

Report On
Sustainable Procurement Practice in LGED: A Case Study on
Construction of Important Bridges on Rural Roads (CIBRR)
Project, LGED

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An internship report submitted to the BRAC Institute of Governance & Development
(BIGD) in partial fulfillment of the requirements for the degree of
Masters in Procurement & Supply Chain Management

BRAC Institute of Governance & Development (BIGD)
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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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Letter of Transmittal

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Subject: Submission of Report Titled “Sustainable Procurement Practice in LGED: A Case Study on Construction of Important Bridges on Rural Roads (CIBRR) Project, LGED”

Dear Sir,

I am grateful to submit my report on “Sustainable Procurement Practice in LGED: A Case Study on Construction of Important Bridges on Rural Roads (CIBRR) Project, LGED” as a partial requirement to achieve the degree of Masters in Procurement and Supply Chain Management. It is my proud privilege to work under your active supervision and guidance.

I have attempted my best to finish the report with the essential data and recommended proposition in a compact and comprehensive manner as possible.

I trust that the report will meet the desires.

Sincerely yours,

Sarthak Halder
Student ID: 21382017
BRAC Business School
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31st December, 2023.

Non-Disclosure Agreement

This agreement is made and entered into by and between the Local Government Engineering Department and the undersigned student Sarthak Halder at BRAC University. As I am currently working at the organization, I have access to the Organization's confidential information. I agree that I will keep all the information strictly confidential and not share it with anyone outside the organization.

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Acknowledgement

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Firstly, I would like to express my profound appreciation to my thesis supervisor, Mir Mehbubur Rahman MCIPS, FIEB, Faculty, BRAC Institute of Government and Development (BIGD), BRAC University, for his unwavering guidance and support throughout the completion of this report. The constructive advice and supportive remarks he provided deeply influenced and motivated me. Devoid of his solicitude, support, and drive, attaining a triumphant conclusion for this report could be unattainable.

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Executive Summary

Sustainable procurement (SP) is a procurement method that focuses on the principles of sustainable development. This includes promoting a healthy society, operating within environmental boundaries, and incorporating economic, environmental, and social aspects of sustainability while ensuring good governance. Public procurement focuses on the allocation of public funds by government entities for the sake of national development. The Local Government Engineering Department (LGED) is a prominent public sector organization in Bangladesh responsible for planning and executing programs to develop local, rural, urban, and small-scale water resources infrastructure. LGED also handles the procurement of goods, works, and services on a large scale. A case study is being performed with LGED officials to assess the existing state of sustainable procurement practices in Construction of Important Bridges on Rural Roads Project under LGED. The study focuses on three key components of sustainability. The case study suggests that authorities possess a reasonable comprehension of sustainability issues, albeit with limited readiness to incorporate it into their procurement process. The project's procurement systems adhere to the sustainability provisions outlined in PPR-2008. Furthermore, this procurement system lacks a way to assess the environmental proficiency of contractors. The procurement process should incorporate sustainability criteria through the implementation of a comprehensive sustainable procurement policy, supported by a sustainable procurement champion and a public procurement framework. Comprehensive training on sustainable procurement is essential for all stakeholders, including procuring entities, suppliers, and beneficiaries, to enhance their understanding and ability to adopt sustainable procurement practices.

Keywords: Sustainability, Procurement, Preparedness, Opportunities, Barriers, Beneficiaries.

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List of Acronyms

ADB	Asian Development Bank
Addl. CE	Additional Chief Engineer
AE	Assistant Engineer
BADC	Bangladesh Agricultural Development Corporation
BIWTA	Bangladesh Inland Water Transport Authority
CE	Chief Engineer
CIPS	Chartered Institute of Procurement and supply
CPTU	Central Procurement Technical Unit
CSOS	Community Service Organization Selection
DCS	Design Contest Selection
DOF	Department of Fisheries
DOFP	Delegation of Financial Power
DPM	Direct Procurement Method
DPP	Development Project Proposal (DPP)
e-GP	Electronic Government Procurement
e-PMS	Electronic Project Management System
EE	Executive Engineer
ERD	Economic Relations Division
FBS	Fixed Budget Selection
ICT	Information and Communication Technology
ICS	Individual Consultant Selection
IT	Information Technology
IWRM	Integrated Water Resources Management
JICA	Japan International Cooperation Agency
LCS	Least Cost Selection
LGED	Local Government Engineering Department
LGIs	Local Government Institutions
LTM	Limited Tendering Method
MoU	Memorandum of Understanding
NOC	No Objection Certificate
OSTETM	One Stage Two Envelop Tendering Method
PMU	Project Monitoring Unit

Glossary

Glossary

Procurement: Is the process of identifying and reaching an agreement to acquire and obtain goods, services, or other products from an external entity, typically through a tendering or competitive bidding procedure.

Public Procurement: It is the term used to describe the process by which a government agency purchases products or services using public funds.

Sustainable Procurement: Sustainable procurement is a method that incorporates environmental, governance, and social aspects of corporate responsibility into procurement procedures and decision-making while still meeting stakeholder expectations.

Socio-economic Development: Socio-economic development is the process by which a society's social and economic development occur. Its goal is to sustain the social and material well-being of the country and its people in order to achieve the maximum potential level of human development.

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Chapter 1

Introduction

1.1 Background

The term 'sustainability' pertains to the capacity of an activity to be maintained or continued at a consistent level in the future. In the present circumstances, it refers to the act of guaranteeing that current acts do not restrict or endanger the standard of living in the future. Main Functions of Sustainable Procurement are:

- Strategic purchasing method considering environmental, social, and economic factors.
- Acquiring goods and services.

The procurement approach in question focuses on the concepts of sustainable development, which include ensuring social justice and well-being, operating within environmental boundaries, and fostering effective governance. Sustainable procurement, as defined by the Chartered Institute of Procurement and Supply (CIPS), is the process by which organizations acquire goods, services, works, and utilities in a manner that provides value for money over the entire lifespan of the products. This approach aims to generate benefits for both the organizations and society, while also minimizing harm to the environment. They make decisions on goods, works, and services based on: Economic considerations: Ensuring cost-effectiveness, efficient evaluation of investments and capital procurement. Cost management and budgetary control refer to the process of effectively managing and controlling expenses. Added value refers to the extra benefits or features that a product or service provides to customers. Ethical trading involves conducting business in a morally responsible manner. Sustainable pricing refers to setting prices that are environmentally and socially sustainable. Ethical tendering and negotiation involve conducting procurement processes in an ethical manner. Payment on time refers to the timely payment of invoices or bills.

Environmental considerations: The ecological effects of the product and/or service during its entire lifespan, as well as green procurement. Social aspects encompass the various social characteristics of a community or region, such as human rights, labor conditions, health and well-being, access to social resources, quality of life, and fair and ethical trading.

Public procurement is primarily focused on responsibly allocating taxpayers' funds for acquiring goods, services, and works, ultimately benefiting taxpayers and citizens. This responsibility lies with public sector entities, guided by principles such as transparency, accountability, equal treatment of bidders, and promoting fair competition. Sustainability has gained significant attention worldwide, leading to efforts to incorporate it into procurement practices to tackle environmental concerns.

1.2 Objectives of the Research

The research aims to investigate the role of public procurement in addressing environmental, social, and economic concerns, while also analyzing the challenges and opportunities associated with integrating sustainability principles into procurement practices. Specifically, the study focuses on the implementation of sustainability principles within the public procurement process, with a primary emphasis on evaluating the awareness and comprehension of sustainability issues among officials involved in the "Construction of Important Bridges on Rural Roads (CIBRR)" Project within the Local Government Engineering Department (LGED). Additionally, it aims to assess their readiness to adopt sustainability measures in procurement activities and to gauge the existing level of sustainability integration in their procurement processes. Through this research, insights can be gained into the potential barriers and facilitators of incorporating sustainability into public procurement, ultimately informing strategies for enhancing sustainability practices in procurement activities within the LGED and similar organizations.

1.3 Research Questions

The study proposes two primary research questions:

- i)** What is the extent of comprehension and readiness regarding sustainable practices in Public Procurement among the officers of “Construction of Important Bridges on Rural Roads (CIBRR)” Project under Local Government Engineering Department (LGED)?
- ii)** What is the current level of implementation in the public procurement procedure of “Construction of Important Bridges on Rural Roads (CIBRR)” Project under Local Government Engineering Department (LGED) in terms of sustainability?

The paper focuses on two primary research topics and employs suitable approaches to address them.

1.4 Scope of the Study

The case study will primarily focus on public sector procurement, specifically assessing the level of preparedness and the current extent of sustainable practices within the Local Government Engineering Department (LGED), a public sector institution in Bangladesh. The location is Project Management Office of “Construction of Important Bridges on Rural Roads (CIBRR)” Project under LGED & Concerned LGED District & Upazilla Offices along with Construction Sites. Data collected via an interview conducted with LGED personnel through comprehensive questionnaire and Office File Observation.

Sustainable Procurement Strategy



Figure 1.4.1: Sustainable Procurement Strategy

1.4.1 Various types of Procurement under CIBRR Project:

Report summary: The project named "Construction of Important Bridges on Rural Roads" has been approved by ECNEC on 10-01-2018. The project will be implemented by LGED and fully funded by the Government of Bangladesh. The total cost of the project is Tk. 392676 Lac BDT. The project titled "Construction of Important Bridges on Rural Roads (1st Revised)" was approved by ECNEC on February 3, 2021, at a cost of Tk. 645,719 Lac BDT. A total of 132 bridges will be built in 98 upazilas throughout 44 districts as a significant component of the project. The selection of bridges is based on the existing road network, field observation, comments from local residents, and the hydrological and morphological characteristics of the river. In this project, the lion's share of procurement done basically in works. Service and goods share few from it.

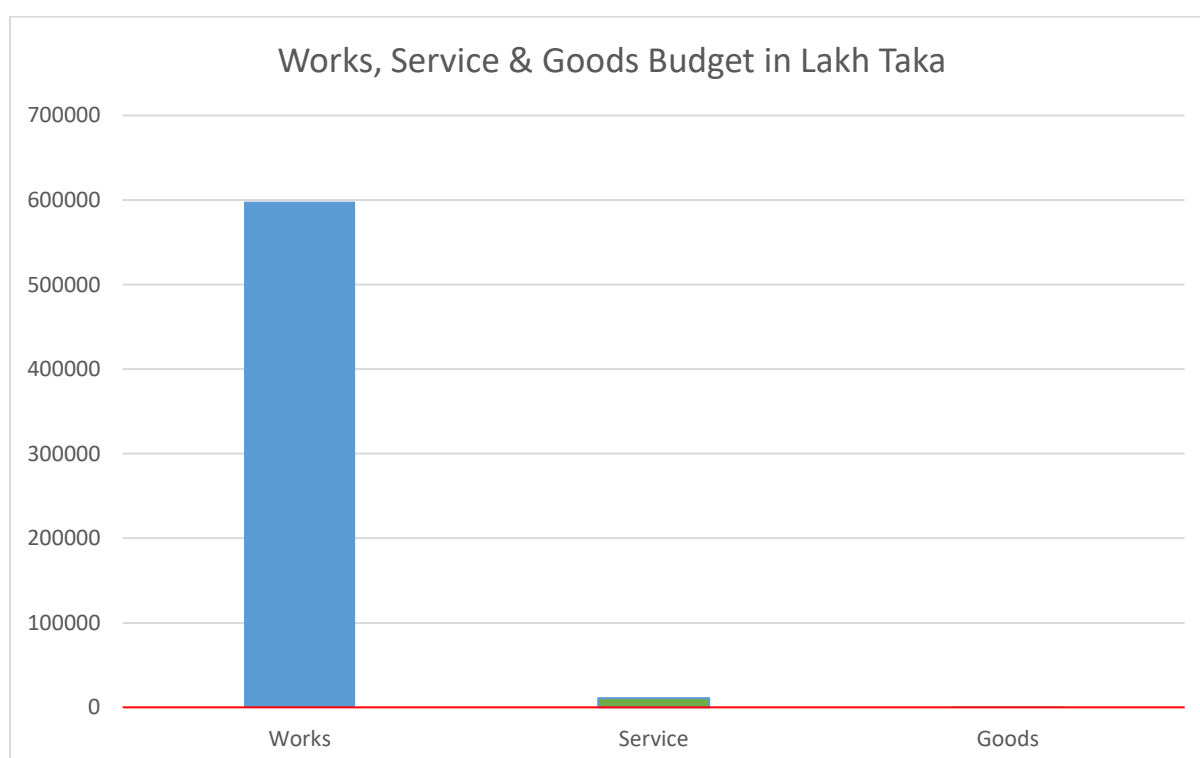


Figure 1.4.2: Amount of various procurement under CIBRR Project.

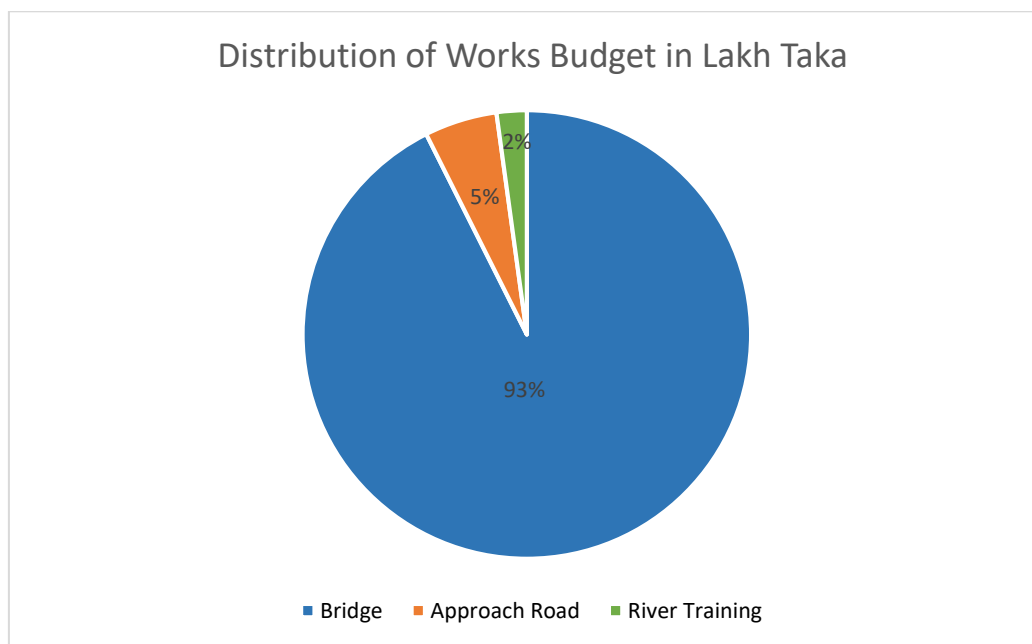


Figure 1.4.3: Distribution of Works under CIBRR Project

1.4.2 Research Area:

Rural roads and bridges/culverts have been being constructed since the creation of LGED to improve the socio-economic status of rural people through improved communication systems. For construction and proper maintenance of rural roads, the government has already fixed the category of roads through gazette notification and LGED has been given responsibility for construction of upazila roads, union roads and village roads and construction of bridges over the above roads. As a result, construction and maintenance of roads and necessary bridges/culverts is easy and giants avoided.

According to LGED statistics of 2016, there was an existing gap of 1,76,877 meters in the project area (40 districts, 94 upazilas) on upazila roads, union roads, and village roads under LGED. The discussed bridge project was built according to the demands of the local people and honorable parliamentarians and the kind instructions of the higher authorities.

1.4.3 Objectives of the project:

- a) Facilitating production and marketing of agricultural and non-agricultural products and improvement of socio-economic conditions of the project area through road network development.
- b) Reducing transport time and cost by establishing uninterrupted rural road connectivity.
- c) Creation of short- and long-term employment opportunities.

1.4.4 Targets of the project:

- a) Construction of 132 bridges - 41043 meters.
- b) River training work- 6721 meters.
- c) Construction of Approach/Connecting Road – 67234 meters.

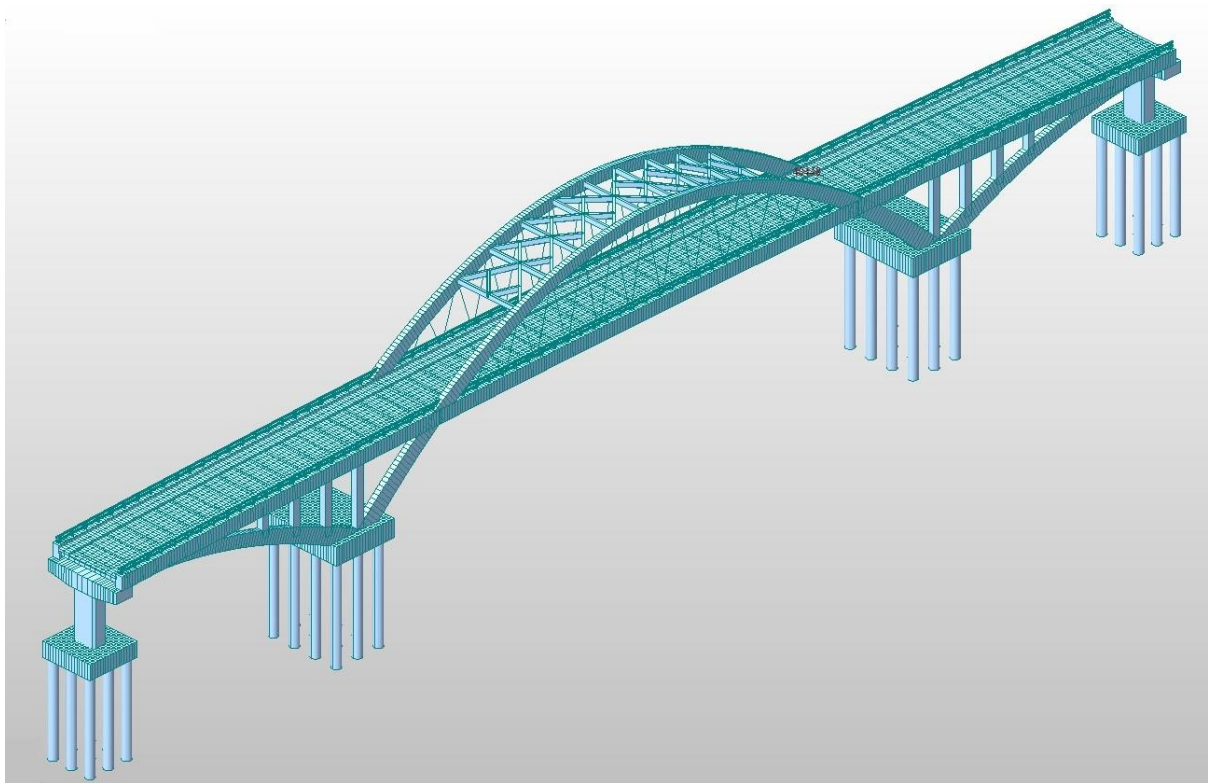


Figure 1.4.4: Design of Typical Bridge under CIBRR

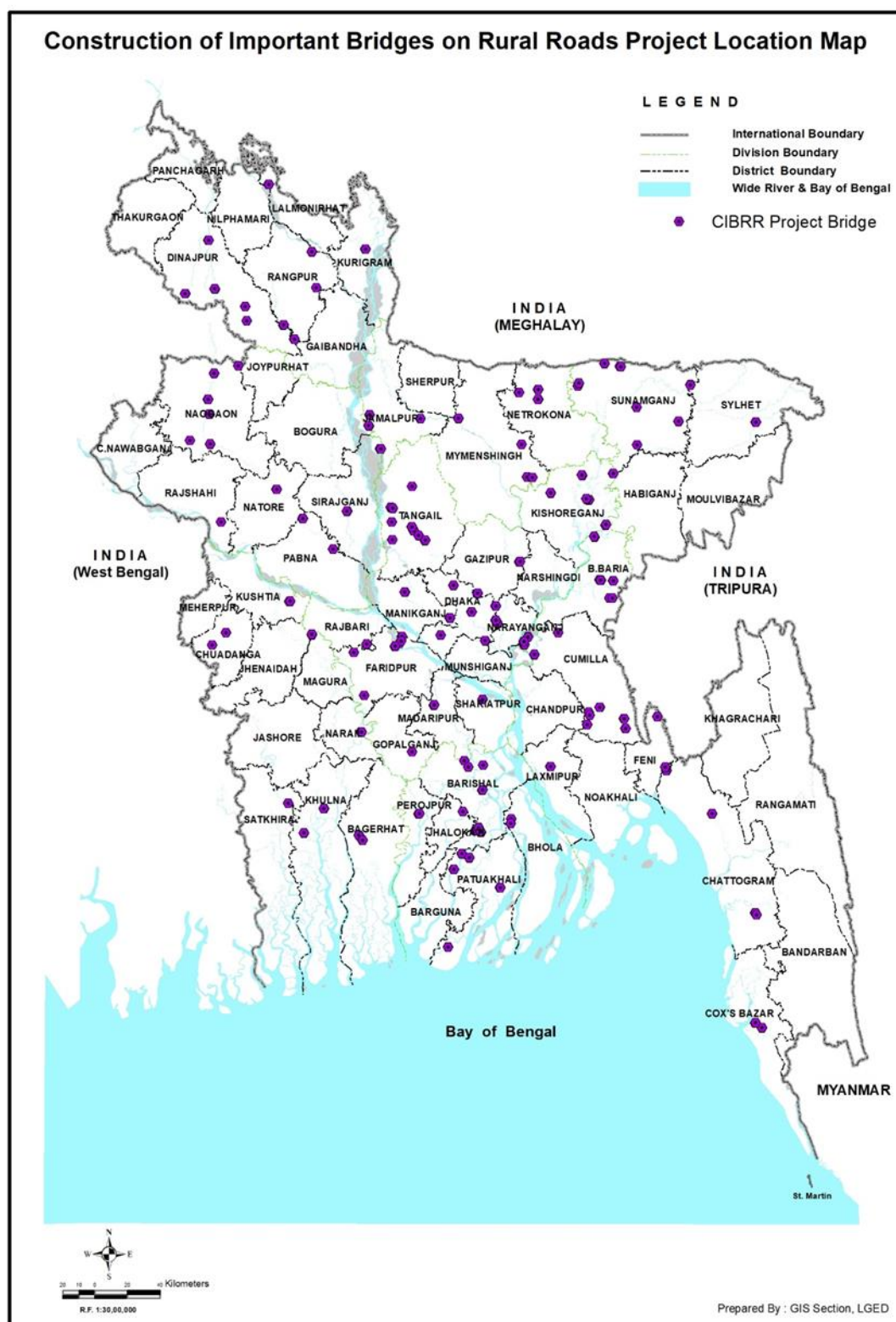


Figure 1.4.5: CIBRR Project Location

1.5 Limitations of the Study:

Some of the limitations which I have faced during this study are stated below:

1.5.1. Lack of Information:

As it's a large project and the project area located all over Bangladesh, so it was quiet difficult to gather all the information in this short time. Only ten respondents were included in the data collection for the study, which focused on project's procurement operations over the previous three fiscal years instead of five or six.

1.5.2. Time Restrictions:

Owing to insufficient time, the study's research area is restricted to a single GoB Project. If a foreign aided project along with this project could be chosen as the research location, it could be easier to ascertain the overall scenario about preparedness and practices of sustainable procurement of LGED at the field level.

1.5.3. Shortage of Manpower:

Collecting all data single handedly and process them was a little bit tough, but I tried my best to gather maximum information. In the short period allotted, sufficient investigation and analysis were needed to create an appropriate approach that would enable the study to meet its goals.

1.6 Research Methodology:

Work Segmentation:

- Questioning,
- Gathering Information,
- Responding.

Performance Metrics:

- Time taken
- Kappa statistics
- Mean absolute error
- Root mean squared error
- Relative absolute error
- Prediction accuracy

1.6.1. Model & Methodology:

Two major categories can be used to classify research models:

- Quantitative
- Qualitative

The present study employed a qualitative research approach to investigate the extent and methodologies of sustainability concerns in the procurement process for CIBRR Project under LGED. The methods used to collect the information are:

- Interview surveys, which make up the first component of the study approach.
- The topic of information collection is the readiness of LGED procurement officers and sustainability practices in public procurement at the LGED Project level.
- The population from which data was collected is Procurement Professionals working on CIBRR Project's public procurement process.
- A Solid data collection process to determine preparedness and degree of practice at the project level, a semi-structured questionnaire about sustainability practices in the procurement process was used.

- Samples collected during the previous three fiscal years, 2020-21, 2021-22 & 2022-23, at least ten (10) questionnaires, or numbers samples, were gathered from ten (10) procurement personnel at the Project Director's Office, CIBRR Project, LGED HQ.

Chapter 2

Literature Review

This chapter delves into the theoretical concepts of sustainability, sustainable development, and sustainable procurement. It explores the evolution of sustainability and its connection to the environment, development, and procurement. Additionally, it outlines the principles guiding sustainable procurement. The research methodology begins with a detailed review of existing literature, analyzing sustainable development, sustainable procurement in the public sector, and the factors influencing it. Various sources including books, journals, publications, and websites were scrutinized to gain insight into sustainable procurement. The chapter also evaluates the coverage of sustainable procurement in the Public Procurement Act-2006 and Public Procurement Rules-2008, along with examining policy documents and newspaper articles to gauge the current level of attention to the issue.

2.1 Brief History of Sustainable Procurement:

Sustainability refers to the ability of an activity to be consistently maintained or upheld over time without compromising future aspirations or quality of life. In essence, it involves ensuring that our current actions do not hinder our future well-being or that of others.

The Sustainable Procurement Guide by the British Standard Institution defines sustainability as considering the long-term consequences when making decisions, ensuring that our personal needs are met without detrimentally affecting the needs of others, both now and in the future.

The concept of sustainability rose to prominence during the 1972 United Nations Conference on the Human Environment. This was driven by growing awareness of environmental challenges associated with industrial development, including issues like deforestation, pollution, and the widespread use of harmful pesticides. The conference served as a catalyst for global action to address these challenges and promote sustainable practices for the well-being of both people and the planet. Environmental disasters like the Exxon Valdez oil spill and the Chernobyl Nuclear Reactor explosion further elevated public and political attention toward environmental issues. Concurrently, concerns about social justice, particularly in South Africa with apartheid and racial segregation, gained significant traction.

Recognizing the interdependence between economic progress and environmental conservation, the United Nations established a think-tank led by Gro Harlem Brundtland to devise solutions ensuring ongoing economic development while safeguarding the environment. The Brundtland Commission aimed to establish a sustainable relationship between human actions and the environment, preserving the well-being of future generations. Their 1987 report "Our Common Future" defined sustainable development as meeting current needs without compromising future generations' ability to meet their own.

The 1992 Rio Declaration on Environment and Development expanded upon these concepts, integrating social justice and human rights concerns, including peace, poverty, child labor, women's roles, and challenges faced by indigenous communities. Sustainability, covering economic, environmental, and social aspects, became widely accepted. John Elkington introduced the term 'Triple Bottom Line' (TBL) in 1997, emphasizing governments' and organizations' need to evaluate performance in economic, environmental, and social realms.

The TBL concept can be understood through frameworks like the 3P framework (Profit, People, Planet) or the 3E framework (Economics, Environment, Equity). It underscores responsible use of economic and natural resources and consideration for people and other living beings.

2.2 Concept of Sustainable Development:

Sustainable development is a complex, multidisciplinary concept with a short history. Its vague definition makes it difficult to define in practical terms. The challenge lies in educating people and clearly defining the concept for universal understanding.

2.3 Definition of Sustainable Procurement:

According to CIPS, Sustainable Procurement can be described as, “A process whereby organizations meet their needs for goods, services, works and utilities in a way that achieves value for money on a whole-life basis in terms of generating benefits not only to the organization, but also to society and the economy, whilst minimizing damage to the environment.”

Sustainable procurement refers to how businesses can identify and reduce the environmental impacts of their supply chains. The following items are included:

- (i) Identifying suppliers that have a minimal negative impact, adhere to fair trade practices, or prioritize environmental sustainability.
- (ii) Utilizing sustainably sourced production materials, such as recycled paper.
- (iii) Minimizing waste by repurposing packaging material instead of discarding it after a single usage
- (iv) Ensuring a conducive work atmosphere that fosters employee respect and appreciation, such as offering livable wages wherever feasible.

2.4 Benefits of Sustainable Procurement:

2.4.1 Minimize Risk and Enhance Reputation:

Suppliers engaging in unethical acts such as employing underage labor or deliberately causing significant pollution can have adverse financial consequences for the organization and negatively impact its brand equity.

2.4.2 Cost Reduction:

Sustainable suppliers have the potential to decrease an organization's expenses by minimizing waste and energy use, resulting in cheaper energy bills.

2.4.3 Revenue Growth:

Consumers who embrace sustainability actively seek ethical and sustainable products and organizations. These clients are frequently willing to pay a somewhat higher price in order to ensure that the product or service is sustainable and obtained ethically.

2.4.4 Futureproofing:

Creating a sustainable procurement strategy is a method to safeguard the organization from prospective supply shortages. This plan would additionally safeguard against variations in social factors, such as the accessibility of technology, economic factors like currency rate fluctuations, and environmental impacts like climate change.

Chapter 3

Public Procurement of Bangladesh & LGED

3.1 Background:

This chapter offers an in-depth exploration of public procurement, covering its historical evolution and current landscape in Bangladesh. It outlines the legal framework governing public procurement and describes the key principles and characteristics guiding the process.

Defined by the Public Procurement Act of 2006 (PPA 2006), procurement encompasses purchasing or hiring products, acquiring items, and carrying out works and services through contractual means. It involves the acquisition of commodities, works, or services by the public sector through methods like purchasing or hiring. Governments worldwide rely on public procurement to secure essential services such as healthcare, education, and infrastructure, making it a matter of significant economic and political importance.

Despite its significance, public procurement has often been overlooked by academia and policymakers, viewed as a routine administrative task. It spans from basic services to major infrastructure projects, distinguishing it from private sector procurement. In the public sector, procurement must prioritize honesty, accountability, national interest, and effectiveness, whereas private procurement primarily focuses on commercial gains.

Bangladesh's public procurement practices have evolved since British colonial and Pakistani governance, with the Compilation of General Financial Rules (CGFR) and Economic Relations Division (ERD) Guidelines influencing government contracts and external project financing.

The evolution of public procurement methods and practices in Bangladesh dates back to the British colonial administration, followed by Pakistani governance. The Compilation of General Financial Rules (CGFR), established during British rule and revised during Pakistani governance, provides overarching guidelines for government contracts. However, these guidelines have seen minimal revisions since the 1930s. Additionally, the Economic Relations Division (ERD) Guidelines, based on World Bank procurement guidelines, influence procurement processes for projects financed by external sources.

The public procurement system in Bangladesh operates in a decentralized manner, with various departments and directorates within ministries handling procurement functions at different levels. The Public Procurement Rules (PPR) of 2008 serve as the governing framework for procurement activities. Departments rely on Standard Tender Documents and Request for Proposals provided by the Central Procurement Technical Unit (CPTU). Various government entities, including departments, corporations, and agencies, engage in procurement activities to fulfill their specific mandates. This standardized approach ensures transparency, efficiency, and fairness in the procurement process across different governmental bodies.

The Public Procurement Regulations and Act of 2006 in Bangladesh improved the efficiency of the public procurement system, while the Public Procurement Rules of 2008 emphasized transparency, accountability, and fairness. These initiatives laid the groundwork for a more robust legal framework governing public procurement. The subsequent introduction of the Public Procurement Rules in 2008 further solidified the legal foundation of public procurement in the country, emphasizing transparency, accountability, and fairness in procurement processes.

3.2 Legal framework of public procurement in Bangladesh

The suggestions outlined in the 2002 Country Procurement Assessment Report (CPAR) by the World Bank seek to build a complete legal framework for public procurement systems.

The recommendations encompass the following:

- Implementation of Procurement Laws and Regulations
- Enhancing the capabilities of institutions
- Increasing the involvement of suppliers and improving market access
- Developing plans and budgets for procurement
- Establishing mechanisms for resolving disputes
- Ensuring compliance with international standards

Implementing these suggestions guarantees the efficient, transparent, and equitable procurement procedures that are crucial for fostering sustainable development and economic expansion.

3.2.1 Central Procurement Policy:

The proposal suggests establishing a Central Procurement Policy Unit tasked with managing Public Procurement Policy, Rules and Procedures, and Standard Bidding and Contract Documents. This unit would also supervise public procurement activities. The objective is to create and publish Public Purchase Rules and Procedures as a publicly accessible document. These rules and procedures would govern the purchase of products, works, and professional services across all ministries, departments, and public organizations. This centralized approach aims to streamline procurement processes, ensure consistency, and promote transparency and accountability in public procurement activities.

3.2.2 Standardization of Contract Document:

The aim is to develop and disseminate a uniform set of Bidding and Contract Documents suitable for all public procurement activities. These documents, designed for products, works, and professional services, will be crafted using templates offered by reputable entities like the World Bank and similar organizations.

3.2.3 Evaluation of Authorities:

To evaluate and modify the assignment of authority to public sector enterprises and autonomous entities, as well as to departmental heads, chief engineers, and project directors.

3.2.4 Evaluation of Hierarchy:

To achieve the objective of assessing and revising the hierarchical structure involved in the permission-granting process, the Government of Bangladesh took steps by establishing the Central Procurement Technical Unit (CPTU) within the Implementation Monitoring and Evaluation Division (IMED) under the Ministry of Planning in 2002. The creation of the CPTU was aimed at addressing the proposed changes and has since been tasked with enforcing public procurement regulations, ensuring the use of standardized bidding documents, and overseeing all public procurement activities in the country. The main objective is to ensure that the allocation of these funds benefits taxpayers and citizens by acquiring necessary resources efficiently and transparently.

3.3 Methods of Public Procurement in Bangladesh

According to the Public Procurement Rules (PPR)-2008, The ideal technique for national procurement is the Open Tendering Method (OTM), which guarantees equal opportunity for all participants. Though there are other methods exist in PPR-2008. They are described below:

3.3.1 Methods for Works and Goods:

Ensure the involvement of all suppliers, promote fair competition, and implement effective promotional strategies. Nevertheless, many procurement procedures that serve as alternatives to the OTM are permissible under specific conditions. These procedures must be rationalized based on technological and economic justifications. The following are various methods for the production and acquisition of goods and services:

- Limited Tendering Method (LTM)
- Two Stage Tendering Method (TSTM)
- Request for Quotation Method (RFQM)

- Direct Procurement Method (DPM)
- One Stage Two Envelop Tendering Method (OSTETM)

3.3.2 Methods for Services:

However, when it comes to procuring consulting services, there are several sorts of tendering processes available, including the following:

- Quality and Cost Based Selection (QCBS)
- Fixed Budget Selection (FBS)
- Least Cost Selection (LCS)
- Single Source Selection (SSS)
- Community Service Organization Selection (CSOS)
- Individual Consultant Selection (ICS)
- Selection Based on Consultants Qualifications (SBCQ)
- Design Contest Selection (DCS)

When considering alternative procurement approaches, several key factors need consideration. The Limited Tendering Method (LTM) is suitable when there are few suppliers, or when soliciting and evaluating bids would cost more than the contract's value. It's also handy in urgent situations. The Two-Step Tendering Process is used for complex or large projects, or when it's impractical to develop complete technical specifications in a single stage, or when the procurement entity lacks knowledge due to rapidly evolving technology. The Request for Quotations Method (RFQM) is for standardized, readily available low-value commodities, works, and services, within specified thresholds, but its use is strictly regulated to prevent misuse. The Direct Procurement method (DPM) is allowed in cases such as acquiring goods from a sole proprietor.

For global procurement, these procedures can also be applied with some modifications to ensure compliance with standards and promote competition.

3.4 Sustainability addressed in Public Procurement

The current regulation of public procurement is governed by two primary legal documents, namely the Public Procurement Act 2006 and the Public Procurement Rules 2008. In addition to several Standard Tender Documents (STDs) for goods and works, there are also Standard Request for Proposals (SRFPs). Prepared by CPTU for services that are contingent upon the magnitude or extent of procurement. The object being referred to is a table. The text highlights the various sustainability factors that have been addressed in public procurement documents.

Table 3.4.1: Sustainability Practice in PPR-2008

Area of Sustainability	Relevant Article in PPR-2008
Economic Sustainability	[Rule 15(2), PPR-2008] The Procuring Entity must consider the following factors while deciding on the technique of Procurement and consolidation of Goods packages: ➤ The availability of the necessary products in the local market. ➤ The quality, sources, and brand of the Goods that are currently available in the local market; ➤ The pricing levels of the specified Goods; ➤ The risks associated with the supply of Goods in both the local and international markets. [Rule 15(7), PPR-2008] When deciding on the manner of Procurement for Works, the Procuring Entity should take into account the following factors: ➤ The current conditions of the contracting industry; ➤ The capability of local contractors; ➤ Anticipated competition;

	[Rule 29(2), PPR-2008] Procuring Entities should articulate Technical Specifications, when applicable, ➤ In terms of performance or output needs rather than specifications directly tied to design or descriptive features that may typically restrict competition; [Rule 29(3), PPR-2008] The technical specification of Goods shall not include any mention of a specific trademark or trade name, patent, design or kind, named country of origin, producer or service supplier.
Environmental Sustainability	[GCC 27.1, STD-PW3] The Contractor shall throughout the execution and completion of the Works and the remedying of any defects therein: ➤ take all reasonable steps to protect the environment on and off the Site and to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes arising as a consequence of the Contractor's methods of operation. [GCC 29.2, STD-PW3] ➤ The Contractor, in particular, shall provide proper accommodation to his or her laborers' and arrange proper water supply, conservancy and sanitation arrangements at the site for all necessary hygienic requirements and for the prevention of epidemics in accordance with relevant regulations, rules and orders of the government.

Social/Ethical Sustainability	[Rule 15(2), PPR-2008] The Procuring Entity must consider the following factors while deciding on the technique of Procurement and combining Goods packages: ➤ The ability of local suppliers to meet the necessary quantities; ➤ The capability of the national industry and the quality of its products; ➤ The prevailing market circumstances and anticipated competition; [Rule 15(7), PPR- 2008] When deciding on the procurement technique for works, the procuring entity should take into account the following factors: ➤ Local contractors' capability; [Rule 29(5), PPR-2008] Procuring Entities should, if feasible, collaborate closely with the relevant user or beneficiary of the Goods, Works, or Service to develop the requirements. [Rule 83(1)(e), PPR-2008] The Tender Document may allow for a domestic preference as defined in Schedule II. I to provide local manufacturers, Suppliers and Contractors with a price advantage over their international competitors for the purpose of promoting domestic products or industries.
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[GCC 28.1, STD-PW3]

The Contractor shall not perform any work on the Site on the weekly holidays, or 30 during the night or outside the normal working hours, or on any religious or public holiday, without the prior written approval of the Project Manager.

[GCC 29.1, STD-PW3]

The Contractor shall comply with all the relevant labour Laws applicable to the Contractor's personnel relating to their employment, health, safety, welfare, immigration and shall allow them all their legal rights.

[GCC 29.3, STD-PW3]

The Contractor, further in particular, shall pay reasonable wages to his or her labourers, and pay them in time. In the event of delay in payment the Procuring Entity may affect payments to the labourers and recover the cost from the contractor.

[GCC 30.1, STD-PW3]

The Contractor shall not employ any child to perform any work that is economically exploitative, or is likely to be hazardous to, or to interfere with, the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral, or social development in compliance with the applicable labor laws and other relevant treaties ratified by the government.

	[GCC 37.1, STD-PW3] The Contractor shall provide, in the joint names of the Procuring Entity and the Contractor, insurance cover from the Start Date to the end of the Defects Liability Period, in the amounts and deductibles specified in the PCC for the following events which are due to the Contractor's risks: ➤ Personal injury or death.
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3.5 Organogram of LGED

3.5.1 Manpower:

The Local Government Engineering Department (LGED) is responsible for the development of rural, urban and water infrastructure. The topics discussed are creation and poverty reduction. The department is led by a Chief Engineer (Grade-1), who is assisted by 19 Additional Chief Engineers (Grade-2 &3), 40 Superintending Engineers (Grade-4), and 168 Executive Engineers (Grade-5). There are a total number of 82 Senior Assistant Engineers (Grade-6), 495 Upazilla Engineers (Grade-6), 720 Assistant Engineers (Grade-9), 2216 Sub-Assistant Engineers (Grade-10) and other staffs posted throughout the country. It has a total of 13,395 regular employees, which is the highest number of employees among all other public engineering agencies.

3.5.2 Units of LGED:

LGED has established several specialized units at its headquarters, they are:

- Administration Unit,
- Planning Unit,
- Design Unit,
- Training Unit,
- ICT Unit, IWRM (O&M) Unit,
- IWRM (P&D) Unit,
- Quality Control Unit,
- Monitoring and Evaluation Unit,

- Road Maintenance & Rural Safety Unit,
- Urban Management Unit,
- Procurement Unit.

These units play a crucial role in improving client/user satisfaction and ensuring efficient technical, administrative, and supervisory control during project execution. Their aim is to enhance the overall quality of services provided by LGED.

3.5.3 Mandats of LGED:

LGED's contribution spans a comprehensive range of physical and social infrastructure for the purposes of national development, national security, and foreign relations. The organization's efforts encompass the entire expanse of the country, reaching even isolated regions and challenging landscapes. The primary functions of LGED are as follows:

- Development of rural, urban and water sector infrastructures.
- Maintenance of rural, urban and water sector infrastructures.
- Technical support to Pourashava (City Council) & City Corporation.
- Technical support to Zila Parishad (District Council).
- Technical support to Upazila (Sub-District) and Union Parishad.
- Technical support to different Ministries.
- Develop planning maps, database, technical specifications and manuals.
- HRD programs for LGED, LGI and other stakeholders.

3.6 Procurement Activities of LGED

Prior to the implementation of Public Procurement Acts (PPR-06), procurement contracts were governed by the broad and general principles of 'The Law of Contract'. Due to the requirement of a straightforward bureaucratic process, highly skilled staff, high-quality tender documents, a standardized tender evaluation framework, efficient contract administration, and the presence of mechanisms to ensure transparency and accountability, the PPR-2006 provides a clear advantage over the current law for any public procurement contract. As a complement to the PPA-2006, the government of Bangladesh has implemented the Public Procurement regulations 2003 (PPR-2003). Following the announcement of PPR-2003, LGED promptly established a distinct Procurement Unit at the headquarters level in January 2004 to effectively adapt to the upcoming modifications.

3.6.1 Primary Functions of Procurement Unit:

- Collaborating and coordinating with the Central Procurement Technical Unit (CPTU).
- Assigning 10 focal persons from LGED officials to assist in ensuring compliance with PPA-06 and PPR-08 during the implementation and monitoring of public procurement.
- Establishing a 7-member e-GP/PROMIS cell to thoroughly monitor e-GP activities and offer extensive support as needed for successful implementation.
- Finalizing the approval of the Annual Procurement Plan (APP) for all offline tenders.
- Finalizing the approval of the Annual Procurement Plan (APP) for all e-GP tenders.
- Finalizing tender approvals for all e-GP tenders.
- Enlisting tenderers in the Limited Tendering Method (LTM).
- Establishing Technical Evaluation Committees (TEC)/Procurement Evaluation Committees (PEC) at various financial levels for offline tenders.

- Establishing Technical Evaluation Committees (TEC)/Procurement Oversight Committees (POC) for specific financial levels within the e-GP system.
- Offering technical advice and feedback on procurement matters to other local government institutions upon request.

3.6.2 Functions of PMU:

The role and responsibilities of LGED Project Management Office in public procurement are as follows.

- Serve as reviewers for public procurement conducted by LGED District offices.
- Develop project schemes or conduct analyses to identify business requirements.
- Draft procurement item specifications.
- Draft specific contract specifications using the Standard Tender Document (STD).
- Seek tender approvals from the higher authority (HOPE).
- Pursue any necessary tender amendments, extensions of tender validity periods, or contract period extensions from HOPE.
- Facilitate financial disbursements from the Accounts General office to the Field Office.
- Participate in processing payments for completed contracts in accordance with tender documents.

Chapter 4

Discussions & Findings

Sustainable procurement involves economic, environmental, and social aspects of purchasing. A semi-structured questionnaire was developed, comprising sections addressing these pillars and information on the organization's procurement practices.

Section A includes questions designed to stimulate respondents' recall of sustainability principles and elements, prompting them to consider their implementation in daily activities.

Section B focuses on respondents' readiness to implement sustainable practices in procurement, assessing their willingness to engage in such activities.

Section C evaluates the extent to which sustainability practices are integrated into the procurement process of the authority.

Section D includes generic questions to gather respondents' views on factors driving and hindering sustainable procurement in the CIBRR Project office under LGED. Respondents are also invited to provide suggestions, opinions, or comments based on their practical experiences.

To gauge comprehension of sustainable procurement matters among relevant officers from the CIBRR Project under LGED, comprehensive interviews were conducted with the Project Director and Executive Engineer.

4.1 Findings:

The following section provides an exposition of the survey data's discoveries and examination. The questionnaire survey covered two officials who are active in the LGED Project Office procurement procedure. The data obtained from the key informant interviews has been

examined using the questions posed during the interviews. A comprehensive examination has been conducted on each of the inquiries, which would facilitate the discovery of a comprehensive understanding of the subject. The majority of the studies have been conducted qualitatively through perception-based interviews with the participants. Nevertheless, a few quantitative analyses have been conducted using the data provided by the respondents. The survey questions posed to the participants are displayed alongside a thorough examination of their answers. The subsequent sections present the questionnaire together with the survey findings.

4.2 Preparedness on Sustainable Procurement:

An inquiry was made to assess their readiness regarding sustainable procurement. I have found Several key findings related to this matter. They lack sufficient training in sustainable procurement to carry out operations at both headquarters and field level. They possess a moderate understanding of the economic, social, and environmental dimensions of sustainability. However, they acknowledge the significance of including sustainability considerations into the public procurement process in Bangladesh. They reached a consensus that PPA-2006 and PPR-2008 had effectively addressed three dimensions of sustainability in the public procurement process. LGED adheres to an Environmental Management System (EMS) in their operations, and their schedule of tariffs incorporates sustainability principles. This enables them to implement sustainable procurement practices.

4.3 Economic Aspect of Sustainable Procurement

As previously said, sustainable procurement has three dimensions: the economic, environmental, and social elements of procurement. The participants were queried about several aspects of the economic dimension of sustainable procurement.

4.3.1 Primary Economic Aspect:

They are in strong agreement with the following three statements.

- a. Public purchasers have the ability to directly impact economic (financial) outcomes, such as achieving cost savings for their business.
- b. The PPR and financial procedures should prioritize whole life costing to consider sustainability factors instead of solely focusing on the lowest price in all tender processes.
- c. The transparency of procurement demand should be enhanced by the use of e-procurement.

4.3.2 Secondary Economic Aspect:

However, they provide an impartial perspective on the following two claims.

- a. Local economic development can be improved by sourcing locally produced items and promoting the engagement of SMEs or small enterprises as sub-contractors by first-tier contractors.
- b. It is important to guarantee suppliers' fair and sustainable profit margins in order to achieve high-quality delivery and efficient supply management.

When asked about the criteria used in preparing specifications, the majority of Project officials expressed the view that the main criterion is the lowest price. However, Project officials have also emphasized that providing superior quality is a significant factor to consider, in addition to the lowest pricing. Nevertheless, it is apparent from the comments that the concept of whole life costing is hardly taken into account while striving for improved quality.

4.3.3 Recommendations:

The procurement documents issued by the Project office do not include any specific criteria to promote the involvement of local domestic companies. In the procurement process of Projects, these sustainable socio-economic changes can be possible through constructing bridges all over the country.

- a) Facilitating production and marketing of agricultural and non-agricultural products and improvement of socio-economic conditions of the project area through road network development.
- b) Reducing transport time and cost by establishing uninterrupted rural road connectivity.
- c) Creation of short- and long-term employment opportunities.

4.4 Environmental Aspect of Sustainable Procurement

Sustainable procurement encompasses the environmental factor as a further component. The respondents were surveyed using a series of questions to gather their perspective on the environmental element. The officials of CIBRR under LGED have expressed their agreement with the following comments.

4.4.1 Hydro-morphological Study:

Constructing large bridges putting major impacts on both rivers and local environment. So proper hydro-morphological study and river training works prior construction must have to be done.

4.4.2 Climate Change Adaptation:

The effects of climate change, such as the release of greenhouse gases that are caused by the manufacture, distribution, use, and disposal of commodities must be dealt with through public procurement.

4.4.3 Key Environmental Concerns:

Key environmental concerns, such as energy consumption, water consumption and quality, hazardous waste, noise pollution, and influence on natural habitat, should be taken into account throughout the whole lifespan of the goods, works, or services.

4.4.4 Sustainability Promotion:

The promotion of sustainable design is necessary to decrease future resource consumption, particularly through the utilization of recycled content for construction materials.

4.4.5 Public Procurement Process Utilization:

The public tendering process should take into account resource conservation, energy usage, and any negative health and environmental impacts.

4.4.6 Quality of the Product:

Purchase products that possess qualities such as durability, recyclability, reusability, easy biodegradability, energy efficiency, non-toxicity, and environmental friendliness.

The respondents were queried on the presence of an environmental policy, environmental management system, or environmental reviews by LGED officials. None of the officials provide a positive response to this issue and they never evaluate the environmental performance of suppliers in order to comply with the environmental laws of Bangladesh.

4.4.7 Additional Works on Environmental Aspect:

However, the project office occasionally engages in the following actions during their procurement process.

- a. Prior to initiating a high-value tender, assess the environmental consequences of the goods, works, or services.
- b. Take into account the proper disposal of the products or works acquired.
- c. The goods/service are evaluated for their influence on key environmental issues such as energy usage, water use, waste, noise, pollutants, emissions, and natural habitat over their whole life cycle.

Promoting sustainable building design is crucial to reduce future energy and water usage, as well as the need for cleaning services during the procurement process.

Prior to submitting a new purchasing request, they consistently explore possibilities for reusing, repairing, upgrading, or modifying current assets.

4.5 Social Aspect of Sustainable Procurement

4.5.1 Primary Initiatives:

The participants were queried about several aspects of the social dimension of sustainable procurement. The officials of CIBRR Project under LGED have agreed with the following comments.

- a. “Safety First” is the first motto of this project. They should ensure all the safety gears at all construction sites for all the engineers, officers, workers.
- b. Public procurement should prioritize the social side of sustainable growth and actively promote workforce welfare, while also assuring workforce equality and diversity.
- c. Implementing Community Benefit Clauses is essential, as they oblige contractors to commit to providing job opportunities or apprenticeships to local residents as part of significant contracts.
- d. Public sector purchasers should prioritize the "greatest common good" and provide opportunities for contracting with social entrepreneurs and the volunteer sector to enhance their competence.
- e. Public procurement should promoting social inclusion and supporting local sustainability. This involves the creation and maintenance of strong communities and the improvement of the well-being of local citizens through the generation of local jobs.

4.5.2 Secondary Initiatives:

They consistently engage in the following activities.

- a. The procurement procedure of the project adheres to the idea of equality, which means that all possible suppliers/contractors have the opportunity to participate.
- b. The project office mandates that suppliers or contractors adhere to the legal regulations for working hours, breaks, holidays, and fair remuneration.

4.5.3 Tertiary Initiatives:

However, on occasion, they engage in the following action.

- a. The project office assesses the societal consequences of the commodities, works, or services prior to initiating a competitive bidding process of significant value.
- b. Include specific criteria or provisions in your tender document on the health and safety of workers/employees at the project office.
- c. The organization should perform compliance audits for suppliers to ensure adherence to employment conditions such as minimum wage, health, and safety.

They do not procure goods, works, and services from third sector organizations such as charities, voluntary sector, and social enterprises.

4.6 Barriers of Sustainable Procurement:

In addition, they were asked to identify the challenges of implementing sustainable buying inside their firm. Barriers refer to the issues that can impede an organization's advancement in sustainable procurement or the overall sustainable procurement goal. The following is a concise summary:

- a. Local politicians' reluctance to implement the e-GP system.
- b. Limited knowledge among procurement professionals regarding sustainability.
- c. Limited education and up-to-date expertise among a significant number of the local contractors.
- d. Insufficient understanding of sustainable procurement by relevant parties.
- e. Prioritizing the lowest price as the primary criterion for selection, rather than considering the entire life cycle cost.
- f. Maintain adherence to conventional procurement methods.
- h. Insufficient implementation of sustainable procurement policy recommendations.

4.7 Recommendations for implementing sustainable procurement practices:

During the discussion with LGED officials, the researcher expressed their interest in obtaining suggestions on sustainable procurement based on the officials' expertise in public procurement in Bangladesh. They proposed the following points through an open discussion.

- a. Sufficient training should be provided to both procuring entities and providers.
- b. All officials and stakeholders should possess knowledge of the advantages of sustainable procurement.
- c. Senior think-tanks should establish comprehensive and durable policy guidelines.

4.8 Summary of Findings:

The research conducted using the questionnaire provides an accurate depiction of procurement processes in the public sector of Bangladesh. The primary factor for choosing suppliers is the lowest price.

Local enterprises are somewhat encouraged to participate through the criteria outlined in the bidding documents. The project lacks any form of environmental policy or environmental management system. Furthermore, the current procurement structure of LGED offers few opportunities to ensure environmental compliance by the suppliers/contractors. Conversely, there is typically a guarantee of equal opportunity for all players.

The current procurement system incorporates ethical labor practices and promotes female labor force participation. However, the overall perspective gained from the respondents' perspectives indicates that sustainability concerns are not adequately integrated into the procurement system of CIBRR Project under LGED.

Chapter 5

Conclusions & Recommendations

5.1 Conclusions:

Chapter One addresses two research questions. The first question aims to assess the level of understanding and preparedness regarding sustainable practices in Public Procurement among the officials of CIBRR Project under LGED. The second question aims to determine the extent to which sustainability is incorporated in the procurement process of CIBRR Project. The analysis yields the following conclusions.

5.1.1 Officials possess a reasonable comprehension of sustainability matters, although they exhibit some degree of uncertainty regarding various topics. However, the majority of them concur on the significance of implementing sustainable practices in public procurement in Bangladesh. They have expressed apprehensions over sustainability challenges in their everyday lives. It can be stated that they have a basic understanding of sustainability concerns, however this knowledge may not be adequate to effectively implement sustainability in public procurement.

5.1.2 The level of preparedness exhibited by LGED officials to implement sustainability in their procurement operation is insufficient. They lack sufficient training in sustainable procurement. They possess a general understanding but lack a precise and particular comprehension of several facets of sustainability. According to reports, influential contractors in the area are reluctant to use e-GP.

The reason for the reduced likelihood of manipulation in e-GP is due to its inherent characteristics. Occasionally, influential suppliers in the local area attempt to engage in fraudulent and coercive practices during the offline tender process for ADP and Revenue budget.

5.1.3 An analysis was conducted to assess the extent to which respondents, who work as procurement professionals, engage in sustainable practices. The investigation indicates that they adhere to the PPR-2008 criteria for all their procurement processes. The PPR-2008 has a language that expressly addresses sustainability. This clause is detailed in section 3.6 of chapter Three. They adhere to all sustainability criteria outlined in PPR-2008. However, while the lowest price remains an important factor in selecting suppliers, it is not sufficient for ensuring sustainability in the procurement process. Sustainability encompasses the consideration of whole life costs. Local enterprises are subtly encouraged to participate through the criteria outlined in the procurement documents. Environmental policy or environmental management system may be present in this project.

5.1.4 In addition, several supplementary inquiries have been made to elicit more remarks or recommendations from the CIBRR personnel. In their procurement, they proposed several efforts to achieve sustainability. They also identified and analyzed the difficulties to implementing sustainable procurement at the local level, as detailed in Chapter Five.

The analysis conducted on CIBRR Project under LGED regarding the specified topics reveal that while there are a few instances where some sustainability concerns are being addressed, these issues are generally prevalent across all projects of the government. The report provides an accurate depiction of public procurement processes at the various projects in Bangladesh.

5.2 Recommendations

Sustainability is a crucial concern in the contemporary society. The United Nations has established 17 objectives as part of the Sustainable Development Goals (SDGs). Two of the goals that are directly relevant to public construction departments like LGED are Goal 11: Sustainable Cities and Communities and Goal 12: Responsible Consumption and Production. The following guidelines are suggested to build sustainability characteristics at the both headquarters and field level.

5.2.1 The purchase process should incorporate sustainability factors. For instance, environmental factors can be considered at various stages of the procurement process. The prequalification process for suppliers should prioritize sustainability, integrate environmental criteria into tender assessments, and stipulate mandatory environmental standards in contracts. This approach ensures that sustainability is a core aspect of procurement practices, promoting environmentally responsible behavior among suppliers and aligning with broader environmental objectives.

5.2.2 Leaders in sustainable procurement should establish a sustainable procurement policy, aligning the public procurement framework with this policy. The development of this strategy should be viewed as a medium to long-term initiative aimed at integrating sustainability considerations into procurement practices. The implementation of a sustainable procurement policy requires collaboration from governmental and political entities, integrating sustainable practices into local procurement processes for environmental conservation and responsible resource management.

5.2.3 A distinct and unwavering dedication is required between the highest echelons of government and the Upazila level through appropriate means of communication. Many public

procuring institutions lack clear guidance from their organizational leadership regarding the priority of attaining sustainable development objectives through procurement.

5.2.4 It is vital to provide sufficient training on sustainable procurement to all stakeholders, including procuring entities, suppliers, and beneficiaries, in order to enhance their understanding and ability to execute sustainable procurement practices. Mere design of a policy and inclusion of sustainability criteria in the papers is insufficient to establish a sustainable procurement system. It should be evaluated from a long-term perspective.

Currently, the integration of sustainable procurement into government projects' public procurement system remains insufficient. Therefore, this paper offers an overview of sustainable procurement practices in the public sector, with a focus on CIBRR Projects under LGED in Bangladesh.

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APPENDIX A: DISSERTATION QUESTIONNAIRE

SECTION A: GENERAL INFORMATION & SUSTAINABILITY CONCEPT

1. Respondent's Name:

2. Title & Institution:

3. Age:

4. Gender:

5. Level of education:

6. Years of procurement experience:

7. Have you received training or become acquainted with the following concepts?

(Please indicate with a checkmark)

a. Public procurement..... Yes/No

b. Sustainable development.....Yes/No

c. Sustainable Procurement.....Yes/No

What is the annual procurement volume for which you are accountable in your project?

..... Taka

9. Kindly specify the sort of procurement in which you are now engaged at your project.

(100% in total)

a. Works.....%

b. Goods..... %

c. Services..... %

10. Please provide information on the nature of works procurement for which you are responsible in your Project. The sum total is 100%.

- a. New Construction Works... ..%
- b. Repair/Maintenance Works... ..%

11. What do you mean by Sustainable Procurement?

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12. What do you mean by economic sustainability?

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13. What do you mean by social sustainability?

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14. What do you mean by social sustainability?

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15. Name the key stakeholders of your Upazila?

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SECTION B: PREPAREDNESS

16. Please specify your level of agreement for the following statements (Strongly agree = 5, Agree = 4, Neutral = 3, Disagree = 2, strongly disagree = 1)

Rating (on a scale of 1 to 5)

Statement	Score (5 to 1)
I possess sufficient training and possess the necessary skills to carry out Public Procurement activities in this Upazila.	
I possess a comprehensive understanding of the economic dimension of sustainability.	
I have clear conception on Social aspect of sustainability	
I possess a comprehensive understanding of the social dimension of sustainability.	
I believe that PPA-06 and PPR-08 have effectively addressed sustainability in the procurement process.	
PPA-06 and PPR-08 have effectively tackled social sustainability in the procurement process.	
PPA-06 and PPR-08 have effectively incorporated measures to promote environmental sustainability in the procurement process.	
LGED adheres to an Environmental Management System (EMS) in their operations.	
The itemized specification of LGED schedule of rates effectively addresses sustainability in procurement.	

SECTION C: PROCUREMENT SUSTAINABILITY PRACTICES

17. What is the primary concern you prioritize when considering sustainability in bridges of your project?

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18. From a sustainability perspective, what is the most significant concern regarding river training work in your Project?

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19. Contract award criteria to responsive tenders that you follow is-

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C1: Economic Dimension of Sustainability

20. Please express your level of agreement with the following statements. (Strongly agree = 5; Agree = 4; Neutral = 3; Disagree = 2; Strongly disagree = 1)

Rating (on a scale of 1 to 5)

Statement	Score (5 to1)
a. Public Purchaser can contribute directly to economic (financial) outcomes including cost savings for their organization.	
b. Local economic development can be enhanced through procuring locally grown goods and to encourage first-tier contractors to make use of SME or small firms as their sub-contractors.	
c. The PPR and financial procedures should promote whole life costing in order to takes sustainability criteria into account rather than lowest price in all tender.	
d. Suppliers' fair and viable margins should be ensured for achieving quality delivery and effective supply management.	
e. Procurement demand should make more transparent through E-procurement.	

21. Please provide the correct response to the following questions. (Please select the proper option)

a. Does the project office prioritize the principles of whole life cost (WLC) over the lowest price when making procurement decisions?	Yes	Partial	No
b. Does the project office include any specific criteria in the procurement documents to promote the involvement of local domestic firms?	Yes	Partial	No
c. Does estimated tender price include suppliers /contractors fair and viable margins?	Yes	Partial	No
d. Does the procurement procedure of LGED Projects provide opportunities for SMEs, socially and economically disadvantaged firms, and indigenous suppliers?	Always	Sometimes	Never
e. Do you incorporate and implement a price adjustment clause in your procurement contract to address fluctuations in market prices and ensure the security of delivery?	Always	Sometimes	Never
f. Does your project office implement the E-procurement procedure to ensure transparency and foster competitive markets?	Always	Sometimes	Never

C2: ENVIRONMENTAL ASPECT OF SUSTAINABILITY

22. Please express your level of agreement with the following statements. (Strongly agree = 5; Agree = 4; Neutral = 3; Disagree = 2; Strongly disagree = 1) Result (5-1)

	Score (5 to 1)
a. The effects of climate change, such as the release of greenhouse gases, that result from the creation, transportation, utilization, and disposal of products must be dealt with via means of public procurement.	
b. When evaluating goods, works, or services, it is important to evaluate key environmental issues such as energy consumption, water usage and quality, hazardous waste, noise pollution, and influence on natural habitats during their whole lifecycle.	
c. The promotion of sustainable design is necessary to decrease future resource consumption and encourage the usage of recycled content for construction materials.	
d. The public tendering process should take into account resource conservation, energy usage, and any negative health and environmental impacts.	
e. Purchase products that possess qualities such as durability, recyclability, reusability, easy biodegradability, energy efficiency, non-toxicity, and environmental friendliness.	
f. River training works included in the procurement plan with necessary requirements.	

23. Please provide the correct answers to the following questions. (Please select the proper option)

a. Does your project office conduct an assessment of the environmental effect of the goods, works, or services before initiating a high-value tender?	Always	Sometimes	Never
b. Does your project office own an environmental management system (EMS) or mandate that contractors have an environmental management system?	Yes	Partial	No
c. Could you please provide specific instances of environmental criteria that were employed during the procurement process, such as emissions, noise levels, energy and water efficiency, and waste generation?	Yes	Partial	No
d. Does your project office possess an environmental management system (EMS) or impose a need for contractors to possess an environmental management system?	Always	Sometimes	Never

e. Do you evaluate the possibilities of reusing, repairing, upgrading, or modifying current assets prior to initiating a new procurement request?	Yes	Partial	No
f. Environmental concerns such as energy consumption, water consumption, trash generation, noise levels, pollutants, emissions, and influence on natural habitats should be taken into account during the whole lifespan of the goods or services. Does your project office take these factors into consideration when creating procurement plans?	Yes	Partial	No

C3: Social Dimensions of Sustainability

24. Please express your level of agreement with the following assertions. (Strongly agree = 5; Agree = 4; Neutral = 3; Disagree = 2; Strongly disagree = 1)

Evaluation Rating (5 to 1)

Statement	Score (5 to 1)
a. Public procurement should prioritize the social side of sustainable growth and actively promote workforce welfare, while also assuring workforce equality and diversity	
b. Utilizing Community Benefit Clauses entails contractors committing to offering jobs or apprenticeships to individuals from the local community in significant contracts.	
c. Public sector purchasers should prioritize the "greatest common good" and provide opportunities for contracting with social entrepreneurs and the volunteer sector to enhance their capability.	
d. Public procurement should function as a means of promoting social inclusion and supporting local sustainability. This involves the creation and maintenance of strong communities, as well as the improvement of the well-being of local citizens.	
e. Public procurement should prioritize diversity and equality by actively promoting the inclusion of a wide range of suppliers, including those from minority or underrepresented groups.	

Promoting local job creation is important. Public procurement should prioritize diversity and equality by supporting a wide range of suppliers, including those from minority or underrepresented groups.

25. Kindly provide the correct response to the following questions. (Please select the proper option)

a. Does your Upazila office assess the societal impacts of the goods, works, or services prior to initiating a high-value procurement process?	Always	Sometimes	Never
b. Does your project's procurement procedure adhere to the idea of equity, ensuring equal involvement for all possible suppliers/contractors?	Yes	Partial	No
c. Does your project office include any specific criteria or provisions regarding the health and safety of workers/employees in your tender document?	Yes	Partial	No
d. Does your project office require suppliers or contractors to adhere to legal regulations regarding working hours, rest and vacation, and fair wages?	Always	Sometimes	Never
e. Does your organization engage in procurement from suppliers or contractors who employ child labor or violate human rights?	Yes	Partial	No
f. Does your organization procure goods, works, and services from third sector organizations, such as charities, voluntary sector groups, and social enterprises?	Yes	Partial	No
g. Does your firm perform compliance audits on suppliers to ensure adherence to employment conditions, such as minimum wage and health and safety standards?	Always	Sometimes	Never

SECTION D: REMARKS REGARDING SUSTAINABILITY CONCERNS

26. Can you recommend any measures that can contribute to achieving any of the three dimensions of sustainable procurement inside your organization?

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27. What barriers do you believe hinder sustainable procurement in your organization?

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28. Do you have any more suggestions, opinions, or comments regarding sustainable procurement based on your experience in public procurement in Bangladesh?

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I greatly appreciate your warm collaboration.