also there was allot of positive feedback from respondents like, Afghanistan is a country with many opportunities specially for

renewable energy and investing in this sector well create better economy for the government an society and better economy will lead to a sustainable security for the country. And also, Afghanistan government have started a big serious reform for procurement system and government agencies and stakeholder relationship to develop PPP projects in Afghanistan.

5.4 Conclusion

This study focused to examine the Macro-Drivers of Critical Success Factors (CSFs) for Public Private Partnership for sustainable development in Afghanistan. The overview and finding of the study show that this is the best way for Afghanistan government to facilitate the opportunity for private sector to participate in building of infrastructure project and the approved framework or procedure for private sector is PPPs, it is a proved frame over the world.

PPPs has demonstrated a supported development over the globe as an overall obtainment in many set up economies across the world. Following upon the encounters from such economies, non-industrial nations have just set out on arrangement of PPP in dispatching significant public tasks. The experience of non-industrial nations is be that as it may, different and profoundly bound to the relevant states of where those activities are executed.

Afghanistan has experienced many years of war and political distress combined with numerous other destabilizing factors which have confronted the country with significant difficulties in nonstop interest in and fruitful conveyance of public undertakings at public scale. PPP has been considered as an elective obtainment technique which can draw in private area in the conveyance and support of the public activities to defeat some of public area insufficiencies here. With this viewpoint, and considering that there has been practically nothing, if any exploration did here in Afghanistan, momentum research was led to examine the reasonable issues in transit of fruitful execution of public activities through PPP. In doing as such, utilizing a broad basic writing audit, imperatives were set up as boundaries to effective arrangement of PPP. Hence drawing upon the encounters in comparable economies, the nation's monetary, political and social climate was concentrated as the setting of this examination.

At the following stage then Afghan experts in four unique areas were reached and requested to add to the examination.

Furthermore, the financial backers have a low certainty towards the public authority's degree of political responsibility in doing powerful cooperating with the private area in PPP renewable energy projects. The financial institutes and project developer further see that there are holes in the sufficiency of the current government approaches that are pointed in development of PPP's renewable energy project in Afghanistan.

Afghanistan as a country which decades of war has destroyed all its infrastructures needs to have international support, WB and ADB in close coordination with Afghanistan government can play a positive role in this context and active participation of private sector will bring a bright future. For a country like which doesn't have stable economic development, multilateral lenders support such as World Bank and Asian Development Bank is really important and conductive.

The most effective part of multilateral lenders contributions in process is their experiment in the field of PPP projects, as such model of projects didn't fully take over either party in Afghanistan to be able fully understand its challenges. Since 2001, these multilateral lenders have been providing financial and technical supports to Afghanistan for conduction of large projects.

Therefore, since the government cannot alone implement mega projects due to economic constrains, the renewable and other gigantic projects should be implemented jointly or with financial supports of those multilateral lender's agencies. The study finding shows that PPP project need strong financial support which is sometimes not possible to be covered by the government and private-sector, therefor Multilateral lenders' role is bold in PPP projects. Meanwhile, it should be mentioned that lenders are more likely to pursue PPP ProJet in countries that have already successfully implemented PPP projects, and where investors have been satisfied and seen good returns. Nevertheless, countries with no previous history of PPPs but which seem to be stable and able to meet certain other conditions will be able to attractive private investment. The respondent feedback and research finding shows that committing to sustainable development Goals (SDGs) countries pledge to pursue progress on

economic, social and environmental targets, in a balanced and integrated manner. The SDGs are Cross cutting and ambitious and require a shift in how in partnership they also push us to significantly change the level of both public private investment in all countries.

The research finding suggest studying the developed PPPs in Afghanistan and evaluate the success ability of those projects, which requires a detailed investigates and mitigate those with the new and under study projects in the country.

The study identified and evaluate opportunities to integrated Renewable Energy (RE) into the overall electricity supply plan presents some unique challenges. Generally traditional planning models which attempt to optimize, in terms of size and timing, among a range of generation options are not well suited to evaluating resources whose cost effectiveness can vary widely depending on location and market density.

Accordance the study and the research respondents hope that a new political system can address the problem of fragile political/security conditions in Afghanistan and step up of ceasefire can bring stability to the country, this will automatically lead up to attraction of investors to the country, and also recommendation for procedures for proposals and set up of time frame for approval. Tendering, procurement, incentives, Project Development Fund (PDF) should reform and set in according to the experiences of developed countries.

The study finding shows that Public Private Partnership PPPs are related to provision of public infrastructure to society towards attaining the Sustainable Development Goals (SDGs) set by the UN. Multilateral lenders role for Public Private Partnership project are very important and the lenders role must be reform in Afghanistan, the relation between project doer and lenders is one of the frameworks must be reform. The study finding shows that the Word Bank (WB) and Asian Development Bank (ADB) presence and support was always conductive on PPP projects in Afghanistan, as they are initiating many PPP projects so far specially in Public Private Partnership power sector and renewable energy projects.

The study also points out the limit of the private sector major parts in the renewable energy sector Afghanistan is still low to deal with enormous renewable energy project framework. Such activities commonly require exceptionally particular specialized and undertaking the board abilities and with immense capital prerequisites. Lion's share of the private area major parts in the street area don't have the inward specialized ability to design, arrange, execute and oversee such PPP projects which additionally run over significant stretches, when contrasted with the conventional government financed projects. The financial backers additionally don't have a committed PPP project supervisory crew. Furthermore, perhaps the greatest hinderance to financial backer cooperation in street PPP projects in Afghanistan is the monetary limit of the financial backers, with an extremely restricted admittance to supported hotspots for such endeavors locally. Hence, most PPP projects are embraced by unfamiliar based financial backers leaving local people for sub-contracting opportunities.

The study shows that there is lack of technical people in PPP units of the government agencies, luck of stakeholder's communication system, low experienced staff for contract management and tendering, and luck of capacity.

5.5 Recommendations For Improvement

Accordance to the study result and literature review the research recommend that all stakeholders and involved parties specially the Afghanistan government must start feasible study with a professional team for optimization of PPP projects and facilitate the implementation procedure for all stakeholders. The Afghanistan government and government agencies must use the support of WB and ADB for PPP units in country, The Afghanistan government must reform the PPA and PPP manifestos or guidelines accordance to the Afghanistan current situation and must raise the funds like Viability Gap Fund (FGF) and Project Development Fund (PDF) specially for Renewable energy development projects. In the energy sector the government must consider the sector infrastructure system, national gride, off-grid and mini grid systems. Taking into account the discoveries, this examination calls for coordinated endeavors at institutional level to improve a typical comprehension of the PPP idea, make

adequate consciousness of PPP possibilities among the private area financial backers, and smooth out the systems and legitimate structure encompassing PPP activities to help private financial backers' certainty. There is an earnest need to survey existing government arrangements and guidelines on PPP, specifically, the PPP Act and other current legitimate deterrents, to achieve an arrangement of the interests of people in general and private area. This ought to be meant to bring about suitable danger reward allocation between the public area and likely private financial institutions in PPP projects.

There is additionally needed to do beginning phase evaluation of the reasonability of proposed projects through a careful attainability examines and monetary displaying which factors in the drawn-out financing ramifications of a PPP project. This might be finished by the public authority committing a unique asset to back the beginning phase project practicality concentrates so that lone activities that are viewed as alluring for association with private area financial backers are then pushed forward the following phase of obtainment to advance the take-up of such ventures by private financial backers.

Eventually, there ought to be clear estimates taken by government to help nearby private financial backers in the street area which will show a solid government obligation to complete foundation PPP projects. This would best be finished by encouraging to close a couple of pilot projects with nearby financial backers that can go about as the plan for future street area PPP projects.

The investigation reasons that there was an absence of straightforwardness in the offering and offering measures, which is a significant impediment towards financial backers' support in PPP street projects. There is lack of common sense in the agreement arrangement and exchange measure which is influenced by defers that blocks the fruitful usage of the arranged PPP projects. Most financial backers are of the assessment that the acquisition measures are tormented by irreconcilable situation and that choice and grant of ventures is driven by other outer issues other than the aftereffects of the open and serious interaction. There are examples where substances with restricted limits are granted tenders and this straightforwardly influences an incentive for cash for the sought after undertaking. A large portion of the financial backers concurred that data on the

pipeline of PPP projects and other delicate data was effectively available by totally invested individuals.

Taking into account the discoveries, this examination calls for purposeful endeavors at institutional level to upgrade a typical comprehension of the PPP idea, make adequate familiarity with PPP possibilities among the private area financial backers, and smooth out the systems and legitimate structure encompassing PPP activities to help private financial backers' certainty. There is a critical need to audit existing government approaches and guidelines on PPP, specifically, the PPP Act and other current lawful snags, to achieve an arrangement of the interests of general society and private area. This ought to be meant to bring about fitting danger reward distribution between the public area and expected private financial backers in PPP projects.

There is additionally need to complete beginning phase evaluation of the practicality of proposed projects through an intensive plausibility contemplates and monetary displaying which factors in the drawn-out financing ramifications of a PPP project. This might be finished by the public authority committing an exceptional asset to fund the beginning phase project feasibility concentrates so that lone undertakings that are viewed as appealing for organization with private area financial backers are then pushed forward the following phase of acquisition to advance the take-up of such tasks by private financial backers.

Eventually, there ought to be clear estimates taken by government to help nearby private financial backers in the street area which will show a solid government obligation to realize framework PPP projects. This would best be finished by encouraging to close a couple of pilot projects with nearby financial backers that can go about as the outline for future street area PPP projects.

There is need to reinforce the institutional limit of both the public area players and private financial backers in the street area for compelling PPP usage. This should be possible by building the monetary limit of expected financial backers through measures to build up the neighborhood monetary business sectors in the nation to support the capacity of monetary foundations to subsidize street PPP projects. The public authority may use credit upgrade programs for loan specialists financing PPP

projects and may likewise utilize administrative estimates that advance adaptability of monetary business sectors to raise assets for such framework projects. This will give freedoms to the private financial backers to participate in PPP at serious and even sponsored subsidizing cost.

Also, the specialized limit of neighborhood financial backers might be improved by making it compulsory for unfamiliar financial backers in the street foundation area to have least level of nearby substance by shaping consortia with neighborhood accomplices in offering for PPP projects.

The most important stakeholder in PPP projects is the procurement parties. Existing of Independence and corruption free procurement is very important section for PPP projects in all world specially in Afghanistan. After all the procurement must have a very strong constitution to do all it's procedure under the law transparency like bidder selection, bidding process, supporting of stakeholders and preparing independent area for stakeholders. We must believe that the PPP programs and project are one of the best models which can cause sustainability in society's level of living, create jobs, welfare to society and in general will attain most of the SDGs defined by UN, even though it is hard to attain those goals in Afghanistan due to factors marked previously but it is Possible. Generally, PPP projects are infrastructural and long-term projects, and they will be approved by the government, if the projects are feasible economically and technically. If it realized that the project is economically beneficial, it will be implanted. So, any project which is economically beneficial, then it can be meet SDGs as well.

I believe countries like Afghanistan cannot alone implement all public infrastructure projects. Hence, the Afghanistan government requires to implement all types of PPPs in order to practically involve the private sector in implementation of public infrastructure. Through this model, other countries could implement mega projects in collaboration with private sector companies.

Accordance to respondents' views and research finding there is no major challenge for renewable energy projects in Afghanistan, since Afghanistan severely needs for energy and right now Afghanistan imports 80% of its energy from Uzbekistan, Tajikistan and Turkmenistan countries, whereas Afghanistan is full of resources for renewable energy yield. In this case government should

support such projects in Afghanistan, the small challenges will be security and land acquisition for PV plants or wind power Plants.

5.6 Recommendatıons For Future Research

The study researched and investigated on Critical Success Factors (CSFs) in Public Private Partnership PPP focused on renewable energy projects in Afghanistan. And the recommendations for authorities, scholars and researcher are to start the feasibility studies about PPP framework in Afghanistan all the critical factors, challenges and opportunities, Investigate the existing literature find the feedback of failed and succeed PPP projects and identify the factors behind those projects. Analysis the risks and uncertainties associated with investment environment in country, identifying the institutions' support for PPP programs which can be a jump start. Their support can be political and financial, as incentives. But for long-term the sector should become independent and business-wise viable so it can be sustainable. Fortunately, huge amount of literature, books, dissertation, article and success reports and expert humane resource are available for PPP programs and it's recommended to reviewing the materials and interviewing with expert will be good support for PPP Program researchers. Arising from the review of literature and findings of this study, for promotion of sustainable development in line with the 2030 Sustainable Development Goals, a number of issues are worth investigating to accelerate the development of renewable energy resources.

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APPENDIX

APPENDIX A Questionair

APPENDIX B Ethical Approval Form

APPENDIX A Questionair

QUESTIONAIR

A RESEARCH STUDY CRITICAL SUCCESS FACTOR FOR PRIVATE PARTNERSHIPS (PPP)

IN RENEWABLE ENERGY IN AFGHANISTAN

QUESTIONNAIRE REFERENCE:

Achieng, J. (2018). *Critical Success Factors for Private and Public-Private Partnership Investments in Renewable Energy Development in Kenya* (Master's thesis).

https://docs.google.com/forms/d/e/1FAIpQLSeOrutsdl0a0wZvnB0MEUe4maVxd0u5pFFy3p4fNEa5zAWM0Q/viewform?usp=sf_link

https://forms.gle/xq6gBpJdUDcA9Gca7

A

Appendix 1: Cross Tab Analysis of Macro-Drivers of Renewable Energy Development

SECTION 1: RESPONDENTS' DEMOGRAPHICS

QUESTION 1: WHAT IS THE TYPE OF YOUR ORGANIZATION	
1. CENTRAL GOVERNMENT	
2. LOCAL GOVERNMENT	
3. GOVERNMENT AGENCY/PARASTATAL	
4. CONTRACTOR	
5. DEVELOPER	
6. CONSULTANT	
7. COMMERCIAL FINANCIAL INSTITUTION	
8. DEVELOPMENT FINANCIAL INSTITUTION (DFIS)	
9. ACADEMIC INSTITUTION	

10. OTHERS SPECIFY	

QUESTION 2: FIELD OF EXPERTISE	
1. ENGINEERING	
2. ADMINISTRATION	
3. FINANCE	
4. LAW/REGULATION	
5. PLANNING	
6. PROCUREMENT/SC	
7. ACADEMICS	
8. ENVIRONMENTAL/SS	
9. OTHERS SPECIFY	

QUESTION 3: NUMBER OF WORKING YEARS' EXPERIENCE	
1. LESS THAN 6 YEARS	
2. 6-10 YEARS	
3. 11-15 YEARS	
4. 16-20 YEARS	
5. 21-30 YEARS	

QUESTION 4: POSITION IN ORGANIZATION	
1. SENIOR LEVEL MANAGEMENT	
2. MID-LEVEL MANAGEMENT	
3. OTHERS SPECIFY	

QUESTION 5: HAVE YOU EVER BEEN INVOLVED IN AN INFRASTRUCTURE DEVELOPMENT PROJECT?

YES	
NO	

QUESTION 6: WHICH OF THE FOLLOWING BEST DESCRIBES THE TYPE OF THE PROJECT	
1. PURELY PRIVATE PROJECT	
2. PURELY PUBLIC PROJECT	
3. PUBLIC-PRIVATE PARTNERSHIP PROJECT	

QUESTION 7: WHAT'S THE SHAREHOLDING STRUCTURE IN THE COMPANY THAT DID/IS

INVOLVED IN THE PROJECT?	
1. FOREIGN	
2. LOCAL	
3. GOVERNMENT	
4. MIX OF FOREIGN AND LOCAL	
5. ALL THE ABOVE	

QUESTION 8: DO YOU HAVE EXPERIENCE WITH PUBLIC PRIVATE PARTNESHIP PPP TRANSITION?

YES	
NO	

QUESTION 9: WHAT IS YOUR LEVEL OF PPP PROJECT EXPERIENCE IN YEARS?	
1. 0 YEARS/NO EXPERIENCE	
2. LESS THAN 3YEARS	
3. 3-5 YEARS	
4. 6-10 YEARS	
5. 11-15 YEARS	
6. 16-20 YEARS	
7. 21-30 YEARS	

QUESTION 10: WHICH OF THE FOLLOWING BEST DESCRIBES YOUR UNDERSTANDING PPP PROJECTS/TRANSACTIONS?	
1. NONE	
2. LITTLE BIT UNDERSTAND	
3. UNDERSTAND	
4. MORE THAN UNDERSTAND	
5. FULLY UNDERSTAND	

QUESTION 11: WHAT IS THE NUMBER OF PPP PROJECTS YOUR INVOLVED?	
1. NONE	
2. LESS THAN 3	
3. 3-5 PROJECTS	
4. 6-10 PROJECTS	
5. MORE THAN 10 PROJECTS	

QUESTION 12: WHICH OF THE FOLLOWING BEST REPRESENT THE SECTORS OF PPP PROJECTS HAVE YOU BEEN INVOLVED IN?	
1. ROADS AND TRANSPORTATION FACILITIES	
2. ENVIRONMENTAL POLLUTION PREVENTION FACILITIES	
3. SEWERAGE, SANITATION, WATER SUPPLY AND WATER CONSERVATION FACILITIES	
4. HEALTH AND MEDICAL FACILITIES	
5. CULTURAL AND EDUCATION FACILITIES	
6. POWER FACILITIES, PUBLIC GAS AND FUEL FACILITIES	
7. MAJOR INDUSTRIAL, COMMERCIAL OR HI-TECH ACTIVITIES	
8. SOCIAL AND WELFARE FACILITIES E.G., SPORTS FACILITIES	
9. URBAN/DEVELOPMENT OF NEW TOWNS	
10. OTHERS SPECIFY	

QUESTION 13: HAVE YOU DONE ANY PPP TRANSACTIONS IN ANY OF THE FOLLOWING ENERGY SUB-SECTORS	
1. SOLAR	
2. HYDRO	
3. WIND	
4. GEOTHERMAL	
5. BIOGAS	
6. BIOMASS	
7. OTHERS [PLEASE SPECIFY]	
8. NONE	

SECTION2: KEY DRIVERS OF PPP'S FOR RENEWABLE ENERGY AND SUSTAINABLE DEVELOPMENT

A. MULTILATERAL LENDERS DRIVERS

Question 1: Rank the following in their order of importance to you in selecting renewable investment destinations for sustainable development?

(**1 being Very Important and 7 being Least Important)**

POLITICAL SUPPORT	
GOVERNMENT COMMITMENT TO RENEWABLE ENERGY	
GOVERNMENT SUPPORT TO OFF-TAKER	
INDEPENDENCE OF THE REGULATOR	
COUNTRY'S DEVELOPMENT PLANS	
ECONOMIC GROWTH	
COUNTRY'S GOVERNANCE SYSTEMS	

Question2: How do you rate Afghanistan as a country in terms of the above renewable energy investment parameters for sustainable development? (**1 being Strongly Disagree and 5 being Strongly Agree)**

A. POLITICAL SUPPORT	1	2	3	4	5
B. GOVERNMENT COMMITMENT TO RENEWABLE ENERGY	1	2	3	4	5
C. GOVERNMENT SUPPORT TO OFF-TAKER	1	2	3	4	5
D. INDEPENDENCE OF THE REGULATOR	1	2	3	4	5
F. COUNTRY'S DEVELOPMENT PLANS	1	2	3	4	5
G. ECONOMIC GROWTH	1	2	3	4	5
H. COUNTRY'S GOVERNANCE SYSTEMS	1	2	3	4	5

QUESTION 3: GENERALLY, DO YOU BELIEVE THE EXISTING ROLE OF MULTILATERAL LENDERS LIKE WB, ADB AND OTHER ENTITIES, IS CONDUCTIVE FOR PPP PROJECTS?	
YES	
NO	
INDIFFERENT	

Please explain your answer in Question 3 above:

B. IMPACT OF PPP PROJECTS

Question 1: Rank the following factors in their order of importance to you considering to be critical to success PPPs for sustainable development? (**1 being Very Important and 7 Least Important)**

1. GOOD GOVERNANCE	
2. EFFECTIVE PROCUREMENT	
3. FAVORABLE ECONOMIC CONDITION	
4. AVAILABLE FINANCIAL MARKET	
5. FAVORABLE LEGAL FRAMEWORK	
6. PROJECT TECHNICAL FEASIBILITY	
7. STRONG AND GOOD PRIVATE CONSORTIUM	
8. POLITICAL SUPPORT	

Question 2: How do you rate Afghanistan as a country in terms of including appropriate following critical success Factors CSFs for PPPs? (**1 being Strongly Disagree and 5 being a Strongly Agree)**

1. GOOD GOVERNANCE	1	2	3	4	5
2. EFFECTIVE PROCUREMENT	1	2	3	4	5
3. FAVORABLE ECONOMIC CONDITION	1	2	3	4	5
4. AVAILABLE FINANCIAL MARKET	1	2	3	4	5
5. FAVORABLE LEGAL FRAMEWORK	1	2	3	4	5
6. PROJECT TECHNICAL FEASIBILITY	1	2	3	4	5
7. STRONG AND GOOD PRIVATE CONSORTIUM	1	2	3	4	5
8. POLITICAL SUPPORT	1	2	3	4	5

QUESTION 3: GENERALLY, DO YOU BELIEVE PPPS TO BE RELATED TO THE PROVISION OF PUBLIC INFRASTRUCTURE TO SOCIETY TOWARDS ATTAINING THE SDGS SET BY THE UN?	
YES	
NO	
INDIFFERENT	

Please Explain your answer in Question 3 Above

C. STRUCTURE OF ELECTRICITY SECTOR

Question 1: What is your impression of the following factors regarding the Afghanistan Electricity Sector?
[Number 1 being Very poor and Number 5 being a Very Good]

1. QUALITY OF REGULATION AND LAWS	1	2	3	4	5
2. RENEWABLE ENERGY POLICIES AND STANDARDS	1	2	3	4	5
3. DEFINITION AND SEPARATION OF ROLES & MANDATES OF SECTOR PLAYERS	1	2	3	4	5
4. QUALITY OF CONTRACTS E.G., PPAS	1	2	3	4	5
5. POWER DISTRIBUTION AND TRANSMISSION INFRASTRUCTURE	1	2	3	4	5
6. RENEWABLE ENERGY ELECTRICITY TARIFFS	1	2	3	4	5
7. PROCUREMENT PROCEDURES AND SYSTEMS	1	2	3	4	5
8. FINANCIAL STRENGTH OF THE OFF TAKER	1	2	3	4	5

D. PROJECT PROFILE

İ. ENVIRONMENTAL AND SOCIAL STANDARD

With regards to renewable energy development, what is your view of the following Environmental and Social Issues in Afghanistan? **(1means StronglyDisagreeand5meansTotallyAgree)**

1. LOCAL POPULATION SUPPORT FOR RENEWABLE ENERGY PROJECTS IS EXCELLENT	1	2	3	4	5
2. STAKEHOLDER MANAGEMENT IS CRITICAL FOR PROJECT SUCCESS	1	2	3	4	5
3. IT IS EASIER TO OBTAIN ACCESS AND WAY-LEAVES TO RENEWABLE RESOURCE AREAS	1	2	3	4	5
4. LOCAL ENVIRONMENTAL & SOCIAL STANDARDS MATCHES INTERNATIONAL STANDARDS	1	2	3	4	5

II. BANKABILITY CONSIDERATION

In your opinion, how do you rate the following Renewable Energy Projects bankability considerations in Afghanistan? **[Number1beingVerypoorand Number5beingaVeryGood]**

1. ELECTRICITY TARIFFS OFFERED ARE ADEQUATE	1	2	3	4	5
2. EASE OF RAISING CAPITAL	1	2	3	4	5
3. COST OF CAPITAL IS COMPETITIVE	1	2	3	4	5
4. CREDIT ENHANCEMENT INSTRUMENTS ARE AVAILABLE	1	2	3	4	5

5. ELECTRICITY DISPATCH GUARANTEE	1	2	3	4	5
6. DEMAND FOR ELECTRICITY EXIST AND IS GROWING	1	2	3	4	5
7. REPORTS AND STUDIES ON RENEWABLE ENERGY IN THE COUNTRY	1	2	3	4	5
8. PARTICIPATION OF DFIS AND MFIS IN RENEWABLE ENERGY DEVELOPMENT	1	2	3	4	5
9. FINANCIAL STRENGTH OF THE OFF-TAKER IS EXCELLENT	1	2	3	4	5

iii. Technology & Capacity Issues

1. DO YOU BELIEVE THE PUBLIC (GOVERNMENT) UTILITIES IN THE ENERGY SECTOR HAVE THE CAPACITY TO IMPLEMENT PROJECTS?	YES	NO
2. ARE THERE CREDIBLE LOCAL PARTNERS THAT HAVE THE CAPACITY TO IMPLEMENT PROJECTS	YES	NO
3. DO YOU BELIEVE THE RENEWABLE TECHNOLOGY THAT I AM IMPLEMENTING IS PROVEN AND MATURE	YES	NO

SECTION 3: GENERAL

1. in your view, what are some of the barriers/ challenges hindering renewable energy development in Afghanistan
2. Please Provide suggestions on how these barrier/challenges can be addressed?
3. Please provide any additional information that you think might be useful for promoting Renewable Energy Sector for sustainable development in Afghanistan

QUESTIONNAIRE REFERENCE:

Achieng, J. (2018). *Critical Success Factors for Private and Public-Private Partnership Investments in Renewable Energy Development in Kenya* (Master's thesis).

https://docs.google.com/forms/d/e/1FAIpQLSeOrutsdl0a0wZvnB0MEUe4maVxd0u5pFFy3p4fNEa5zAWM0Q/viewform?usp=sf_link

https://forms.gle/xq6gBpJdUDcA9Gca7

Appendix 2: Cross -Tab Analysis of Macro-Drivers of Renewable Energy Development

TABLE 6-04: CTR FOR TYPE OF ORGANIZATION AND POLITICAL SUPPORT

CATEGORY OF INSTITUTION	VERY POOR	POOR	INDIFFERENT	GOOD	VERY GOOD	TOTAL
	%	%	%	%	%	**%**
CENTRAL GOVERNMENT	0	37.5	12.5	12.55	37.5	100
GOVERNMENT AGENCY	0	75	25	0	0	100
CONTRACTORS	9.1	18.2	45.5	9.1	18.2	100
DEVELOPER	33.3	0	33.3	33.3	0	100
CONSULTANTS	25	25	50	0	0	100
COMMERCIAL FINANCIAL INSTITUTIONS	0	0	50	0	50	100
DEVELOPMENT FINANCIAL INSTITUTION	33.3	0	33.3		33.3	100
ACADEMIC INSTITUTIONS	0	100	0	0	0	100
OTHERS	0	0	0	0	100	100

TABLE 6-05: CTR FOR TYPE OF ORGANIZATION AND COUNTRY DEVELOPMENT PLANS

CATEGORY OF INSTITUTION	STRONGLY DISAGREE	DISAGREE	INDIFFERENT	AGREE	STRONGLY AGREE	TOTAL
	%	%	%	%	%	**%**
CENTRAL GOVERNMENT	12,5	12.5	37.5	12.5	25	100
GOVERNMENT AGENCY	25	50	0	25	0	100
CONTRACTORS	18.2	18.2	36.4	9.1	18.2	100
DEVELOPER	33.3	0	0	33.3	33.3	100
CONSULTANTS	25	37.5	12.5	25	0	100
COMMERCIAL FINANCIAL INSTITUTIONS	0	0	50	0	50	100
DEVELOPMENT FINANCIAL INSTITUTION	33.3	0	0	33.3	33.3	100
ACADEMIC INSTITUTIONS	100	0	0	0	0	100
OTHERS	0	0	100	0	0	100

TABLE 6-06: CTR FOR FIELD OF EXPERTISE AND POLITICAL SUPPORT

FIELD OF EXPERTISE	STRONGLY DISAGREE	DISAGREE	INDIFFERENT	AGREE	STRONGLY AGREE	TOTAL
	%	%	%	%	%	**%**
ENGINEERING	11.5	23.1	38.5	7.7	19.2	100
FINANCE	0	0	100	0	0	100
LAW/REGULATION	0	0	0	0	100	100
PLANNING	0	0	0	100	0	
PROCUREMENT/SUPPLY CHAIN	0	50	00	0	50	100
SCIENTIST (E.G., GEOLOGIST)	0	0	0	100	0	100
ACADEMICIAN	20	40	20	0	20	100
ENVIRONMENTAL/ SOCIAL SCIENTIST	33.3	33.3	0	0	33.3	100
OTHERS	0	0	0	0	100	100

TABLE 6-07: CTR FOR FIELD OF EXPERTISE AND COUNTRY DEVELOPMENT PLANS

FIELD OF EXPERTISE	STRONGLY DISAGREE	DISAGREE	INDIFFERENT	AGREE	STRONGLY AGREE	TOTAL
	%	%	%	%	%	**%**
ENGINEERING	53.8	15.4	7.7	15.4	7.6	100
FINANCE	0	0	100	0	0	100
LAW/REGULATION	0	0	0	100	0	100
PLANNING	0	0	0	100	0	100
PROCUREMENT/SUPPLY CHAIN	100	0	0	0	0	100
SCIENTIST (E.G., GEOLOGIST)	40	0	20	20	20	100
ACADEMICIAN	0	0	100	0	0	100
ENVIRONMENTAL/ SOCIAL SCIENTIST	66.7	0	0	33.3	0	100
OTHERS	0	0	0	0	100	100

TABLE 6-08: CTR FOR POSITION IN ORGANIZATION AND POLITICAL SUPPORT

POSITION IN THE COMPANY	STRONGLY DISAGREE	DISAGREE	INDIFFERENT	AGREE	STRONGLY AGREE	TOTAL
	%	%	%	%	%	**%**
SENIOR LEVEL MANAGEMENT	23.5	35.3	17.6	5.9	17.6	100
MIDDLE-LEVEL MANAGEMENT	4.5	22.7	40.9	9.1	22.7	100
OTHERS	0	0	0	0	0	100

TABLE 6-09: CTR FOR POSITION IN ORGANIZATION AND COUNTRY DEVELOPMENT PLANS

POSITION IN THE COMPANY	STRONGLY DISAGREE	DISAGREE	INDIFFERENT	AGREE	STRONGLY AGREE	TOTAL
	%	%	%	%	%	**%**
SENIOR LEVEL MANAGEMENT	47.1	23.6	11.8	11.8	4	100
MIDDLE-LEVEL MANAGEMENT	54.5	13.6	13.6	13.6	4.5	100
OTHERS						100

Appendix 3: Cross-Tab Analysis of Structure of Electricity as a Driver of Renewable Energy Development

TABLE 6-10: CTR FOR TYPE OF ORGANIZATION AND INDEPENDENCE OF THE REGULATOR

CATEGORY OF INSTITUTION	VERY POOR	POOR	INDIFFERENT	GOOD	VERY GOOD	TOTAL
	%	%	%	%	%	%
CENTRAL GOVERNMENT	12.5	0	25	50	12.5	100
GOVERNMENT AGENCY	50	25	25	0	0	100
CONTRACTORS	0	18.2	45.5	18.2	18.2	100
DEVELOPER	0	33.3	33.3	0	33.3	100
CONSULTANTS	12.5	25	62	0	0	100
COMMERCIAL FINANCIAL INSTITUTIONS	0	0	50	0	50	100
DEVELOPMENT FINANCIAL INSTITUTION	O	33.3	33.3	0	33.3	100
ACADEMIC INSTITUTIONS	0	0	100	0	0	100
OTHERS	0	0	100	0	0	100

TABLE 6-11: CTR FOR ELECTRICITY SUB-SECTOR AND INDEPENDENCE OF THE REGULATOR

SUB-SECTOR	VERY POOR	POOR	INDIFFERENT	GOOD	VERY GOOD	TOTAL
	%	%	%	%	%	%
SOLAR	13.3	13.3	40	13.3	20	100
HYDROPOWER	14.3	0	42.9	42.9	0	100
WIND	7.1	143	57.1	14.3	7.1	100

TABLE 6-12: CTR FOR SHAREHOLDER STRUCTURE AND INDEPENDENCE OF THE REGULATOR

SHAREHOLDER	VERY POOR	POOR	INDIFFERENT	GOOD	VERY GOOD	TOTAL
	%	%	%	%	%	%
FOREIGN	33.3	0	66.7	0	0	100
LOCAL	0	25	37.5	25	12.5	100
GOVERNMENT	16.7	0	58.3	8.3	16.7	100
MIX OF FOREIGN AND LOCAL	14.3	14.3	42	14.3	14.3	100
ALL THE ABOVE	0	30	30	30	90	100

TABLE 6-13: CTR FOR TYPE OF ORGANIZATION AND GOVERNMENT SUPPORT TO OFF-TAKER

CATEGORY OF INSTITUTION	VERY POOR	POOR	INDIFFERENT	GOOD	VERY GOOD	TOTAL
	%	%	%	%	%	%
CENTRAL GOVERNMENT	0	50	12.5	25	12.5	100
GOVERNMENT AGENCY	25	25	50	0	0	100
CONTRACTORS	0	27.3	54.5	9.1	9.1	100
DEVELOPER	0	33.3	33.3	0	33.3	100
CONSULTANTS	0	50	25	25	0	100
COMMERCIAL FINANCIAL INSTITUTIONS	0	0	100	0	0	100
DEVELOPMENT FINANCIAL INSTITUTION	0	33.3	33.3	0	33.3	100
ACADEMIC INSTITUTIONS	0	0	0	100	0	100
OTHERS	0	0	0		100	100

TABLE 6-14: CTR FOR SHAREHOLDER STRUCTURE AND INDEPENDENCE OF THE REGULATOR

SHAREHOLDER	VERY POOR	POOR	INDIFFERENT	GOOD	VERY GOOD	TOTAL
	%	%	%	%	%	%
FOREIGN	33.3	0	66.7	0	0	100
LOCAL	0	25	37.5	25	12.5	100
GOVERNMENT	16.7	0	58.3	8.3	16.7	100
ALL THE ABOVE	0	30.	30	30	10	100

Appendix 3: Cross-Tab Analysis of Project Profile as a Driver of Renewable Energy Development

1. Environmental Dimension

TABLE 6-15: CTR FOR TYPE OF ORGANIZATION AND STAKEHOLDER MANAGEMENT

CATEGORY OF INSTITUTION	STRONGLY DISAGREE	DISAGREE	INDIFFERENT	AGREE	STRONGLY AGREE	TOTAL
	%	%	%	%	%	%
CENTRAL GOVERNMENT	12.5	12.5	12.5	12.5	50	100
GOVERNMENT AGENCY	0	25	25	25	25	100
CONTRACTORS	0	0	18.2	45.5	36.4	100
DEVELOPER	0	0	0	33.3	66.7	100
CONSULTANTS	0	25	25	12.5	37.5	100
COMMERCIAL FINANCIAL INSTITUTIONS	0	0	50	50	0	100
DEVELOPMENT FINANCIAL INSTITUTION	0	0	0	33.3	66.7	100
ACADEMIC INSTITUTIONS	0	0	0	100	0	100
OTHERS	0	0	0	0	100	100

TABLE 6-16: CTR FOR TYPE OF ORGANIZATION AND ENVIRONMENTAL STANDARDS

CATEGORY OF INSTITUTION	STRONGLY DISAGREE	DISAGREE	INDIFFERENT	AGREE	STRONGLY AGREE	TOTAL
	%	%	%	%	%	%
CENTRAL GOVERNMENT	0	50	37.5	0	12.5	100
GOVERNMENT AGENCY	0	100	0	0	0	100
CONTRACTORS	0	45	36	9.1	9.1	100
DEVELOPER	33.3	33.3	0	33.3	0	100
CONSULTANTS	0	25	50	12.5	12.5	100
COMMERCIAL FINANCIAL INSTITUTIONS	0	0	50	0	50	100
DEVELOPMENT FINANCIAL INSTITUTION	33.3	33.3	0	33.3	O	100
ACADEMIC INSTITUTIONS	0	100	0	0	0	100
OTHERS	0	0	100	0	0	100

TABLE 6-17: CRO FOR TYPE OF ORGANIZATION AND LOCAL POPULATION SUPPORT

CATEGORY OF INSTITUTION	STRONGLY DISAGREE	DISAGREE	INDIFFERENT	AGREE	STRONGLY AGREE	TOTAL
	%	%	%	%	%	%
CENTRAL GOVERNMENT	0	37.5	12.5	12.5	37.5	100
GOVERNMENT AGENCY	0	75	25	0	0	100
CONTRACTORS	9.1	18.2	45.5	9.1	18.2	100
DEVELOPER	33.3	0	33.3	33.3	0	100
CONSULTANTS	25	25	50	0	0	100
COMMERCIAL FINANCIAL INSTITUTIONS	0	0	50	0	0	100
DEVELOPMENT FINANCIAL INSTITUTION	33.3	0	33.3	33.3	0	100
ACADEMIC INSTITUTIONS	0	100	0	0	0	100
OTHERS	0	0	0	0	100	100

2. Bankability Consideration

TABLE 6-18: CTR FOR TYPE OF ORGANIZATION AND ROLE OF MFIS AND DFIS

CATEGORY OF INSTITUTION	STRONGLY DISAGREE	DISAGREE	INDIFFERENT	AGREE	STRONGLY AGREE	TOTAL
	%	%	%	%	%	%
CENTRAL GOVERNMENT	0	25	62.5	0	12.5	100
GOVERNMENT AGENCY	0	0	50	50	0	100
CONTRACTORS	0	27.3	36.4	27	9.1	100
DEVELOPER	0	0	66.7	33.3	0	100
CONSULTANTS	12.5	25	37.5	0	9.1	100
COMMERCIAL FINANCIAL INSTITUTIONS	0	0	50	50	0	100
DEVELOPMENT FINANCIAL INSTITUTION	0	0	66.7	33.3	0	100
ACADEMIC INSTITUTIONS	0	0	100	0	0	100
OTHERS	0	0	0	0	100	100

TABLE 6-19: CTR FOR TYPE OF ORGANIZATION AND ELECTRICITY DEMAND

CATEGORY OF INSTITUTION	STRONGLY DISAGREE	DISAGREE	INDIFFERENT	AGREE	STRONGLY AGREE	TOTAL
	%	%	%	%	%	%
CENTRAL GOVERNMENT	0	12.5	37.5	12.5	37.5	100
GOVERNMENT AGENCY	25	0	0	25	50	100
CONTRACTORS	0	9.1	27.3	36.4	27.3	100
DEVELOPER	0	0	33.3	33.3	33.3	100
CONSULTANTS	12.5	12.5	12.5	25	37	100
COMMERCIAL FINANCIAL INSTITUTIONS	0	0	100	0	0	100
DEVELOPMENT FINANCIAL INSTITUTION	0	0	33.3	33.3	33.3	100
ACADEMIC INSTITUTIONS	0	0	0	0	100	100
OTHERS	0	0	0	0	100	100

TABLE 6-20: CTR FOR TYPE OF ORGANIZATION AND ELECTRICITY TARIFFS

CATEGORY OF INSTITUTION	STRONGLY DISAGREE	DISAGREE	INDIFFERENT	AGREE	STRONGLY AGREE	TOTAL
	%	%	%	%	%	%
CENTRAL GOVERNMENT	37.5	12.5	50	0	0	100
GOVERNMENT AGENCY	50	25	25	0	0	100
CONTRACTORS	27.3	27.3	36.4	0	9.1	100
DEVELOPER	0	33.3	66.7	0	0	100
CONSULTANTS	0	37.5	37.5	25	0	100
COMMERCIAL FINANCIAL INSTITUTIONS	0	0	50	50	0	100
DEVELOPMENT FINANCIAL INSTITUTION	0	33.3	66.7	0	0	100
ACADEMIC INSTITUTIONS	0	0	0	0	0	100
OTHERS	0	0	0	0	100	100

TABLE 6-21: CTR FOR TYPE OF ORGANIZATION AND FINANCIAL STRENGTH OF OFF-TAKER

CATEGORY OF INSTITUTION	STRONGLY DISAGREE	DISAGREE	INDIFFERENT	AGREE	STRONGLY AGREE	TOTAL
	%	%	%	%	%	%
CENTRAL GOVERNMENT	0	25	75	0	0	100
GOVERNMENT AGENCY	50	25	25	0	0	100
CONTRACTORS	36.4	27	27	9.1	0	100
DEVELOPER	0	0	33.3	66.7	0	100
CONSULTANTS	12.5	50.	25	0	12.5	100
COMMERCIAL FINANCIAL INSTITUTIONS	0	0	50	50	0	100
DEVELOPMENT FINANCIAL INSTITUTION	0	0	33.3	66.7	0	100
ACADEMIC INSTITUTIONS	0	0	100	0	0	100
OTHERS	0	0	0	0	0	100

TABLE 6-21: CTR FOR TYPE OF ORGANIZATION AND FINANCIAL STRENGTH OF OFF-TAKER

CATEGORY OF INSTITUTION	STRONGLY DISAGREE	DISAGREE	INDIFFERENT	AGREE	STRONGLY AGREE	TOTAL
	%	%	%	%	%	**%**
CENTRAL GOVERNMENT	12.5	37.5	25	12.5	12.5	100
GOVERNMENT AGENCY	0	25	0	25	50	100
CONTRACTORS	0	27.3	27.3	45.5	0	100
DEVELOPER	0	33.3	33.3	33.3	0	
CONSULTANTS	12.5	25	12.5	25	25	100
COMMERCIAL FINANCIAL INSTITUTIONS	0	0	50	50	0	100
DEVELOPMENT FINANCIAL INSTITUTION	0	33.3	33.3	33.3	0	100
ACADEMIC INSTITUTIONS						100
OTHERS						100

APPENDIX B Ethical Approval Form

Evrak Tarih ve Sayısı: 02.04.2021-9139

T.C.
İSTANBUL AYDIN ÜNİVERSİTESİ REKTÖRLÜĞÜ
Lisansüstü Eğitim Enstitüsü Müdürlüğü

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Sayın Abdul Barı LATIFI

Tez çalışmanızda kullanmak üzere yapmayı talep ettiğiniz anketiniz İstanbul Aydın Üniversitesi Etik Komisyonu'nun 01.04.2021 tarihli ve 2021/04 sayılı kararıyla uygun bulunmuştur.
Bilgilerinize rica ederim.

Dr.Öğr.Üyesi Alper FİDAN
Müdür Yardımcısı

Dağıtım:
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Sayın Ecehan ŞİMŞEK
Sayın Merve AKBULUT
Sayın Gülfidan ERDOĞAN
Sayın Yeşim TİMİSİ
Sayın Buse DURAN
Sayın Feyza ÇAVUŞOĞLU
Sayın Tuğçe DÖNMEZER
Sayın Kadirye Defne DEMİRDÖVEN
Sayın Tuğba SOYSAL
Sayın Özge ALGÜL
Sayın Mayar RANNEH
Sayın Mehmet Ali BALTA
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Sayın Marıam CHAWK
Sayın Danıyal Humaıd Ur REHMAN
Sayın Amır T S AL IDRISI
Sayın Nazir Ahmed NOORI
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Sayın Awaıs ALSHRAIEDEH
Sayın Hebah Maher Baker HANBALI
Sayın Dmytro BABUKHIN
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RESUME

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Education:

2004-2008, BSC University of Engineering, Herat University Afghainstan,

Civil Engineering

2019-2021 MBA İstanbul Aydın University- Master's Degree- Master of Business Adminitration.

Work Experience:

2008-2019 Lead Civil and Electrical Engineering Projects.

Languages:

-Pashto: Native Language

-Persian: Second Lanuage

-English: Advanced

-Turkish: Intermediate

-Urdo: Good

-Balochi: Good

Skills:

-Communication, Teamworking, Problem Solving, proposal writing, Strategy making.

- Computer skills (Microsoft Office, Auto Cad, Primavera, Microsoft Project, MSP, SPSS) and others