Practicum On 'Procurement under Public Private Partnership: A study on its process efficiency in Bangladesh'

By

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A report submitted to the BRAC Institute of Governance & Development [BIGD] in partial fulfillment of the requirements for the degree of Masters in Procurement and Supply Management [MPSM]

BRAC Institute of Governance & Development [BIGD]

Brac University
[September] [2024]

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Declaration

It is hereby declared that

- 1. The internship report submitted is my/our own original work while completing degree at Brac University.
- 2. The report does not contain material previously published or written by a third party, except where this is appropriately cited through full and accurate referencing.
- 3. The report does not contain material which has been accepted, or submitted, for any other degree or diploma at a university or other institution.
- 4. I/We have acknowledged all main sources of help.

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Project Director (Joint Secretary) Bangladesh Economic Zones Authority Chief Adviser's er's Office

Letter of Transmittal

Shish Haider Chowdhury, MCIPS

Additional Secretary, Govt. of Bangladesh &

Sr. Trainer, BIGD, Brac University

Subject: Practicum On "Efficiency of Public Private Partnership (PPP) procurement process

in Bangladesh based on case studies"

Dear Sir,

Please accept this letter as transmittal of my final practicum for Masters in Procurement and Supply

Management, entitled "Efficiency of Public Private Partnership (PPP) procurement process in

Bangladesh based on case studies". This practicum is prepared on the basis of ToR provided by the

BRAC University to fullfill the requirement of PSM 665.

In this report, I have evaluated the current PPP procurement process of Bangladesh, developed

flowcharts for understanding the procurement process and ease of evaluation, collected procurement

related data from three PPP projects and evaluated their performance against standard process and

provided recommendation for the improvement of procurement performance of PPP projects in

Bangladesh.

I appreciate your guidance and support throughout this course for making the project comprehensive

and robust.

Thank you for your time and consideration.

Sincerely yours,

Mahid Al Hassan

22382004

BRAC Institute of Governance & Development

BRAC University

Date: 22/09/2024

Non-Disclosure Agreement

This Agreement is made between:

- Bangladesh Economic Zones Authority. ("BEZA")
- Mahid Al Hassan ("Student")

WHEREAS, BEZA possesses Confidential Information (defined below). Student desires access for the purpose of academic report.

NOW, THEREFORE, in consideration of the above, the parties agree:

1. Confidential Information:

 Any information disclosed by Bank, orally, written, or otherwise, designated confidential or by nature ought to be treated as confidential.

2. Non-Disclosure:

- Student agrees to hold all Confidential Information in confidence and not disclose it,
 in whole or in part, to any third party without BEZA's prior written consent.
- 3. **Exceptions:** Disclosure is only permitted:
 - o As required by law or regulation; or
 - To comply with a valid court order or subpoena (with commercially reasonable effort to notify BEZA beforehand).
- 4. **Use:** Confidential Information shall only be used for the purpose stated above and not for personal gain or benefit of any third party.
- 5. **Term & Return:** This Agreement remains in effect for 1(one) year. Upon termination or BEZA's written request, Student shall promptly return all Confidential Information.

6. **Independent Contractor:** Student will be treated as an independent contractor, not an employee, agent, or partner of BEZA.

7. **Entire Agreement & Governing Law:** This Agreement constitutes the entire agreement and supersedes all prior agreements, whether oral or written. This Agreement shall be governed by the laws of Bangladesh.

8. **Severability:** If any provision is held invalid, the remaining provisions shall remain in full force and effect.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

Abdullah Al Mahmud Faruk, Project Director (Joint Secretary), Bangladesh Economic Zones Authority, Chief Adviser's Office

Mahid Al Hassan

ACKNOWLEDGEMENT

The researcher would like to express his sincere thankfulness to the following organisations and individuals who extended their sincere assistance and motivation for completion of the research on "Efficiency of Public Private Partnership (PPP) procurement process in Bangladesh based on case studies".

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Finally, I would like to express my gratitude to my family and my coworkers at Bangabandhu Sheikh Mujib Development Project who have helped me navigate the crucial and hectic time during the report writing.

Mahid Al Hassan

Executive Summary

With its alternative funding mechanism, improved efficiency and scope for innovation, PPP has emerged as viable alternative to traditional procurement to meet the growing demand of infrastructure in Bangladesh. While there have been many studies on overall impact of different sectoral PPP projects, focused study on the PPP procurement process of Bangladesh has not been done before which is the focus of this practicum. Review of the PPP procurement process of Bangladesh shows that regulatory framework of the PPP procurement process in Bangladesh are efficient and streamlined. Data analysis shows that all three projects reviewed took substantially more time to complete their procurement process compared to the expected timeframe. Further analysis of the procurement timeframe of each project shows that the different project has taken substantially more time compared to expected timeframe in different phases. The Dhaka Bypass project has taken more time in bidding phase while RAD project has taken more time in approval and award phase which means these projects faced different challenges and shortcomings. To address the issues identified, the practicum suggested recommendations such as capacity development of officials, organizations and agencies, improving the variables that can improve the overall PPP project implementation environment such as long term project financing, improving legal framework for contract management etc.

ACRONYMS

BIFFL Bangladesh Infrastructure Finance Fund Limited

BPPA Bangladesh Public Procurement Authority

CA Contracting Authority

CCEA Cabinet Committee on Economic Affairs
CPTU Central Procurement Technical Unit

IDCOL Infrastructure Development Company Limited

IFB Invitation for Bid IPA In Principle Approval

HOCA Head of Contracting Authority

LM Line Ministry
LoA Letter of Award

PAC Project Appraisal Committee

PDT Project Delivery Team

PPPA Public Private Partnership Authority

PPA Public Procurement Act
PPR Public Procurement Rules

RAD Project Rampura-Amulia-Demra (RAD) Expressway Project

RFP Request for Proposal RFQ Request for Qualification

TVET Technical and Vocational Education and Training

VGF Viability Gap Funding

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CHAPTER 1: INTRODUCTION

1.1 Introduction

Bangladesh has a growing economy with a constant rate of GDP growth over the last decade. Although it has slowed down a bit over the last few years due to COVID and world economic conditions, it still requires significant infrastructure to support its development (Manik, 2023). The government of Bangladesh has recognized Public Private Partnership (PPP) as a viable alternative to traditional infrastructure development which is evident in its long-term policy (Perspective Plan 2021-2041) which iterates the importance of developing 30% of its infrastructures in PPP modality. The government has also taken steps to implement this policy by developing the capacity of PPP Authority and other relevant agencies to effectively implement PPP projects. PPP has some distinct advantages over traditional procurement as well as some caveats that need to be considered for effective implementation.

1.2 Objectives of the Practicum

The main objective of the Practicum is to analyze the landscape of the PPP procurement in Bangladesh. This will include the analysis of the current PPP procurement process, rules and regulations. Then will be compared the standard PPP procurement process, rules and regulations against the practice of the current agencies who are implementing PPP projects in Bangladesh. This will include three case studies of the PPP projects that already completed its procurement processes. After revieing the PPP procurement related data of the case studies, results will be analyzed to assess the efficacy of their procurement process. There is a perception in Bangladesh that PPP procurement process is very slow compared to the traditional procurement process which hinders the development of PPP in Bangladesh. This Practicum will look closely at the procurement processes of the few selected case studies to understand this statement and have a comprehensive idea about the efficacy of the PPP procurement process through the selected case studies. Some measures recommend to improve the overall performance of the PPP procurement process of Bangladesh.

1.3 Limitations of the study:

This Practicum has will cover the case studies of the PPP projects that has completed its procurment process. Due to limited number of PPP projects completed in Bangladesh, three projects were considered for the analysis. This limited number of project may not give a comprehensive outcome of the PPP procurment process efficiency. But this framework can be used to measure the efficiency of future PPP projects to understand the PPP procurment process further.

CHAPTER TWO: Literature Review

2.1 Literature Review

Procurement PPP is a procurement process where private party is allocated significant risk so that they can bring higher efficiency to manage those risks thereby increasing the overall efficiency of the project. So, for the PPP process to be successful, risks need to be allocated to the parties which have the capacity to best manage those risks and add value to the overall process (PPP Reference Guide 3.0). APMG has a narrower definition of the PPP process which defines PPP as alternative process of financing infrastructure projects because in PPP, private sector provides all financing or a significant portion of the financing for the development of the infrastructures. This is important for countries like Bangladesh which have limited government budget for infrastructure development. So, there is always a gap between the allocated budget and budget required for the development of infrastructure that matches the requirements of economic growth. PPP can play an important role in bridging that gap in financing of infrastructures in Bangladesh (Islam & Rahman, 2019). PPP usually has more cost of transaction compared to the traditional procurement process due to its nature of long and complex feasibility, extensive bid development, specific and complex contractual structures which requires specific expertise to manage effectively. This not only increases the cost of transactions but also requires greater institutional resources. The private party needs to bring innovation and efficiency that outweighs the additional transaction cost and makes the whole process more efficient resulting in better infrastructures in less costs (Pruthi & Singh, 2023).

Government of Bangladesh has recognized the importance of PPP in Bangladesh. To facilitate and accelerate the growth of PPP and investment of private sector in infrastructure development in Bangladesh, government established PPP Authority after the enactment of PPP Act, 2015. The government has also enacted several rules such as Procurement Guidelines for PPP Projects 2018, Rules for PPP Technical Assistance Financing 2018, Rules for VGF of PPP Projects 2018, Guidelines of Unsolicited Proposal 2018 etc. Although (Mannan, 2019) has identified few areas that can be addressed to better align the current PPP legal framework with the needs of the PPP projects in Bangladesh such as dispute resolution process, contract management etc., these rules provide a comprehensive guideline for the development of PPP projects in Bangladesh.

There has been multiple academic work on PPP projects in Bangladesh. Most of these works focuses on the sectoral PPP projects in Bangladesh. Power sector has most of the PPP projects in Bangladesh

which is done through Power Purchase Agreement (PPA) with the Independent Power Producers (IPP's). There are 40 IPP PPP project contracted in Bangladesh with many in the different stages of evaluation for the inclusion in the national grid. Private sector installed capacity has improved significantly from 1290 MW in 2005 to 6448 MW in 2018 due to the adoption of policy aimed at improving private sector involvement in power sector and developing projects in PPP modality (Islam & Rahman, 2019). This has been possible with required policy change to facilitate private participation in power production as well as the improved capacity of the government officials involved and their positive mentality towards change. Although power sector has seen significant positive change in terms of providing necessary electricity to the business and households, there are some pitfalls in PPP projects of power sectors. Matching the demand and the supply of electricity is a difficult work as the business enterprises sometime overstate the electricity requirement. Measures such as improving the overall environment for the PPP projects, proper and efficient allocation of risk and reward of the PPP process, adopting transparent and competitive bidding process for the selection of private partner including providing them with equal opportunity and making the bidding process uniform throughout sector, proving guarantees and other measures to increase the credit worthiness of the PPP projects etc. will attract quality private partner and leverage the advantages of the PPP projects while avoiding the pitfalls (Zhang & Shahid, 2024).

Gordon (2012) conducted a comprehesnvie study on the transport sector PPP projects in Bangladesh. According to this study, projects from the transport sector impleted in PPP modalities for countries like Bangladesh can bring significant benefits such as bringing private expertise, Innovation, developing the capacity of the private and public sector, developing reliable infrastructures at comparatively lower actual cost compared to the traditional procurements. Although there are some major obstacles that needs to be overcome such as stability of policy, ability to generate enough traffic to make projects financially viable, ability of the government agencies to conduct technical and commercial feasibility of projects, overcoming these obstacles will provide significant benefits to the country. Nipa, Sultana & Rahman (2012) explored the potential of PPP projects in the tourism sector. According to the study, knowledge from PPP projects can contribute towards developing tourism sector in Bangladesh overcoming critical shortcomings of the sector such as innovation, technology, branding, marketing, capital requirement etc. According to Rahman (2016), PPP can be an important tool for expanding the facilities information technology to rural and remote arears. PPP ca be used to involve private sector which can inject initial high investment required for the ICT

sector of developing countries like Bangladesh. Predominantly private sector-oriented industry such as livestock can benefit greatly from the benefits of PPP as land requirement, managing initial investment required for the financially viable enterprise in livestock sector may become difficult for the small-scale business entrepreneurs working in the sector (Husain & Amin, 2018). PPP can be used to reduce the gap between the industry skills requirement and the education provided by the higher education sector of Bangladesh as currently there is substantial gap demonstrated by the lack of availability of skilled personnel and hiring of such personnel from the neighboring countries. This can be accomplished by the improved industry involvement with higher education institutions as well as increasing the funding available for research valuable to the private sector (Boye & Mannan, 2014). PPP's can also be used to improve the output of the TVET sector in Bangladesh through improving the quality of training and better linkage to the market requirement (Tansen, 2012).

CHAPTER THREE: Approach and Methodology

3.1 General Approach

Although PPP procurement process for infrastructure development has been prevalent in Bangladesh for the last 25 years, it has only started to accelerate in the last 10 years. So Bangladesh is still developing its PPP process. This Practicum will try to analyze the current PPP procurement process in Bangladesh as well as compare its execution in the projects that different government agencies Bangladesh has undertaken. The analysis of the procurement outcome of the PPP projects considered for this Practicum will be conducted following a mixture of quantitative and qualitative data analysis. After the data analysis, the results will be interpreted based on the existing knowledge and international best practices of PPP procurement process.

3.2 Methodology

The Practicum will start with the literature review in which existing literature on the PPP procurement of Bangladesh will be reviewed to find the existing knowledge of the PPP procurement in Bangladesh. The existing literature will be a suitable mix of primary literature such as Journal, papers etc. and secondary literature such as government reports, reports of the multilateral development organizations etc. with greater emphasis on the content of the primary literature. Literature review will be done after searching the relevant databases such as Google Scholar, SCOPUS etc. Based on the outcome of the literature review, the data analysis will be designed.

After the literature review, data collection process started. This Practicum involves the PPP procurement process of Bangladesh, data collected from the PPP projects that has completed its whole procurement process. For the better assessment of the procurement process, only the competitive procurement process has been considered in this Practicum. There are very few PPP projects in Bangladesh which has both followed the competitive bidding process and completed the whole procurement process. Upon review of literature, three projects were found that has completed its procurement process and followed the competitive bidding process. The names of the projects are: Dhaka Elevated Expressway Project, Dhaka Bypass Project and Rampura-Amulia-Demra (RAD) Expressway Project. All these projects have completed their procurement process following

the competitive bidding process and now are in the implementation stage. So, this Practicum will analyze these three projects.

Data collected from the three projects which is covered by this Practicum through both online methods such as google forms and others survey tools. Data collected from the google forms and survey tools will be than substantiated through interview and discussion with the relevant officials associated with the projects. After the data validation, the data were consolidated in the suitable form for the data analysis.

After data collection, the data analyzed using suitable tools. Mostly Microsoft excel will be used for data analysis. Data collected from the projects will be arranged and collated in accordance with the requirement of the Practicum to address the research question. Collated data analysis results will be compared with the existing PPP procurement process.

After data analysis, the results of the data analysis being interpreted to find conclusion of the Practicum. This Practicum ended with recommendation related to the PPP procurement process of Bangladesh which relevant authorities may consider for further improving the process.

CHAPTER FOUR: Data Analysis and Results

4.1 PPP Procurement Process

PPP procurement is different from the traditional procurement in a sense that it encompassed a wider range of activities including the identification and development of the project which in traditional procurement is done before the actual procurement process is initiated. According to the PPP procurement Guideline 2018 for the PPP Projects enacted by the PPP Authority of Bangladesh, there are four stages of PPP procurement process based on competitive bidding which are: 1) Identification Phase, 2) Development Phase, 3) Bidding Phase, 4) Approval and Award Phase.

4.1.1 Identification Phase

The PPP procurement process starts from the identification of the project which is usually done by Contracting Authority. Contracting Authority is usually a government department or agency, or it can be ministry itself depending on the size, nature and complexity of the project. Contracting authority needs to consider certain aspects of the project which will make it a potential PPP project such as whether the output of the project is measurable, can the project generate revenue, capacity of the private sector to deliver the project effectively adding value to the overall process etc. Once the project is identified by the contracting authority, the project is forwarded to the relevant ministry for its endorsement. If the ministry endorses the project to be delivered in PPP modality, the contracting authority forwards the project to the PPP Authority for the official screening. If the project passes the official screening of the PPP Authority, the contracting authority and the relevant ministry are notified of the screening result. The contracting authority will then forward a project proposal to the relevant ministry for taking the In Principal Approval (IPA) of the PPP project from CCEA attaching the official screening result from the PPP Authority. After receiving the PPP project proposal from the contracting authority with the official screening result from the PPP Authority, the relevant ministry sends the proposal to the cabinet division for the CCEA approval. CCEA either approves or rejects or sends back the approval with comments. This process must be done within two months of getting the official screening result from the PPP Authority. Otherwise, the screening result becomes redundant and contracting authority needs to send the project proposal again to PPP Authority for their official screening again. The relevant ministry will then forward the IPA to the

contracting authority and give a copy to the PPP authority. Figure-1 shows the identification phase
of the PPP procurement process.

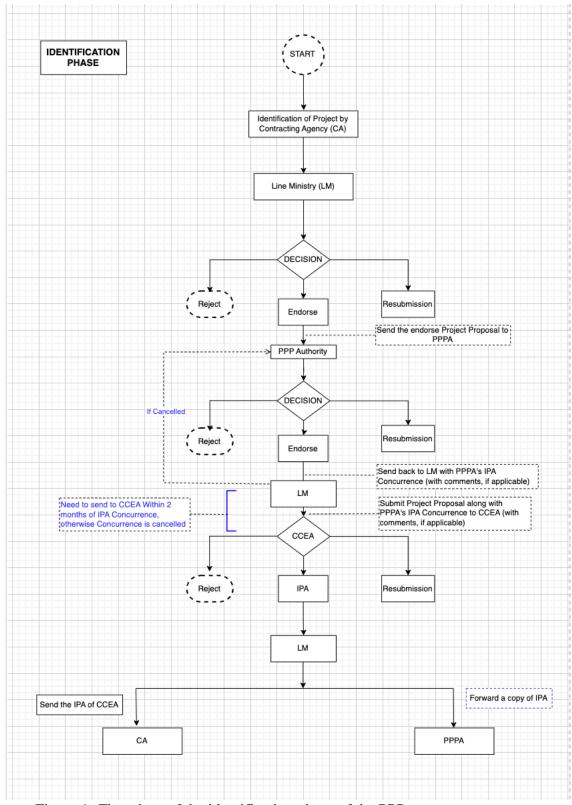


Figure 1: Flowchart of the identification phase of the PPP procurement process

4.1.2 Development phase

After receiving the IPA from the relevant ministry, the contracting authority will appoint Project Delivery Team (PDT) including the appointment of a Project Director with the concurrence of the PPP authority. The contracting authority will then appoint a consultant for the feasibility study and transaction advisory services for the proposed PPP project following the PPA 2006 and PPR 2008. The contracting authority can either use their own fund for the consultant or they can use revolving fund available at the PPP authority under PPP Technical Assistance Fund. The consultant prepares the feasibility report including the suitable PPP structures. PPP authority formulates the Project Appraisal Committee (PAC) to evaluate the deliverables of the consultant. Feasibility report is placed at the PAC for approval. If the PAC approves the feasibility report, consultant moves forward with the preparation of the tender document in line with the selected procurement modality (one stage/two stage) along with the draft tender document. The tender document and the draft PPP contract are sent to the PPP Authority through the relevant ministry. PPP authority places the documents in the PAC for appraisal and approval. If the tender document and the draft PPP contract documents are approved by the PAC, then the contracting authority can move forward to the bidding process. Figure-2 shows the development phase of the PPP procurement process.

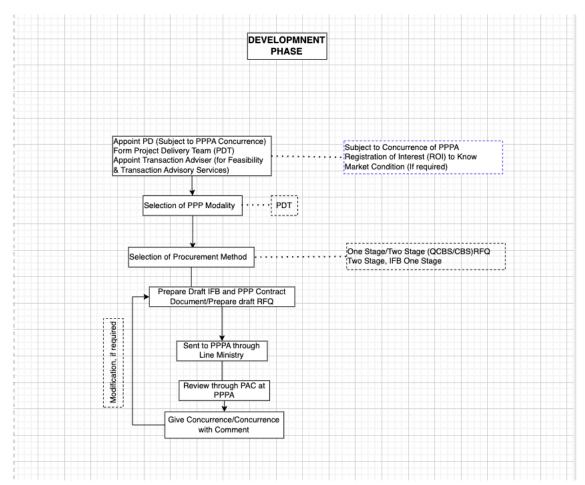


Figure 2: Flowchart of the development phase of the PPP procurement process

4.1.3 Bidding Phase

The bidding phase starts with the advertisement of the bid. There are two types of bidding process available in the current PPPP procurement process. They are: 1) One Stage Bidding Process, 2) Two Stage Bidding Process. These two-bidding process including their approval and award phase are described below:

4.1.3.1 One Stage Bidding Process including Approval and Award

This bidding process starts with the advertisement of Invitation for Bid (IFB). After the advertisement, PPP authority opens a data room where the interest parties can register themselves. Pre-bid meeting for the bid occurs at a specified time mentioned in the IFB document and based on the discussion in the pre-bid meeting, modifications have been made to the IFB document if it

deemed necessary by the contracting authority. At the specific time, IFB is closed, and the evaluation process starts. After the evaluation and the approval of the report by the HOCA, the preferred bidder is invited for the negotiation for finalizing the terms of the PPP contract. After finalizing the PPP contract, the contracting authority sends the contract to the relevant ministry. The Ministry then sends the contract to the Ministry of Law, Justice and Parliamentary Affairs for their legal vetting. After receiving legal vetting, the relevant ministry sends the contract to the PPP Authority for their final approval. After PPP Authority approval, ministry sends the project to the CCEA for their final approval. After CCEA approval, the relevant ministry notifies the contracting authority in which case contracting authority issues LoA.

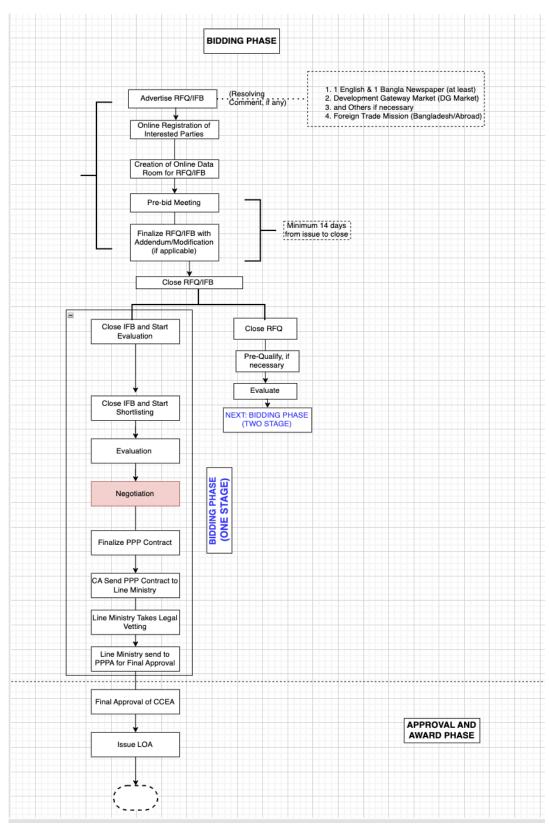


Figure 3: Flowchart of the bidding phase of the One stage bidding including its approval and award phase

4.1.3.2 Two Stage Bidding Process including Approval and Award

This bidding process starts with the advertisement for the Request for Qualification (RFQ). After the advertisement, PPP authority opens a data room where the interest parties can register themselves. Pre-bid meeting for the bid occurs at a specified time mentioned in the RFQ document and based on the discussion in the pre-bid meeting, modifications have been made to the IFB document if it deemed necessary by the contracting authority. At the specific time, RFQ is closed, and the evaluation process starts. Final evaluation report for the RFQ is sent to the HOCA for approval. After the approval of the RFQ evaluation report, the shortlist is finalized and the shortlisted bidders are notified. After this process, the data room created for conducting the RFQ process is terminated.

The second stage of the two-stage tendering process starts with the creation of the data room to manage the Request for Proposal (RFP) process. The contracting authority than prepares the draft RFP document and draft PPP contract document which is sent to the relevant ministry so that they can forward it to the PPP authority. After ministry forwards the draft RFP document and draft PPP contract to the PPP Authority, they takes steps to approve the document through PAC. If the PAC approves the documents, the contracting authority issues the document to the shortlisted bidders. A pre-bid meeting is arranged by the contracting authority to understand the bidder's perspective and share their view of the RFP. Based on the minutes of the pre-bid meeting, RFP is finalized. After elapsing of time specified in the RFP document, the RFP is opened and evaluation process starts. After finalizing the evaluation report by the evaluation committee, the report is sent to the HOCA for approval. After the approval of the evaluation report, the preferred bidder is invited for the negotiation and the PPP contract document is finalized through the negotiation process. Contracting authority than sends the contract to the relevant ministry. The Ministry then sends the contract to the Ministry of Law, Justice and Parliamentary Affairs for their legal vetting. After receiving legal vetting, the relevant ministry sends the contract to the PPP Authority for their final approval. After PPP Authority approval, ministry sends the project to the CCEA for their final approval. After CCEA approval, the relevant ministry notifies the contracting authority in which case contracting authority issues LoA.

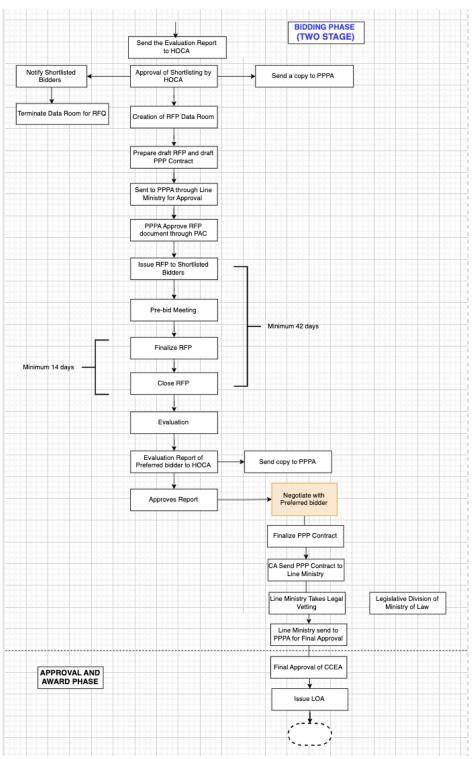


Figure 4: Flowchart of the bidding phase of the Two stage bidding including its approval and award phase

4.2 Procurement efficiency of the selected projects

Work experience The data was collected for the three projects as mentioned earlier. From the collected data, time required for the different phases of the PPP procurement process was calculated. Although the guideline for the PPP procurement process indicates there are 04 phases of the PPP procurement process, actual procurement is related to the three phases except the identification process which is more related to the project appraisal rather than the procurement process. So, for the purpose of this report, the remaining three phases are considered. Based on the timeline given in the procurement guideline and the existing process of the PPP procurement, a realistic timeline for the procurement is estimated. The estimated time required for the procurement is compared with the actual procurement timeline of the three selected projects. Following figure show the total time required:

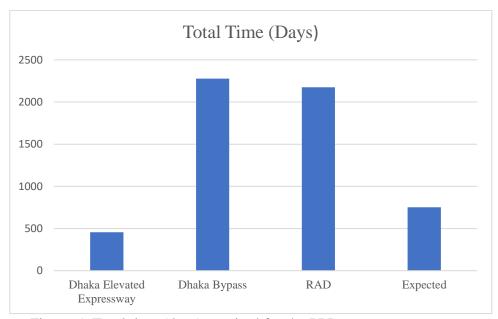


Figure 5: Total time (days) required for the PPP procurement process

From Figure-5, Both Dhaka Bypass and the RAD project has taken substantially more time compared to the expected base case time required in accordance with the procurement guidelines. Procurement of Dhaka Elevated Expressway project was conducted before the enactment of the procurement guidelines. So, the total timeline for this project is misleading.

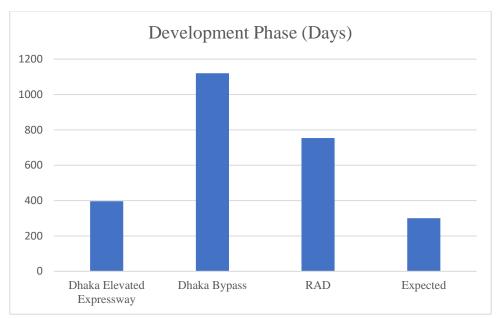


Figure 6: Time (days) required for the development phase of the PPP procurement process

While considering the time required for the development phase, it is understood that the time required for the development phase will depend greatly on the nature and the complexity of the project. For this report, a development phase of 300 days is considered as most of the project's development stage should be finished within this time period. From Figure-6, both Dhaka Bypass and RAD project took substantially more time to be developed compared to the expected timeline while the Elevated Expressway project was developed in similar timeframe compared to the expected timeline.

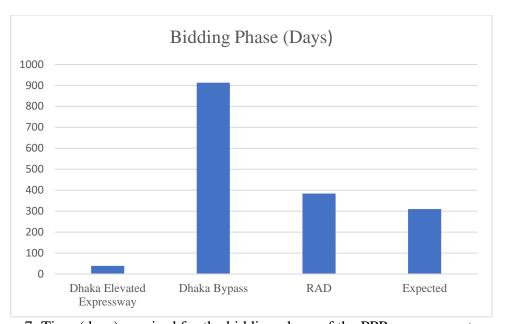


Figure 7: Time (days) required for the bidding phase of the PPP procurement process

Bidding phase is the most relevant phase in terms of PPP procurement as actual procurement activities like traditional procurement happens in this phase. In terms of efficacy and control, project director and the project delivery team have the most control over this phase. From Figure-7, although bidding phase of RAD project shows similar timeframe compared to expected timeframe, Dhaka Bypass project has taken significantly more time to complete their bidding phase. This may indicate that the procurement process was not efficient for the Dhaka Bypass project.

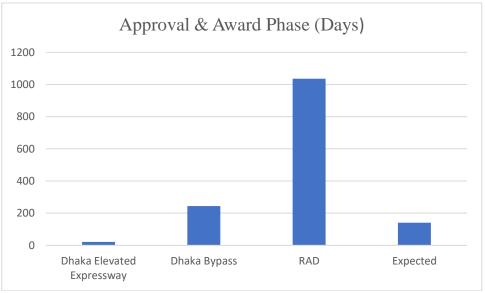


Figure 8: Time (days) required for the approval and award phase of the PPP procurement process

Approval and award phase is the phase of the PPP procurement process where PPP contract is approved by the government through CCEA, and contract is signed between the private party and the government. Although Most of the big infrastructure development project in Bangladesh is economically viable, they are not commercially viable. So, they require Viability Gap Funding (VGF) to make them commercially viable and suitable for PPP procurement as was the case for all three projects considered for this report. Usually, VGF is used as a bidding parameter meaning whoever asked for the lowest amount of VGF is selected as preferred bidder. In the approval and award phase, CA knows the amount of VGF required for the project which is then sent to the finance division for approval. This process takes time for the approval. This is why any project with VGF requirement may take time to complete its approval and award phase. From Figure-8, although Dhaka Bypass project has completed its approval and award phase in similar timeframe of compared to the expected, RAD project substantially long time to complete its approval and award phase.

If we look at the percentage of time required for the three phases of the each projects we will have an idea about the efficiency of the procurement process and identify scope for improvement in each project.

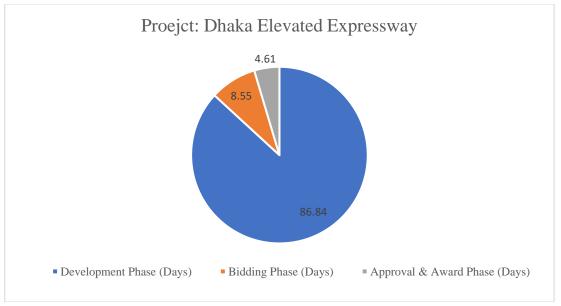


Figure 9: Percentage of time required for each phase of the procurement process for the Dhaka Elevated Expressway project

From Figure-9, Dhaka Elevated Expressway project took most time in developing the project which is understandable considering the technical, logistical and legal complexity of the project

but its bidding as well as approval and award phase was very efficient. Although it must be acknowledged that this project was approved before the enactment of the procurement law and guideline for the PPP procurement which have contributed in its quick procurement and approval of contract.

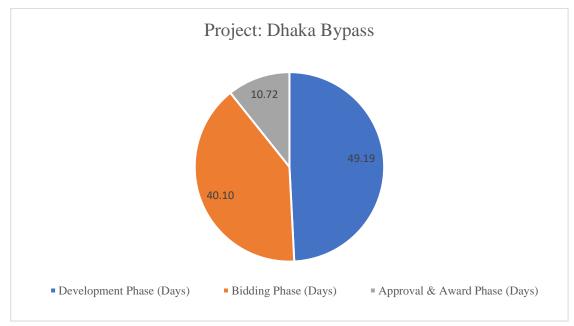


Figure 10: Percentage of time required for each phase of the procurement process for the Dhaka Bypass project

From Figure-10, Dhaka Bypass project shows more balanced distribution of timeframe between the three phases of the procurement process. But the bidding process in this project took longer than expected.

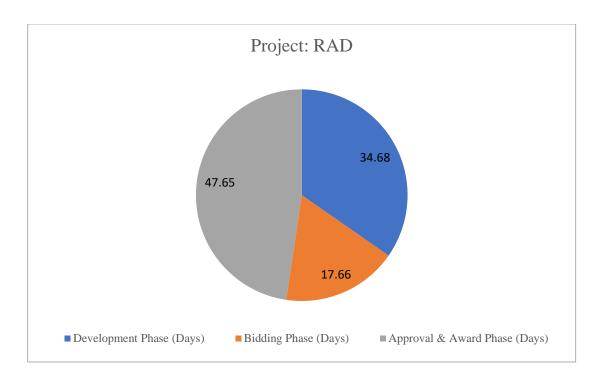


Figure 11: Percentage of time required for each phase of the procurement process for the RAD project

From Figure-11, approval and award phase of RAD project took substantially more time compared to the other two project while the bidding phase and the development phase of this project was completed very smoothly compared to the other two project. This shows that each project has different characteristics with different requirement and challenges which may affect the procurement performance of the project.

4.3 Summary of Results

Summary of the result of study on 3 PPP Projects procurment process is given below:

➤ Projects that are tendered before the enactment of the PPP procurement law and guidelines take less time compared to the projects that tendered after the enactment of the law and guidelines. But after the enactment of PPP procurement law and guidelines, the process has become more streamlined and efficient.

- > Total time taken for the procurement process is substantially higher for the two projects procured under current PPP procurement law and guidelines compared to the expected timeframe which shows inefficiency in the whole process of the procurement.
- ➤ Dhaka Bypass project has taken more time in bidding phase while RAD project has taken more time in approval and award phase. Longer time taken in bidding phase shows the inefficiency of the people involved in the bidding process while longer time taken in approval and award phase shows that the overall PPP enabling environment is not suitable for PPP procurement as factors such as approval of VGF, vetting and approval of PPP contract takes longer time compared to the traditional procurement, arranging financing, negative attitude of different institutions involved in the process etc. makes it difficult for the approval and award phase to be completed in time.
- ➤ Time distribution of the projects in different phases of the procurement process shows projects are developed in time but either the bidding phase or approval and award phase are getting delayed which may indicate that although the project are developed quickly but they are not developed in a comprehensive manner thereby creating chances for time overrun in the procurement process.

CHAPTER FIVE: Conclusions and Recommendations

5.1 Conclusion

Bangladesh has seen sustained economic growth over the last decade. This economic growth requires infrastructure to sustain which is difficult to provide by the government through its traditional mode of procurement. PPP has the potential to bridge the gap between the infrastructure requirement and infrastructure provided by the traditional procurement. Evidence from the study shows that the PPP procurement process in Bangladesh is streamlined and efficient. There are some critical deficiencies in the relevant contracting authorities, ministries and other organizations such as lack of capacity to plan, develop, procure and implement PPP projects, lack of PPP enabling environment etc. which reduces the efficiency of PPP procurement process. Despite these limitations, we have seen few successful PPP projects implemented in Bangladesh. Coordinated efforts from different government and non-government organizations can further improve the PPP procurement efficiency.

5.2 Recommendations

The Based on the findings of the Practicum, following are the recommendations for improving the efficiency of PPP procurement process in Bangladesh:

- 1. Capacity development of the contracting authorities as well as relevant ministries and people involved in the PPP procurement process are required so that they can understand the concept of PPP procurement and implement the same efficiently and effectively. A comprehensive training program like training conducted by CPTU (presently BPPA) for the traditional procurement will be helpful to develop a common understanding of the PPP concepts. In addition to that, in-depth and practical training focusing on the bidding phase of the PPP procurement should be arranged for the personnel involved with the PPP procurement from different contracting authorities.
- 2. Overall PPP environment is an important factor in successful PPP procurement process. Availability of long-term financing, robust legal structure etc. are important parts of the process. Most of the PPP projects are struggling to manage long term financing from the local market. That's why they are finding it difficult to achieve financial closure. The Finance

- ministry and PPP authority should take measures to develop financial institutions like IDCOL and BIFFL which can provide long term project financing for the PPP projects.
- 3. This study focused on the PPP procurement of three Infrastructure PPP projects related to the transport sector as this sector has developed PPP projects in Bangladesh. Although transport sector has developed PPP projects in Bangladesh, there are other sectors such as service sector, power sector, solid and liquid waste management etc. have high PPP potential as evident from the literature review. Sector specific PPP projects have sector specific challenges and opportunities which can only be exploited through proper focused research on the sector specific PPP projects.

REFERENCES:

Boye, E., & Mannan, M. A. (2014). Bangladesh: Public-Private Partnership in Higher Education (Financed by Asian Development Bank). *Asian Development Bank*.

Chowdhury, R. S., & Muhammad, M. H. (2020). Growth Empirics of Public Private Partnership (PPP) in the Infrastructure Development of Bangladesh. International Supply Chain Technology Journal, 6(02).

Gordon, C. (2012). The challenges of transport PPP's in low-income developing countries: A case study of Bangladesh. *Transport Policy*, *24*, 296-301.

Husain, S. S., & Amin, M. R. (2018). Public Private Partnership in livestock sector of Bangladesh. *Bangladesh Journal of Animal Science*, 46(3), 172-178.

Islam, M. R., & Rahman, A. (2019). Prospects of PPP Project in Bangladesh: A Study on Power Sector. *Journal of Governance and Innovation*, *5*(1), 47-60.

Manik, M. H. (2023). Movement of the economy of Bangladesh with its sector-wise contribution and growth rate. *Journal of Production, Operations Management and Economics*, *3*(02), 1-8.

Mannan, Z. (2019). Legal Framework of Public Private Partnership in Bangladesh: A Critical Review.

Nipa, N. J., Sultana, J., & Rahman, M. H. (2015). Prospect of private-public partnership in tourism of Bangladesh. *Journal of Investment and Management*, 4(3), 73-83.

- PPP Reference Guide 3.0 (Full version): Public private partnership. (n.d.). Retrieved from https://ppp.worldbank.org/public-private-partnership/library/ppp-reference-guide-3-0-full-version
- Pruthi, H. S., & Singh, V. (2023). Optimal procurement choices for development of public infrastructure-identification of key metrics. *International Journal of Procurement Management*, 16(1), 75-92.

Rahman, S. M. A. (2016). Prospects of PPP in expanding ICT services in rural Bangladesh: A case of union digital center. *International Journal of Economics and Finance*, 8(2), 163-170.

Tansen, M. H. (2012). Public private partnership (PPP) in the technical vocational education and training (TVET) sector in Bangladesh: Challenges and prospects. *TVET Project, Save the Children in Bangladesh*.

Zhang, M., & Shahid, R. (2024). Enlightening Bangladesh: Navigating power sector challenges through PPP excellence. *Journal of Infrastructure, Policy and Development*, 8(3), 2529.