

Exploring Public Private Partnership Projects of Bangladesh and Analysing the Progress of Implementation

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Abstract

A Public Private Partnership (PPP) is a collaborative arrangement between a government authority and a private sector company or not-for-profit entity. In Bangladesh, the capacity of government to implement PPP is hampered by corruption, collusion, and mismanagement, which represents a serious problem for the country and its citizens. This study uses secondary sources of information to examine a number of PPP projects of the country to evaluate the success of ventures and the effectiveness of the government in handling its responsibilities in project development. The study reviews published literature including the body of academic research, government and non-government reports, and news reports that shed light on the capacity of government in managing the public private partnership. In addition, the study analyses the justifications for the PPP concept and why governments choose PPP in project implementation. The study provides readers with important insight into case studies of four PPP projects in different sectors of Bangladesh and the extent and coherence of the responses from government to the program. Each case study was found to have experienced significant problems with delays, budget blowouts, and difficulties in managing the PPP partnership arrangements due primarily to mismanagement, inefficiencies, corruption, and poor governance.

Key words: PPP, PPP Bangladesh

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I. Introduction

A Public Private Partnership (PPP) is a collaborative arrangement between a government authority and a private sector company or not-for-profit entity (NFP), often of a long-term nature involving contractual agreements that can be instrumental in financing, building, and operating projects or services needed in the community (Osborne, 2000). Typically, PPP is widely used in the development, maintenance, or improvement of infrastructure and public services, such as public health, environment protection, public transportation networks, waste management, sewage, water and energy supply, and other governance issues of importance to the welfare and progress of the community (English, 2006; Hodge & Greve, 2007). Many countries are justifying their reliance on PPP as the most suitable means of overcoming the shortcomings of their traditional public sector in terms of its expertise, capacity, or ability to undertake a major project or in instances where government capital funding is not adequate to carry out the development (Spielman et al., 2010). As an effective partnering approach to development and governance, PPPs have become popular around the globe because of the perception they deliver improved levels of efficient use of resources, procurement, service quality, innovative technical and financial solutions, and risk mitigation (Huanming et al., 2018).

In the United Kingdom, Australia, Spain, Portugal, and many other developed countries there has been steady growth in the number of PPP projects (English, 2006; Huanming et al., 2018; Osborne, 2000). Similarly, developing countries are increasingly using PPP in advancing their own infrastructure and services (Anagal, 2007; Melville, 2017). For example, by September 2016 China had implemented 10,471 PPP projects where the total amount of the investment was 12.46 trillion Yuan (AUD\$ 2.74 trillion) (Huanming et al., 2018). Many countries, regardless of developed or developing status, are depending on the private sector in implementing public policies, which indicates that governments need the cooperation of the private sector to accomplish their aims (Hodge & Greve 2007; Teisman & Klijn, 2002). This study identifies and discusses the main justifications of governments in choosing to use PPP in projects. Furthermore, by examining a number of case studies of some major PPP in Bangladesh, the study will be able to determine how successful the government has been in achieving its main objectives and will be able to explain the factors leading to these outcomes and the lessons that have been learned.

II. Background

The concept of Public Private Partnerships (PPP) appeared in the developing countries in the mid-nineties. From that time the investment has increased significantly in the PPP programs and the participation of the private sector (Mahmudul & Abu, 2011). According to World Bank PPI Database (2018), an average 95 Billion US Dollar is invested every year by the participation of private sector in the developing countries under this program up to the year of 2016. This growing trend indicates that PPP has gradually become popular with the governments of the developing countries. However, the developing countries are characterised by poor management capacity, greater scope for corruption and nepotism, which is often associated with determining success or failure of the PPP projects (Hossain, Guest, & Smith, 2019).

The People's Republic of Bangladesh is a rapidly developing country in South Asia supporting a population of 163 million people living in one of the most densely populated nations of the world (World Bank, 2020; World Population Review, 2020). As the fifth largest democracy in the world and having gained independence only recently (1971), Bangladesh has sought to modernise and to pursue an inclusive growth strategy that reduces poverty and inequality, and improves the balance in development across all the regions (Alam, 2016; Haque, 2004). Hence, an effective public sector and efficient infrastructure are high priorities of the government to achieve improved quality of life for its people. In line with the global phenomenon, Bangladesh is implementing a large number of PPP projects for the infrastructure development of the country, which are being managed by a separate autonomous regulatory authority established in 2010 by the Prime Minister's office. The regulator is called the Public Private Partnership Authority, but is often referred to as PPP Bangladesh (2020). The aim of this authority is to support the line ministries to facilitate the development, identification, and tendering of PPP projects. In addition, a PPP unit also has been established in the Ministry of Finance to ensure fiscal responsibilities and sustainability.

On 16 September 2015 Bangladesh Government enacted a law concerning the PPP operation of Bangladesh under the name of Bangladesh Public-Private Partnership Act 2015 (PPP Law 2015). Since its inception in 2010, PPP Bangladesh (2020) has undertaken 76 development projects in line with different ministries and sectors. Most of these are infrastructure development projects of different sectors. Among the list of the PPP projects, 18 projects have been undertaken in the transportation sector, which is the largest according to the number and budget. The number of projects in the other sectors are industrial sector (16), health sector (7), shipping (7), tourism (6), economic zone (5), civil accommodation (4), information technology (3), social infrastructure (2), urban (2) and 1 project in the power sector (PPP Bangladesh 2020).

Usually governments evaluate the failure or success of a project based on the political purpose and strength of governance of the project, but governments often do not focus on the utilitarian characteristics (Hodge, 2004). Therefore, the utility of a project is a useful means to measure the success or failure of the projects and particularly make a general comment for a country. In this way, Bangladesh is characterised as an ideal case, since the country has developed as one of the most successful stories in Asia in recent years, in addition with this. The PPP implementing environment and economic status of the country has reached a correspondingly high level in the region (Hossain et al., 2019).

As this is a recent policy initiative, most of the PPP projects of Bangladesh government are in the implementing process and yet to be completed. Therefore, it is timely to examine the preliminary picture of the PPP initiatives and management issues of the country and to evaluate the relative success of the program.

III. Methodology

The research design and methodology utilises secondary sources to gather information. It gathers data and information from published works and analyses them in order to find answers to the research questions. Therefore, the study applies 'literature search' as described by Creswell and Poth (2017) for collecting necessary information. In this study, broadly two types of literatures will be gathered. Published works, such as journal articles, individual researches, government and non-government reports, online articles and relevant web-sites that address the definition, concept and justifications of Public Private Partnership programs in general, which will be accumulated to find the state of PPP implementation in global context. This analysis will provide an explanation of why governments in developed and developing countries are choosing PPP as a means for advancing their infrastructure, public services, tourism, and industrial capacities.

Both qualitative and quantitative information are measured. Quantitative information shows the magnitude of the program, while qualitative information helps to understand the contexts and the dimensions of the projects (Walliman, 2018). The policy documents and decision of government of Bangladesh that address PPP in general in Bangladesh in particular will be collected. The relevant literature allows scrutinising the government's expertise, response, and commitments to the implementation relating to PPP in Bangladesh. In addition, the international experience, policy suggestion and document are used to assess existing frameworks dealing with things relating to the PPP in Bangladesh. There are number of performance measurement methods found in the existing literature to assess the country performance in managing PPP projects.

Considering the limitation of resources and time, and lack of primary data sources, the study focuses on case studies covered in the literature. To get a general picture on PPP projects of Bangladesh, this study includes four individual case study on four particular projects. Therefore, each case study portrays a particular scenario of the respective sector. Moreover, in generating a comparative picture of PPP project of Bangladesh, four major development sectors have been identified for the case studies and individual projects have been selected on a random basis. However, some criteria have been considered in the selection of case studies, such as whether they are direct public service-oriented projects, and well discussed in the media, and size of the projects. Therefore, the variance of sector, line ministry and size of the projects, provides a common overview of the expertise of government which can be estimated on the partnership management of PPP projects.

Since PPP is a relatively recent initiative of the Bangladesh Government, many of the projects are still under process and incomplete. Consequently, in portraying the case studies of these ongoing projects, information and data mostly has been obtained from the respective government web sites and the online published articles from the most reliable and recognised print media of Bangladesh, such as *The Daily Star*, *Dhaka Tribune*, *The Financial Express*, *The Independent News*, and other national and international news portals. In the current study, information has been analysed and presented in descriptive manner. The information gained from existing literature has been analysed to produce a comprehensive scenario of the state of implementation to different public private partnership project in Bangladesh. The assessment of the Bangladesh government's policy frameworks in addressing the program of PPP has been presented for readers in a narrative manner.

Research questions

1. What are the major justifications governments consider in choosing Public Private Partnership (PPP) in project implementation?
2. What is the state of PPP projects in Bangladesh?
3. What causes are liable for the success or failure of PPP programs in the context of Bangladesh?

IV. Literature Review

Although PPPs have been in common use around the world for some time, the concept is not yet fully developed or definable in only one way, given that the collaborative arrangement has many variations and is still evolving (World Bank 2007). The Asian Development Bank (ADB) (2008) defined PPP as a choice of relationships between public and private entities, often in the field of infrastructure and public services. Although the characteristics of the PPP may be widely variable, the relationship creates a legal and structural framework for the engagement of the private sector in the partnership, and it also structures the role for government in ensuring that social obligations to the community are met. Often, a conventional public infrastructure project is directly financed and operated by the government authorities. However, in a PPP project development, the execution, financing procurement, and operation are usually managed by a private investor through a scheme. In a sense, PPP may not be only project-based in its nature, as it may involve a long-term business arrangement, which is operated by a private actor or investor through the partnership with government. Here, the government and private company in collaboration formally provide services that may previously have been supplied by the government alone (Economic and Social Commission for Asia and the Pacific [UNESCAP], 2005).

Although PPP has become a popular approach to develop public service and infrastructure, there are aspects that are ill-defined and still present significant challenges to the successful achievement of goals, such as risk mitigation, transparency and accountability, prevention of corruption and maladministration, management of arbitration, and conduct of performance appraisal (Hodge & Greve, 2007; Wang et al., 2018; World Bank, 2002). Corruption, in particular, is a significant obstacle to effective management of PPPs; hence, there is a need for monitoring, regulatory frameworks, and tools that deter corruption while ensuring the continuity and success of the PPP contract (de Michele et al., 2018).

The justification for governments using private contractors to build and deliver the public infrastructure and services in recent times has been linked to the New Public Management (NPM) reform movement, which has radically transformed public sector processes in the member countries of the Organization for Economic Cooperation and Development (OECD) (Hodge, 2004; OECD, 2019). The OECD has defined a set of principles that enable governments engaged in PPPs to improve the economy, efficiency, and effectiveness of the public sector, which is often referred to as "value for money" (VFM) and is the main motive for government decisions to partner with the private sector (Anderson & LSE Enterprise, 2000; Grimsey, & Lewis, 2005). Although PPPs have different characteristics and contemporary implications and manifestations with differing models in use depending on the individual contextual factors, similar principles, budgetary procedures, and sound governance practices are needed to maintain a constructive relationship in a PPP (OECD, 2019). For example, in electrical or water supply arrangements, a number of key characteristics in PPP agreements include that the private

contractor usually owns, operates, and maintains the infrastructure or assets for the term of contract period and offers the contracted services to the users, which are directly paid by the state or by consumers. Governments engage and consult with consumers and other stakeholders on the implementation and management of the PPP contract and subsequently in monitoring satisfactory service quality (Osborne, 2000; Skelcher, 2005). The assets are then handed over to the state after completion of the agreement period (English, 2006).

Siddiquee (2011) revealed that this present form of PPP has been commonplace since 1990 as part of the reformation of public sector management. Furthermore, Siddiquee (2011) states this development has been driven mainly by the prevailing belief that the private sector is more efficient to deliver the services in a cost-effective manner and more able to meet the customer or client needs. Therefore, this is the main justification for governments choosing to privatise infrastructure assets and engage the private sector in major project work. However, Siddiquee (2011) and other authors (de Michele et al., 2018; Hall, 1998; Hodge, 2004) argue that, despite having such purported benefits, PPP is subject to strong criticism and allegation that the reality of privatisation of state assets and services is far from the glowing claims of government rhetoric. According to reviews of the literature and case studies of PPP projects and arrangements, there are mixed results that suggest the concept may be of questionable benefit or VFM in many instances (Teisman, & Klijn, 2002; Wang, et al. 2018). One reason for this is the 'off-budget' nature of the PPP concept that allows government to avoid capital outlay for a project or ongoing costs of a service delivery, thereby encouraging spending in other areas while neglecting the commitment to PPPs by the government itself (Cangiano et al., 2006). Another reason is that it is difficult for the private sector to achieve savings in PPPs, which often results in contractors taking shortcuts and risks, or reducing standards and service quality to achieve profitable outcomes for a business (Cangiano et al., 2006; Melville, 2017; Siddiquee, 2011; Skelcher, 2005). These factors can encourage governments to disregard future public commitments and liabilities, while at the same time compromises in service and asset quality will be contributing to poor social and environmental outcomes that may cost the government and the community much more in the longer term.

For example, the UK treasury taskforce reports of Andersen and LSE Enterprise (2000) and the national audit office investigated 29 PPP projects conducted by different departments of government and disclosed that 60% of project cost savings were achieved through risk transfer rather than efficiencies or improved methods. Furthermore, a number of researchers (e.g., Hall, 1998; Hodge, 2004; Teisman & Klijn, 2002; Wang et al., 2018) have noted that efficiency gains more than remunerated for higher private finance costs is difficult to obtain and that political motivations and risk transfer were often factors in government decision-making on entering into PPPs. Therefore, it could be argued that governments may at times publicly justify their implementation of a PPP on the pretext of financial or efficiency benefits for the community, whereas there may be political strategies involved, including the achievement of improved budgetary balances or enabling the government to fulfil election promises.

Under the traditional framework of PPP, measuring in developing countries and considering only the time, cost and quality is not sufficient to evaluate the intricate scheme of this program (Kennerley & Neely, 2003). So, for evaluating the PPP projects it requires broader framework to find out the actual situation of the PPP regardless of countries where this program has implemented. One mode of PPP appraisal method is challenging to evaluate the typical procurement. However, one single method is not suitable for each PPP project because the detail and context of each PPP project varies and requires specific methods of appraisal (Grimsey & Lewis, 2002). A number of researchers endeavoured to examine individual PPP in different sectors of the particular countries. However, these appraisals could only evaluate parts of the wide domain of PPP, because they measured only the cost, dimensions, and schedule of the projects (Hossain, Guest, & Smith, 2019). On the other hand, a group of researchers have recommended to give more importance to the life cycle phases for evaluating PPPs performance because that helps to capture the dynamics of different phases of the project (Grimsey & Lewis, 2002). Conducting a survey, Yuan, Yajun, Skibniewski and Qiming Li (2011) developed an assessment of the relative importance of the indicators not separating the operational context of PPPs. Therefore, Yuan et al. (2011) argues that study reports of PPPs cannot be used in general for the developing countries. As an example, that study found some successful transport sector PPPs in the European countries, but the regional focus of this research and approach to measuring the relative importance of the performance is different (Liyana & Villalba-Romero, 2015).

Case studies

Dhaka Elevated Expressway

A major PPP transport sector project being implemented under the Ministry of Road Transport and Bridges and managed by the Bangladesh Bridge Authority is the Dhaka Elevated Expressway Project. The

cabinet committee on the economic affairs approved the project budget of Bangladeshi BDT Taka 90 billion (AUD\$ 1.65 billion) on 20 July 2011 (PPP Bangladesh, 2020). Dhaka is the capital and largest city of Bangladesh, where population size is 18 million and increasing rapidly. In line with a rapidly growing population and corresponding transport requirement, the extension of the existing roads and highways infrastructure is needed throughout the country to support social and economic development. Moreover, the growing number of vehicles, both commercial and private, has created regular traffic congestion and difficulties in the Dhaka city as well as on the major highways in rural areas of Bangladesh. With the aim of minimising this traffic congestion, Bangladesh Bridge Authority initiated this project in 2011 on PPP basis. The project consists of 46.7 km elevated expressway, which will connect the north and south part of Dhaka along with different points of the metropolitan area. Commencing from Dhaka international airport, this four-lane elevated highway will touch different important points of the city and be finally linked with the Dhaka Chittagong Highway, the most important economic lifeline of the country (PPP, 2020). The objective of this expressway is to improve the traffic capacity within and around the city by expanding connectivity among the northern part, central, south, and south-eastern parts of the megacity of Dhaka. Furthermore, as an important addition of traffic capacity, the expressway is designed to relieve existing overloaded roads, while access and distribution to the expressway has been designed to avoid adding congestion to existing facilities. The design and construction of this project has been divided into three different phases projected to be completed in eight years, commencing in 2013 and expected to finish in 2019. As the private partner of this project, Italian-Thai Development Company Ltd signed the contract on 15 December 2013 (*Financial Express*, 2019; PPP Bangladesh, 2020).

However, by the end of 2019 when the project should have been completed, the authority reported that only 22 percent of total construction work had been completed and only 50 percent of the first portion had been finished due to “financial problems” (*Financial Express*, 2019). There were earlier delays from 2011 in land acquisition, railway line relocation, and utility transfers that slowed commencement of the project until 2013, which has meant that the works could take more than a decade from initial signing of the PPP agreement and Prime Minister’s approval. The Bangladesh Bridges Authority has now assured that the first portion will be opened for traffic in September 2020 and the entire project will be completed by March 2022 (*Dhaka Tribune*, 2019). Since the inception of the project, other delays and cost increases have been caused by contract variations due to design changes and inflation. In addition, the Italian-Thai construction company ran short of funds and was forced to go into partnership with China Shendong International Economic and Technical Company (35% owner) and another company, Sino Hydro (14% owner), which are both Chinese state-owned entities, with the Bangladesh government contributing 27% to the financing of the project (*Dhaka Tribune*, 2019; PPP Bangladesh, 2020).

Hence, the project has encountered significant delays and is now a more structurally and financially complicated multi-partnership arrangement, and one in which government oversight and control has become ever more difficult. However, it is clear that, due to the slow pace of development, poor planning, and many deviations from the original blueprint, the BDT 90 billion budget has blown out to BDT 138 billion Bangladeshi, which is an increase of over 50% on initial estimates (*Daily Star*, 2018; *Dhaka Tribune*, 2019).

In March, 2020 the construction work again stopped due to the COVID-19 pandemic, and most of the foreign experts left the country, while workers ceased building activities. More recently, in August, work resumed and experts came back to the project construction. Consequently, this additional vacuum of six months in the project construction again delayed the intended accomplishment of the project. The bridge authority has now stated that only 56% of the construction work has been accomplished in just the first phase. Therefore, the earlier announcement of opening the first phase in October 2020 is no longer possible, and the project will be delayed at least until mid-2021 (*Financial Express*, 2020).

Bangabandhu Hi-Tech Park

Bangabandhu Hi-Tech Park is one of the significant projects of the Information Technology sector projects of PPP Bangladesh. This project has commenced on PPP basis in line with the ministry of information and communication technology. The authority of Bangladesh Hi-tech Park has been working as the lead agency for the construction of that project. The Cabinet Committee on Economic Affairs approved the budget in January, 2012 for this hi-tech project (PPP Bangladesh, 2020; Bangladesh Hi-Tech Authority, 2020). As background of this project, the Bangladesh government revealed that in 1999 they had planned to set up a hi-tech park in the area of Kaliakoir, which is 40 km away to the north of Dhaka and administratively located in Kaliakoir Upzilla of Gazipur District. The objective of undertaking this project is “To establish World class business environment for investment in the Hi-Tech Sector that will help to achieve the goal of Vision-2021 of Bangladesh government” (Bangladesh Hi-Tech Park Authority, 2020, p. 1).

Accordingly, the government acquired 232 acres of land and ensured the project commencement with the intention of creating an industrial park for investment by global and local companies in IT, ITES (Information Technology Enabled Services), biotech, telecommunication, electronics, and research and

development. The project is expected to significantly contribute to Bangladesh's economy and boost foreign exchange, while also providing employment opportunities. To create this world class business environment and ensure the facilities, a project under the name of "The project, labelled Support to Development of Kaliakoir Hi-Tech Park at Kaliakoir, Gazipur, has been designed with a budget of BDT 2.2236 billion (Kaliakoir Hi-tech Park, 2020). Located at Dhaka-Tangail expressway, and covering the area of 231.685 acres, this project includes the major construction of industrial base, internal roads, science plaza and a number of policy sections. In order to attract the entrepreneurs and ensure easy transportation, link roads and inner ring road have been designed to connect with 30 feet-wide Dhaka-Tangail expressways. In the next stage, the authority has also planned to construct the access to Dhaka International Airport, Taingail, Mymensing, and Chittagong port through both railways and highways (Kaliakoir Hi-tech Park, 2020). In December 2018, Bangladesh Computer Council (BCC) and Bangladesh Hi-tech Park authority assigned a Memorandum of Understanding (MoU) to work together to bring foreign investment in the hi-tech park. In addition, a special 40-acres of land was allocated for the foreign investors to create an exclusive zone. A projected income of BDT 5 billion has been targeted as expected to be achieved by exporting information and communication technology (ICT) from this park by 2021 (*Tribune*, 10 December 2018). According to the news of *Daily Star* (2020), the concerned authority has changed the name of the park to Bangabandhu Hi-Tech City from its previous name. Up to the year 2018, the authority had signed agreements with nine local and foreign companies and handed over the land so that these agencies could commence the process of manufacturing hi-tech products in the Hi-Tech City. The *Daily Star* (2020) reported that the Bangladeshi authority stated that it expected to receive investments of about BDT 150 million, which would create about 25,000 new employment positions for local people.

Under the PPP program, with the view of developing the hi-tech city, Bangladesh TechnoSity Limited has signed an agreement for developing Block 3 of the Hi-Tech Park. In this regard, the state minister for ICT has inaugurated the foundation stone of the park through a formal program where senior authorities of Bangladesh Hi-Tech Park and Fibre@home, parent company of TechnoSity also took part. The state minister informed the audience that along with the 232-acre area, the acquisition of a further 100-acre block of land is under process and will be added with the park soon. The agreement signing ceremony of TechnoSity Limited and the park authority took place on 11 August 2015 in order to speed up the construction and development works. The published news revealed that TechnoSity and Malaysia's IRIS Corporation Berhad Technology together will develop the project. Initially TechnoSity will invest BDT 25 million in construction and have plans to increase the investment up to 10 to 12 times more. As per the agreement, TechnoSity will develop 40 acres of land of Block 3 and will operate the block for 40 years, which can be extended for another 20 years. After 60 years, the block will be handed over to the government. The target industries of Block 3 include ICT and ITES, software and BPO, manufacturing hardware, animation and multimedia, robotics and robotics engineering, electronics, biotech, telecommunication, auto-mobile, renewable energy, training and education institutes, venture capitalists, and incubators.

However, on 28 June 2015 Bangladesh Hi-Tech Park Authority also signed an agreement under a separate PPP with Summit Technopolis to develop Block 2 and 5, which span over respectively 65 and 29 acres of land. The Hi-Tech Park Authority itself will develop Block 1 on 65 acres of land for administrative purposes. The tender evaluation process for developing Block 4 is yet to finish.

To attract investors, park authority offers exemption of income tax for foreign professionals, exemption from import duties, 10 years tax holiday, 10 years accelerated depreciation, 100% exemption of taxes for all exports, 100% equity is allowed for FDI companies, customs-bonded warehouse, and single window agency. The Bangladesh Hi-Tech Park Authority announced that all this initiative will create 70,000 direct employment positions and 100,000 indirect jobs for the Bangladeshi citizens. The park authority also committed to ensure the facilities of electricity, gas, separate 150 megawatt power plant, and strong internet coverage (*Dhaka Tribune*, 14 October 2015). As per the project design, the construction of the Kaliakoir railway station has been completed in October 2018, and through a press briefing, the Bangladesh railway informed that a special train service under the name of Bangabandhu Hi-tech City commuter service has been introduced to connect the hi-tech park with Dhaka. This train service will move four times in a day between Dhaka and Hi-tech Park station, which will carry the workers and investors of the park (*Bangla Tribune*, 2018).

Construction of a high-rise residential apartment building for low and medium-income people at Jhilmil Residential Project, Dhaka

This is a project of the civil accommodation sector and has been implemented under the Ministry of Housing and Public Works or *Rajdhani Unnayan Kartipakkah* (RAJUK), an autonomous body which is responsible as a city development authority and is working as the lead agency of the project. This project has been constructed at Keranigonj Upzilla and beside Dhaka-Mawa road of Dhaka. The Bangladesh Cabinet

Committee on economic affairs gave budgetary approval on 04 November 2015 for this project. This is a pioneer project of RAJUK, which planned to accommodate the increasing number of low and medium-income people of Dhaka. The project will contribute to the Dhaka city in reducing population pressure and traffic congestion. The Jhilmil residential PPP project was designed to develop 100 acres land and construct 13,800 apartments and the necessary number of schools, parks, and shopping centres. The total project scope contains an area of 381 acre of land, where about 200,000 people are expected to be accommodated. For ensuring the project, RAJUK already finalised the land development, construction of roads, culverts, and bridges. As a private partner, BNG Global Holdings Malaysia submitted an unsolicited proposal for developing 100 acres of land and about 15,000 apartments in 42 months. Based on this offer, RAJUK forwarded this unsolicited proposal to the PPP Bangladesh authority to process and complete the required formalities. From July 2015 to December 2019 was initially allocated as the estimated time frame for the project duration (PPP Bangladesh, 2020; RAJUK, 2020).

In order to complete the formalities and as a part of the process, RAJUK declared the call for proposal for the Jhilmil project in January 2017 and issued the work order in October 2017. Finally, RAJUK signed the contract with a tri-national consortium including BNG Holdings SDN BHD, Jianxi Construction Engineering, and Multiplex Holdings. In the agreement signing ceremony on 16 November 2017, the concerned minister of the line ministry and other important persons related to the project participated and explained about the project aims and goals to the media representatives. Through a public statement, RAJUK revealed that RAJUK had signed a contract of BDT 99.79 billion to implement the project in collaboration with the private partners of BNG Holdings SDN BHD, Jianxi Construction Engineering and Multiplex Holdings. It was also explained by RAJUK that the construction work of Jhilmil project would commence in January 2018 and was expected to finish by the year of 2022 (*Daily Star*, 2017).

As per the project design and contract, PPP partners planned to construct a total number of 85 high-rise buildings. Among them 60 will be 20 storied and the rest of the 25 buildings will be 25-storied, including the basement. The apartments will be of three sizes: Type A (9,120 apartments sizing 1,550 square feet, Type B (2,576 flats with 1,750 square feet), and Type C (2,024 apartments with 2,400 square feet). The building will be earthquake-resistant and will use the most recent construction technology, namely the Industrial Building System. The project will include facilities, such as schools, colleges, a hospital, park, playground, lake, jogging track, walkway, artificial shower, and wide road on the open space, including a mosque, shopping centre, and community centre. Regarding the value of a flat, the developer has set Tk 3,696 per square feet for each apartment. When RAJUK sells flats, the value of land will be added to the price. At the end of the construction, the capital development authorities will sell the flats in between Tk 4,600 and Tk 5,100 per square feet (RAJUK 2020; *Financial Express*, 2019).

This was the primary information of the journey of Jhilmil, which is a project of the civil sector's PPP initiative. Jhilmil was one of the largest housing programs for the low and medium-income class people of Bangladesh. After signing the contract, the chairman of RAJUK and Minister, Ministry of Housing and Public Works announced that interested people could start applying to purchase their suitable apartments from the Jhilmil project and apartments will be handed over in due time. Consequently, the project was widely discussed topic regarding the housing issue at that time. However, two years past the proposed commencement time of the project in December 2019, an investigating journalist team found no tangible progress in the development of this project (*Financial Express*, 2019). The journalists discovered that the pre-design of the construction work was not yet finalised by December 2019. Therefore, it appears that the announcement by the lead authority and concerned ministry in November 2017 that by December 2022 the construction would be finished was over optimistic since by 2019 the developers had not even finished the working design. As a result, the project is not expected to achieve the target period of project completion by 2022, or even soon thereafter. The RAJUK authority reported that it had communicated repeatedly with the consortium, but there had been no visible progress in the time since announcing the project's commencement. In response of the queries of the investigating journalist team, the project director, PPP Bangladesh, stated that currently they are working on the piling test and at the end of the testing they will be going to the design finalisation (*Financial Express*, 2019).

Construction and operation of two jetties of Mongla Port Authority at Mongla

The Mongla Port jetty development is a shipping sector PPP project currently in the stage of construction level and implementing. The Mongla Port Authority (MPA), Ministry of Shipping, is working as lead agency for the execution of this project. Mongla Port is the second largest seaport of Bangladesh located in the south west part of the country and on the east bank of the Pushur River, which is 71 nautical miles upstream of the Bay of Bengal. Due to the speedy and sustainable economic growth, expansion in

industrialised development, and evolution of export based oriented industries, there are significant constraints faced in the existing capacity of Chittagong Port. Chittagong is the first port and major gateway to the east south part of Bangladesh. To mitigate the increased need of port facilities and address the scarcity of the existing capacity of the Chittagong Port, and to cover the increasing export and import need of the south west region of the country, the Bangladesh government approved a strategic decision to re-construct Mongla as an international standard port.

Following this decision, the Bangladesh government has already invested significant amounts in different development projects of Mongla Port, which includes procurement of a pilot and dispatch boat, navigation equipment, cutter suction dredger, and dredging the Mongla Port harbor channel. As a part of the wider plan of government, developing the special economic zone in Mongla and reorganising the port facilities, two jetties, out of six new jetties have been handed over to be built under PPP project arrangements. The project scope will ensure the delivery of international level port facilities, cargo handling service based on the construction, management and operation of two jetties with additional backup facilities and terminals managing equipment. An eight-year time frame has been estimated for the project implementation, which was proposed from 2012 to 2019. The Cabinet Committee of Economic Affairs approved the project budget on 18 November, 2011 and as a private partner, Powerpac Port LTD signed the contract on 21 August, 2016 with the MPA under the condition that Powerpac would complete the project within the next two years and would invest BDT 52.75 million in the project. In addition, during operation of the port, Powerpac would share the operational profit with MPA (*Daily Star*, 2016; PPP Bangladesh, 2020).

As per the project design, Powerpac would construct two jetties, each being 183 metres in length and 40 metres in width with the backup of 90,000 metres, which will have the capacity of 70,000 tons for each year and 240,000 tons yearly capacity for general cargo and break bulks handling. The project was also developed on the basis of build, operate and transfer (BOT), with a contract over a period of 30 years and profit-sharing ratio of 40/60 percent, where the port authority would receive 60 percent and Powerpac would receive a 40 percent share in profits. The total investment estimated for the project was US\$52.75 million (*Daily Star*, 2016).

After three years from the contract signing date, investigating journalists from the *Independent News* (2019), published an article in their online and print versions concerning the statements of the authority of Mongla Port. The port authority informed them that up to the reporting time they had completed the required official procedure regarding the PPP project and were expecting to commence the PPP construction work as soon as possible, along with another two government to government projects. They also stated that, among the new six jetties, two would be constructed under PPP program, while two would be constructed with the support of the Chinese government, and the last two would be constructed with the Indian government. Mongla Port Authority expected that all these projects would be implemented by the end of 2023, which confirms that the project is at least four years behind schedule with no satisfactory explanation.

V. Conclusion

Research into Bangladesh's public sector works and PPP developments is challenging due to the difficulty in obtaining access to information since there is a general lack of government transparency, which is exacerbated by bureaucratic mismanagement, and the persistent corruption, bribery, and nepotism that exists in the country's public sector (de Michele, et al., 2018; Haque, 2004; Melville, 2017). However, during a caretaker government period of Bangladesh, a law was enacted, namely the Right to Information Act 2009, which has the intention of ensuring improvements in the transparency and accountability of the public sector (Islam & Lee, 2016). Although this important tool is useful, it cannot assure the availability of information disclosure for those wanting to look into the sector's activities (Baroi, 2013). The news media are often the only means for citizens, non-government agencies, and researchers to inform themselves on matters of public concern in the public sector. The situation of lack of transparency in Bangladesh is similar to that already identified in many developing countries (Islam & Lee, 2016).

However, there are international and local authorities active in seeking access to enable scrutiny of governance and commercial activities of governments. In particular, the print media has been instrumental by playing the role of watchdog on the government activities and projects (Islam & Mahmud, 2013). Furthermore, the media assists the general population by providing updates on the status of implementation of those projects, since public awareness depends mainly on the news articles they can readily access and read. In this case study, government websites only provided data about the beginning plans and general information, and rarely included any update or recent information regarding the implementation of the projects. This lack of transparency exists despite the government promising in 2009 to provide more access through the digital Bangladesh program and all the concerned ministries and departments have their own web portals (Gregor, Imran, & Turner, 2014). Therefore, investigating the state of the PPP in Bangladesh still relies mostly on information gleaned from the recent news

articles, together with published accounts in the academic literature derived from empirical evidence.

Examining the details available on the development and progress of the PPP projects, it is clear that the Dhaka Elevated Expressway illustrates the challenges for the Bangladesh government and the private partner in implementing such a large and complex project, which was over-ambitious for a government accustomed to smaller scale initiatives. This was the first major infrastructure project to be undertaken by the PPP Bangladesh (2020) authority. This government body responsible for overseeing the development was inexperienced, having only recently formed up, while the private contractor lacked the scope for such a major project. Problems with coordinating the activities of stakeholders, including different government agencies, private developers and investors, funding shortfalls, project variations, and planning delays have plagued the project from the beginning. These are all key factors that have been described by numerous authors as prime considerations in planning and managing PPPs (OECD, 2019; Skelcher, 2005; Spielman, 2010).

Thus, it can be seen that both the Bangladesh government and the private partner failed to meet the Dhaka expressway project requirement in the targeted project time or within budget provisions, as evidenced by the government not completing the land acquisition in time and similarly the private partner Italian-Thai Development LTD could not manage the construction cost of the project. The predicted duration of the project of eight years for the construction was not met; at the last review of progress only 22 percent of the work had been completed. The increase of more than 50 percent in the project budget also added significant costs and delays. As a result, the completion is uncertain and final cost unpredictable, which suggests a remarkable level of inefficiency and mismanagement of the project (Anwar, Xiao, Akter, & Rehman, 2017).

In the second case of Bangabandhu Hi-Tech Park, which was an information technology sector project initiated under PPP, an evaluation in this study has shown that although the government planned to set up this hi-tech park in 1999 it was more than a decade later that the executive committee made the decision to implement the project through PPP. It was not until December 2018 that the Bangladesh Computer Council (BCC) and Bangladesh Hi-Tech Park Authority finally signed an MOU to bring foreign investors in for the proposed park. Thus, it can be seen that there was a long time gap in the planning stage to commencement of the project, which impacted cost escalation and prevented income revenue for the government from potential export earnings. Although Bangabandhu hi-tech city is a high priority project to promote the economic zone (Mahmudul & Abu, 2011), the development is well behind schedule and no update of the PPP initiative could be found on government websites. According to a report in the *Daily Star* (2019), the son of the present prime minister of Bangladesh has been working as the advisor for the nationwide digital Bangladesh program for the country and the hi-tech parks are considered important projects. This influential government-related involvement in the project may help to accelerate its completion, but it is difficult to ignore the apparent example of deeply entrenched nepotism in the country.

In the civil accommodation sector, the Jhilmil housing project is an example of the lengthy bureaucratic obstacles and delays inherent in government PPP projects in the country. The private partner consortium BNG Holdings SDN BHD, Jianxi Construction Engineering and Multiplex Holdings are also responding at a very slow pace. The RAJUK and PPP authorities in Bangladesh spent three years to complete the design process after getting the unsolicited proposal of BNG Global Holdings Malaysia. The RAJUK authority took no visible action on the delay of two years in commencing the construction work of the private partners, which signifies the weakness of the contract and the concerns of monitoring authorities of RAJUK. In addition, corruption allegations have been leveled against the land development and housing projects of RAJUK authority, which raises more questions regarding the project's mismanagement and lack of success (Islam & Lee, 2016; Rashid, 2011).

Finally, in the fourth case study, the same type of complex and prolonged bureaucratic characteristics in the shipping sector PPP project implementation has been observed, and the same types of obstacles have been noted (Huque & Rahman, 2003; Khan, 2003). After three years from the date of contract signing, the private partner, Powerpac LTD which was a sister concern of a national group of companies, still cannot start the construction work due to the bureaucratic process of the authority.

Lessons that can be taken away from these PPP failures include the importance of the relevant key factors of lack of preparation, inefficiency, poor cost management, and lack of coordination between actors (Siddiquee 2011). Clearly, the 'conditions precedence' (CP), which means the proper discharge of responsibilities of all participants and stakeholders in the projects, was not met in the project (Melville, 2017). Further lessons might be found in the contrasts evident in a number of successful smaller PPPs, such as those described by English (2006) and Enright and Roberts (2007) in regional Australia.

The overarching take-away lesson from this research into four case studies in Bangladesh is that the success of PPPs in developing countries depends on capacity of government, relationships between parties, trust, mutual collaboration, and shared responsibilities between the partners (Haque, 2004). Evidence shows that PPPs work well if there is strong commitment and good trust within the government and participating firms (ADB,

2008; Anagal, 2007; Enright & Roberts, 2007; World Bank, 2002, 2007). Finally, there is some debate that PPPs can improve the delivery of public services and infrastructure, particularly in the short term, and provide real increases in efficiency. However, it is not clear whether PPPs are in fact truly ‘value for money’ for the government and taxpayers (Anderson & LSE Enterprise, 2000; Cangiano et al., 2006; Grimsey & Lewis, 2005). Although it is easy to establish there are short-term gains, it is inherently difficult and at times subjective to assess the long-term value of PPPs due to unforeseen situations, complex implications, and long-term nature of the project outcomes.

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